

CHALLENGES AFFECTING INVESTMENT IN PUBLIC TRANSPORT (MATATU) INDUSTRY IN NAIROBI-KENYA

**ALEX SERETI OIRA** 

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# CHALLENGES AFFECTING INVESTMENT IN PUBLIC TRANSPORT (MATATU) INDUSTRY IN NAIROBI-KENYA

Oira, A., Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya

Makori, M., Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya

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#### **ABSTRACT**

Transport is very crucial for economic development of any nation because the industry has a significant effect on the economic growth and development of a nation and major investments are channeled through the industry. However, in Kenya studies have shown that public transport is not efficient thus not attractive to investors enough to fill the gap between the required investment levels versus the current status which is low, characterized by high costs on fares and uneven costs on daily commuters using the public transport means. This study seeks to establish the challenges facing investment in public transport industry in Nairobi, Kenya. The specific objectives are to establish the effect of government regulations on investment in public transport in Kenya, to find out how profitability of the transport industry affects investment in public transport, to find out how access to adequate financing affects investment in the public transport industry and to establish how cartels in the transport industry affect the investment in public transport industry in Kenya. The study adopted a cross section survey design. The target population for this study was the owners of passengers' service vehicles for public transport in Nairobi. Using simple random sampling, a sample size of 100 respondents was selected to respond to the questionnaires for primary data collection. Descriptive statistics and regression analysis was used to analyze data. SPSS version 21 was used to process the data to come up with summary tables and the results that have been subjected to regression analysis. The study findings showed that government regulations, profitability of the industry and access to finance contributed significantly and positively to investment in public transport industry whereas effects of cartels in public transport contributed negatively to investment in public transport industry.

Key Words: Challenges, Investments, Public Transport

#### INTRODUCTION

This chapter includes background of the study, global perspective, local perspective, and statement of the problem, objectives, and research questions, justification of the study, scope of the study and limitations of the study.

# 1.1Background of the study

The transport industry is one of the industries that has a significant effect on the economic growth and development of a nation (Weisbrod & Reno, 2009). Public transport provides mobility and access to areas of interest to people. People engage public transport services when they want to get access to areas of employment, education, retail, health and recreational facilities, as well as community facilities (Republic of Kenya, 2009). Since the movement of people and goods must occur on day-to-day basis in a working economy, it is certain that the transport sector holds a very critical role to any given nation/society. This importance of the transport sector attracts numerous investments of people who may want to reap the guaranteed returns.

The dream of every investor in any business is to get the expected return on his investment within the right period. An investor will be motivated to pump his/her investment in a business when its performance is high enough to guarantee the said returns (Khayesi, 1999). However, it is wise to note that challenges in business are very common. At no point will the investor accrue his benefits from an investment without facing the challenges in that sector. Weisbrod and Reno (2009) agree with the presence of challenges in businesses but notes that an attractive investment will show signs

where the cost of overcoming the challenges is low enough to guarantee profits. Investors are also attracted when the benefits exceed the challenges of the business. It is estimated that by the year 2020 with the urbanization, over 55% of the population in Africa will be living in urban centers (Ousman Thiam, President of the African association of Public Transport) of which Nairobi is part of. Based on the data prorated from the population growth versus the public vehicles available in Nairobi, it can be noted that there exists a deficit on the number of public Service Vehicles to cater for ever increasing numbers of people.

An elaborate public transport system in Kenya can be traced back to 1934, when the Overseas Transport Company of London (OTCL) launched the first local bus in Kenya using a fleet of 13 buses on 12 routes (Mukabanah, 2008). OTCL was later on rebranded to United Transport Overseas Services (UTOS) and its busses registered as Kenya Bus Services Ltd (KBS). Additionally, most of the transport needs were met by taxis. The 1950s saw the introduction of the Matatus on city routes besides the Kenya bus though the operation of Matatus remained illegal until 1973 (Khayesi, 1999). In 1966 the City Council of Nairobi (CCN) awarded United Transport Overseas Services (UTOS) "the then owners of Kenya Bus Services Ltd (KBS) a monopoly franchise to operate a bus service in return for a 25% shareholding stake" (Mukabanah, 2008). By the early 70s, the ruralurban migration in Kenya had grown significantly thus creating a higher demand for public transport services within the city that KBS alone could not satisfy. Intensified lobbying from the informal and illegal Matatu operators saw the government bow down to pressure to legalize the operation of Matatus as a public transport form in 1973 (Mukabanah, 2008; Khayesi, 1999). At this point individual Matatu owners intensified their investments into the public transport sector.

In 1986, a new investor, the government, invested in the public transport service through the introduction of the Nyayo Bus Service a deal that saw the contravention of the earlier signed franchise deal with CCN. This new entrant provided subsidized transport services to Kenyan citizens though it only lasted for 7 years (Mukabanah, 2008). According to Chitere and Kibua (2004); Khayesi (1999), the public transport sector has grown since 1960 when there were only less than 400 'Matatus' to 17,600 'Matatus' in 1990 and 40, 000 in 2004 depicting growth in transport investment. However, there have been numerous cases of some key players in the sector falling out of business due to being overpowered by certain challenges. Mukabanah (2008) writes that Kenya bus services, Nyayo bus and Stagecoach are some of the organized public transport companies that have failed to succeed due to severe challenges in the transport sector. He notes that the current Kenya Bus Services has had to change hands several times since its incorporation due to numerous losses in their business.

# 1.1.1 Global Perspective of investment in public transport

A view at the global front public transport shows a high level of government controls on most structural arrangements and infrastructure. For instance the American public transport system is predominantly controlled by the federal government. America has one of the largest public transit systems in the world. Most

major cities like Chicago, New York City, Boston, Washington, DC, and San Francisco have like a third under the federal government and the controlled by other transportation Authorities like Metropolitan **Transport** Authority (MTA) for New York City, Chicago Transit Authority (CTA), The Massachusetts Bay Transit Authority (MBTA), Washington Metropolitan Area Transit Authority (WMATA) and Bay Area Rapid Transit (BART) in Francisco and outlying areas in East Bay (Aug 18,2014 by MPA@ UNC). Other countries like China with fast growing economies have significant problems associated with urban public transport that as J Yulin (2014) wrote 'China has experienced rapid development urbanization since the opening and reform being carried out in 1978.The policy urbanization rate was 42% in 2004, and is expected to reach 57% in 2020, with the current urban population of 830 million continuing to grow by approximately 80 million each year as rural residents relocate to urban areas. This level of urbanization brings huge transportation demand between urban and rural areas and requires much more transportation capacity, both on the inter-city and intra-city level. Therefore, it is wise to design the transportation structure to accommodate an integrated transportation system connecting urban and rural areas. In general most developed nations have a fair share of challenges on public transportation but their main concern is on sustainability issues and environmental concerns.

# 1.1.2 Local Perspective of the investment in public transport

The Kenyan public transport sector has numerous challenges that make investments

into the sector slim (All Africa news, 2012). According to a 2009 report by the Ministry of Transport (MoT), the Kenyan public transport faces challenges like poor quality of transport services; inappropriate modal split; unexploited regional role of the transport system; transport system not fully integrated: urban environmental pollution; lack of an urban/rural transport policy; institutional deficiencies; inadequate human resource capacity and lack of a vision for the transport sector. All Africa news (2012) added challenges like inadequate infrastructure, high costs, poor safety and inefficiency not only hinder the performance of the transport sector but also jeopardize efforts to attract investors into the public transport sector.

Investment in transport covers a wide range of projects with participation from a cross range of public and private. These investments cover infrastructure projects in transport that have reached financial closure and directly or indirectly serve the public (Trade Economics, 2012). The investment is not yet at par as Kenya's mass transport is characterized by inadequate infrastructure, high costs, poor safety and inefficiency. The Kenya's public transport system contributes majorly to the country's economic inefficiency as it encourages use of low capacity vehicles compared to the high capacity ones. The majority public transport vehicles have a capacity of 14 passengers that leads to high operation costs. As a result, Kenya's public transport system is facing challenges that inhibit it from performing the role of facilitating economic growth and development (All Africa, 2012). This is blamed on inadequate investment in transport system. The Chairperson of the Transport Sector Board at the Kenya Private Sector Alliance (KEPSA) noted that huge investment by the private sector has made a shift from large buses to smaller ones and that if Kenya is to achieve its long term economic goals, public resources must be devoted to the transport sector.

Investment in the transport system is also marred with cartels that terrorize public service vehicles (PSV) and charge fees for using the routes where they are located discouraging potential investors. Cartels generally increase costs and destroy fair competition in the public transport sector (Galliers et al., 2003). Cartels seek to form agreements, written or sometimes verbal, to work to the same mutually agreed rules so that there is no competition among the parties if they are operating in the same industry. There is need to counter the large number at which single PSV dealers come up so as to enhance control and regulation which is important for sustainability (Chitere & Kibua, 2004). Odero, Khayesi and Heda (2003) added that there is for comprehensive and implementation of the law by empowering traffic police through better training and remuneration so as to combat some of the challenges facing the investment opportunities in the public transport sector.

The transport sector has been operating below capacity (Otieno, 2003). Investment growth in this sector has been greatly suffered inadequate infrastructure, high fuel costs, poor safety, poor road maintenance, problem of sourcing funds other than government and low contracting and sourcing capacity (Mac Donald, 2012). Despite the challenges facing the transport sector, it has remained the fastest growing sectors of the Kenyan economy since 2000 (Africa economic outlook 2005-2006) this

has increased investment in this sector (Karimi& Mugenda, 2011), especially when government steps in to combat or reduce the effect of these challenges, the amount of investment to the sector is likely to grow significantly (Mukabanah, 2008). Khayesi and Heda (2003) noted that the performance of the transport sector could significantly if the challenges faced by players could be managed adequately. Congestion, pollution, numerous road accidents, corruption between Matatu operators and traffic police, cartels and insecurity (Mungiki) are said to have erupted over the years in the transport sector and need to be addressed to make the industry attractive to more investors.

#### 1.2 Statement of Problem

The transport sector in Kenya is characterized by inadequate infrastructure, high costs, poor safety and inefficiency. These are attributed to a number of challenges in the sector that make investments into the sector guite difficult (All Africa news, 2012). The high cost of funds has been a major hindrance to investment in Matatus which are the main means of transport in the country (Chitere and Kibua, 2004). Mukabanah (2008) comments that government subsidies are required to build, maintain, and operate most public transport sectors. In most developed nations like China, USA and some European nations, the government owns the public transport sector due to the financerelated challenges likely to be faced by private investors (Stares & Liu, 1997).

In the Kenyan case, studies have shown that public transport is not efficient thus not attractive to investors. For instance, the dominant 14 seater Matatus accrue high cost of operation (All Africa news, 2012). This leaves

one with the question: If the returns accrued from the transport business will not dispense the desired revenue to enable sustainability, what attracts investors to the transport sector business? What can be done to increase the level of investment into the sector? Looking at the regulations in the sector, there are regulations that guide investments operations within the sector but as the African Executive Newsletter puts it, disorder and disorganization is the order of the day in the sector as it is bedeviled with incessant turmoil. This calls for a study into the matter in order to establish the challenges hindering sufficient investment in public transport sector in Kenya to bridge the gap between the required investments versus the current reality of under capacity.

# 1.30bjectives of the Study

#### 1.3.1 General objective of the Study

The purpose for the study was to establish the challenges affecting investment in public transport industry in Nairobi-Kenya.

## 1.3.2 Specific Objectives of the Study

To meet the main objective of the study, the following specific objectives were formulated to:

- Establish the effect of government regulations on investment in public transport industry in Nairobi-Kenya
- II. To assess how profitability of the transport industry affects investment in public transport industry in Nairobi-Kenya

- III. Find out the effects of access to finance on investment in public transport industry in Nairobi-Kenya
- IV. To establish effects of transport cartels on the investment in public transport industry in Nairobi-Kenya

## 1.4 Research Questions

The study was guided by the following research questions:

- I. What is the effect of government regulations on investment in public transport industry in Nairobi-Kenya?
- II. How does profitability of the transport industry affect investment in public transport industry in Nairobi-Kenya?
- III. What are the effects of access to finance on investment in public transport industry in Nairobi-Kenya?
- IV. How do transport cartels affect the investment in public transport industry in Nairobi-Kenya?

## 1.5 Justification of the Study

This study would be of great importance to several groups of individuals including the government as a policy maker, the key players in the public transport sector and the public. This study would provide important facts on how the government can step in to enhance the investment committed to the transport sector since it is an important part of the economy. The study would also highlight on areas in the public transport industry that are not well regulated so that the government can initiate the formulation of regulations to manage the areas. The study would also identify the role the government ought to play to enhance the

performance of the public transport sector in Nairobi as well as Kenya.

Key players in the transport industry like investors, policy makers and private sector business commentators would use the study to get information on the actual state of things in the transport industry and from the information be able to mobilize the right persons to invest or play their role to enhance the performance of the sector. Key players would also act as a watch dog to ensure that the government comes up with better and sustainable policies and regulations to govern the sector. They would also get information that would enable them know which areas to lay emphasis on so that are attracted to put their monies in the sector. The public gets to benefit by the well performing public transport sector. Since this study would identify the causes of inefficiencies in the public transport sector as pertains to investment, it would expose some of the things that the public need to pressurize so that they can be implemented in the transport sector to make it offer better services to them. As potential investors, the public would also be informed on the viability of investing in the Kenyan public transport sector. The study would also form a potential source of for reference information by scholars/researchers aiming to conduct studies in the field of public transport.

# 1.6 Scope of Study

Durotolu, (2001) defines scope of a study as an extent of coverage of the subject matter being investigated .This Study only investigated challenges affecting investments in public transport industry in Nairobi in Kenya, based on four specific areas: government regulation,

profitability, adequate financing and cartels. The study focused on the region of Nairobi. The study focused on the transport sector in Nairobi for the period between April to June 2015.

## 1.7 Limitation of the Study

Public transport in Kenya is a broad field that involves bigger scope and players. This study was limited to factors affecting investment in public transport in Nairobi, hence did not include other modes of public transport like railway and air. The recent part of political lobbying around solving the transport crisis would tip the Kenya government to develop the rail more and indeed in the vision 2030, this is envisioned. If this is done, then the current study may be deemed insufficient from a coverage perspective. In addition the industry is undergoing rapid changes with the advent of technological exploits being witnessed and further studies may be required to put this in consideration. Consequently, dealing with cartels is a safety hazard as it is a highly instigated affair that is kept under tables with a lot of mutagenic characteristics and may have some few limitations in getting all the required information for the study.

## LITERATURE REVIEW

The aim of the literature review is to present the available literatures explaining the issues available in the public transport sector, from which the study will come up with the gaps to be addressed. The review also shows the research already done in the transport sector hence depicting the new things that need to be done to advance the knowledge available in the field of study. This chapter is organized such that it reviews existing theories around the four specific objectives identified in the study after

which divulge into the various researches done and lastly concluding by presenting a conceptual framework.

#### 2.1 Theoretical Framework

The theoretical framework shows how the research fits into what is already known as well as the contribution of the research being undertaken to the topic of the field. (Maxwell, 2005)

# 2.1.1 Government Regulation

Boyer R. & Michael Aglieta (1976) who were among the founders of regulation school, stated that broad theory is the study of the transformation of social relations, which creates new forms- both economic and non-economic organized structures and the producing a determinate structure. the mode of reproduction. This theory or approach looks at capitalist economies as a function of social institutional systems and not just government's role in the regulation of the economy, although the latter is the major part of the approach. The above approach seeks to put into perspective that an economy would be more efficient if there is presence of regulations governing institutions such as transport sector. Indeed Thomas K. MC Craw, Prophets of regulation wrote about the railway system in the US in which it was evident that when the federal government was in control efficiencies were noted and the common citizens were not exploited.Based on the above framework, it is notable perhaps that in the Kenyan context on transport industry if the government draws policies to regulate the sector and build capacity to enforce the rules in all its facets, more investors' would be attracted to invest in

the industry thus driving quality in service provision and reducing the cost

#### 2.1.2 Profit Maximization

Milton Friedman an economic theorist who believed in free market with no government intervention, states that "There is one and only one social responsibility of business — to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud."

Most Businesses and organizations' main objective is to make profits and for that matter would work more efficiently and allocate their resources in such a manner that they maximize the profits accrued. Profits are maximized at the point where the Marginal Revenue is equal to the Marginal Cost.Based on the above theory, the individual investors would be attracted to invest on the public transport to make profit and maximize it through efficiencies that would be created.

#### 2.1.3 Financing

According to Zheng GU (University of Nevada) who wrote and published a journal on financing theories and Financing practices, it is important for firms to have strong policies on what mode of financing they shall take in expanding their businesses. For instance he notes that the capital structure irrelevance theory proposed by Modigliani and Miller (1963) holds that a firm's value is not affected by its capital structure. The theory, however, was proposed under some strict assumptions, such as frictionless markets,

no tax, and no bankruptcy. Other firms that are not very profitable tend to incline towards Equity financing. Other theories of corporate and general financing include Myers (1984) Traditional Trade-offs mode which is based on a firm's trade-off between the debt's tax shield and the costs associated with bankruptcy and financial distress (Robincheck & Myers, 1966, Marsh, 1982), the other two were the Pure Pecking Orders (PPO) in whose essence was that firms and individuals follow a pecking order of preference when making a financing decision for the business capital and internal capital is preferred, Donaldson (1961&1969).Lastly, Modified Pecking Order (MPO)-Myers (1984) in which preference is the same as PPO though on MPO the two assumptions exist on information asym- metry and the preference of the debt to equity being reversible. The MPO emphasizes not only information asymmetry but also a firm's preference for 'financial slack' or debt capacity.

Based on the theories of financing above it is worth noting that its relevance to this study is on each transport firm or individuals to consider the policies that it has to adopt in getting the much needed finances. The theories incline towards firms or individuals exhausting the internal sources first before going for external sourcing for funds due the total cost involved. In this study, one of the questions to be answered is that of how access to adequate financing affect investment in the public transport industry and through the above theory, the assumption is that individuals and other transport firms have exhausted the internal sources and therefore, need for access to finance to either expand their transport business or enter.

# 2.1.4 Theory of Cartels

People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices. It is impossible indeed to prevent such meetings, by any law which either could be executed, or would be consistent with liberty and justice. Adam Smith, The Wealth of Nations, 1776.Cartels denote mutual agreements between competing firms to control prices or exclude entry of new competitors to the same market. In the Kenyan context cartels are characterized by chaos and hooliganism that affects the public transport industry directly. The current situation has seen this change face in form of SACCOS that one has to subscribe to so as to be allowed in certain routes which is tantamount to extortion of new entrants.

### 2.2 Conceptual framework

The study seeks to establish the challenges of investment in the public transport industry in Nairobi Kenya. The study uses the government regulations, profitability, access to financing and cartels as the independent variables that determine investment in the public transport industry. The study wants to find out how the independent variables determine investment in the transport sector. Figure 2.1 is the conceptual framework diagram of the study.

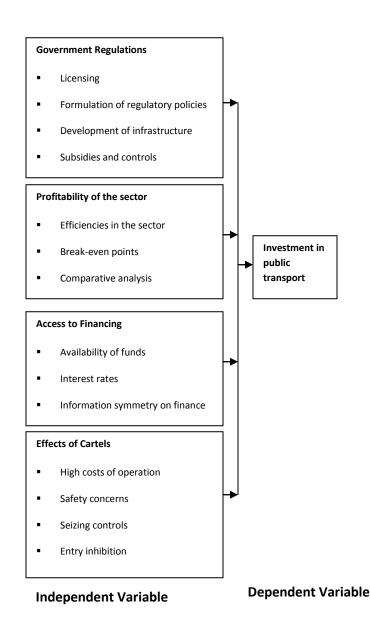


Figure 2.2: Conceptual Framework

# 2.3 Empirical Review

# 2.3.1 Government Regulations on Investment in Public Transport

Regulations and policies are very important in providing standards to which resources and services need to be managed. Well regulated sectors present several advantages ranging from value for money, high returns, quality

services, sustainability, effectiveness, efficiency among others (APEC Economies, 2002). In the transport sector better regulations are linked with better performing transport sector (Republic of Kenya, 2009). According to the ministry of transport in Kenya, the public transport sector in Kenya is regulated by three major laws which are the New Constitution of Kenya, the Integrated National Transport Policy and the Sessional Paper on Integrated National Transport Policy. Other rules and policies are also available to regulate the activities carried out in the transport sector and this are implemented through the Transport Licensing Board (TLB); Kenya Maritime Authority (KMA) and the Kenya Railway Corporation (KRC).

Regulations ensure that the activities carried out in the transport sector are legal (Ibid). The overall responsibility of drafting the policies and ensuring they are implemented is in the Ministry of Transport with coordination with related ministries (MoT, 2012). As to whether the available regulations are adequate enough to ensure an attractive public transport system is debatable. Some scholars note that the laws are available but implementation hurdles have made them ineffective (Khayesi, 1999; Chitere & Kibua, 2004). Other arguments point out that there should be regulations that control prices so that operators are cushioned from unfair competition from fellow operators who charge lower prices (Heseltine & Silcock, 1990).

Estache & de Rus (2000) also assert that there should be policies that bind stakeholders like the government to play their role-in infrastructure development so as to reduce the excessive costs public transport operators face. Such policies will enable operators of public transport sue the government for damages

caused by poor infrastructural network. As such elaborate infrastructural development will see operators face lower costs hence room for profit making will be created, which will attract many investors.

Chitere and Kibua (2004) present one of the reasons as to why regulating the public transport sector was necessary to be increased accidents experienced on Kenyan roads. They argue that the Integrated National Transport Policy and the publication of the Legal Notice No.161 in October, 2003 were some of the key regulations created to ensure that the public transport sector was managed well. The regulations aimed at reducing accidents and in case the accident happens, then many lives are saved. It should be noted that accidents do not only lead to lose of lives alone but also to lose or damage of property.

Providing and enforcing regulations that would ensure the accidents are reduced guarantees that investors' investment will be protected so will the lives of road users. It should be noted that every investor is interested in investing in a business that they are sure is well regulated to cushion their investment from unnecessary risks (Sohail, Maunder & Cavill, 2006). Chitere and Kibua (2004) argue that the availability of regulations is not just enough; going the extra mile to ensure adequate implementation of these laws is also important in confirming that a sector is well regulated. In fact, the presence of the laws does not have a significant impact on investors as the smooth implementation has.

A report by the APEC Economies (2002) concurs that when the available laws are well implemented and the fruits can be witnessed, then does the effect of the created laws seem to have meaning. Over the last few years accidents have been very rampant on Kenyan roads particularly during festive periods leading to a lot of losses being incurred. Inadequate enforcement of the available regulations in public transport saw overspeeding and overloading of PSV vehicles increase hence the accidents (Odero et al., 2003). Heseltine and Silcock (1990) add that when the formulated regulations are weak or when the implementation of the available regulations is inadequate, motorists see that as a chance to engage in illegal practices like overloading of freight vehicles or racing of buses. Chitere and Kibua (2004) add that it is only through strong regulations that are well implemented that award of driving licenses fraudulently will be controlled hence controlling illegal driving practices.

Further, Heseltine and Silcock (1990) and APEC Economies (2002) report claims that sometimes increased regulations create redundancies in the way people do business and only a deregulation fastens services hence opening up the business. The Mexican Transport freight for instance experienced many redundancies due to over regulation but after deregulation, the sector increased performance which saw more revenue collection and certainly more investments into the freight transport (APEC Economies, 2002).

The study by Sohail et al. (2006) also makes important conclusions on the regulatory framework that should be very attractive to investors in the public transport industry. First, they argue that an attractive regulatory framework must embrace openness, show honest, and be effective, but should not be very detailed that it perpetuates illegal activities like

corrupt practices. These factors, they say, promises growth in the public transport sector to any economy that adopts them. Sohail et al. (2006) further present that most investors commit their investment where they are sure of regulations that will enhance the potential for growth.

Sohail et al. (2006) also concluded that better regulation must reflect adequate communication and coordination among key stakeholders as a way of coming up with laws that will be easy to implement, less impassive to some sectors and effective. Chitere and Kibua (2004) argue that design of most of the public transport regulatory laws in Kenya did not involve all stakeholders thus the challenges in implementation. Khayesi (1999) also posited that most of the Kenyan public transport regulatory laws were being broken because most of the Matatu operators and drivers and not consulted during touts were formulation. This resulted to the laws that most investors thought were very discriminative to them. The recent introduction of the alcoholblow technology also presents another example of a regulation that did not involve all stakeholders to extent PSV stakeholders (particularly Matatu drivers and owners) thought the regulation was aimed to jeopardize their work/businesses.

In the Kenyan sector, for instance, the availability of elaborate policies and regulations were not enough to ensure a well performing and maintained transport sector. Chitere and Kibua (2004) argue that though the laws were present, some obstacles to road transport planning existed. An instance of such obstacles was the institutional fragmentation where the Kenya Roads Board (KRB), Transport Licensing

Board (TLB), Motor Vehicle Inspection Unit, Registrar of Motor Vehicles, Driving Test Center, Traffic Police and Local Authorities were charged with different but sometimes similar responsibilities in managing the activities of the public transport sector hence creating sources of conflicts.

Estache and de Rus (2000) argued that division of labor and responsibilities among key regulators in the public transport sector must be distinct enough to avoid any conflicts or inconsistencies. They argue that investors in the transport sector might not be attracted by wrangles among key players tasked with regulating the sector. This is because the wrangles will end up affecting the innocent operators and consumers of the transport services. Other obstacles were identified as TLB lacking adequate information on allocation of routes to Matatus, corrupt traffic police who could not enforce the requirements of the traffic act, and inadequate accountability on finding out which roads are maintained well and ΑII these how. obstacles depict that implementation was another key factor in making the transport sector favorable and attractive to investors.

According to Mukabanah (2008), despite the significant role the formal public transport sector played in the Kenyan transport industry, the government seemed to care a lot about the Matatus than it did about the formal transport sector-KBS. This is based on the numerous charges KBS were charged while Matatus were exempted from some of those charges. Chitere and Kibua (2004) also argue that it was questionable whether the government had a soft spot for small capacity vehicles as opposed to large capacity vehicles like buses. This is

based on the fact that while the number of buses was declining in public transport in Kenya, that of Matatus and other private transport means were increasing rapidly despite their low capacity. This is seen as a barrier to investors aiming to invest in bus transport as opposed to those investing in Matatus. However, this inclination has since changed after the ministry of transport initiated reforms that would reduce traffic congestion on city roads. Gichuki (2012) argues that the coming up with a policy that required all Matatus and buses in public transport services registered under SACCOS was one of the strategies of ensuring that operators could access financing that would enable them invest in larger capacity vehicles like buses. This coupled with the cost effectiveness of larger capacity vehicles has since seen the number of large capacity vehicles on Kenyan roads rising gradually.

According to Wright and Thiriez (1987), the regulations that attract investors should also pose very little limitations to new entrants. Regulations that will make it difficult for new entrants to enter the business of public transport will see some potential investors being locked out. They also argue that strict entry regulations excludes or limits chances of giving innovative forms of low-cost transport that can cater for transport needs of poorer citizens. It also limits the alternatives of higher quality to those willing to pay for such. Though Wright and Thiriez emphasize that the regulations should not bur new entrants, it is also worth noting that when the supply is high prices will certainly be low thus investors are likely to get low returns on their investments thus withdrawal (Estache & de Rus, 2000). This therefore means that as much as the available regulations should encourage fewer hindrances

to new entrants to the market, it should also manage the entries so that the suppliers do not exceed the demand.

# 2.3.2 Effect of Profitability on the Transport Industry

One of the motivators of a business person or entrepreneur to invest in a given business or sector is the profitability of that business (Salon & Shewmake, 2011; Raballand & Macchi, 2008). Of course no business man will be willing to invest in a business whose profitability is uncertain. In fact, according to Mukabanah (2008), KBS collapsed after shareholders realized that the company was not profitable. The collapse of the Nyayo Bus services was due to costs exceeding revenues-meaning that the company was making losses instead of profits (Republic of Kenya, 1995). It therefore may be assumed that the need for profits is what drove investors to invest in the public transport sector though the accuracy of this statement lies in the findings the study will collect.

A study by Heseltine and Silcock (1990) found that reducing the transport fares at lower levels with the aim of providing affordable fares to the poor without reducing the costs as well led to deterioration of vehicle fleets as well as a reduction in the number of the vehicles. A reduction in both the fares and the costs or an increase in the fares was however found to have the alternative results leading to a conclusion that investment was only positive when profitability was guaranteed. Khayesi (1999) attributes the rapid growth in the number of Matatus on the Kenyan roads since 1973 to the ability of the Matatus to promise larger profits based on the operators' naughty

way of increasing fares with claims that costs have gone higher.

On the contrary, Raballand and Macchi (2008) assert that the hiking of fares by Matatus is not necessarily to make huge profits but rather to respond to the high costs intertwined in the public transport business. this might be considered as a weak defense because if fares are increased to cover the increased costs, then it goes without say that the operators do not want their profits to be slashed to cover part of the increasing costs. Chitere and Kibua (2004) argue that Matatu operators take advantage of the liberal market to increase fares so that they can enhance their profits. Liberal market also does not limit the kind or number of PSV an investor wishes to invest it. Mukabanah's (2008) article notes that KBS and Nyayo collapsed due to high costs/ Though Nyayo Bus service had subsidized their prices, KBS did not thus their fares were higher. Despite these higher fares, the costs involved saw the company make loses that saw creditors come running for their assets. This means that the high fares alone are not enough to make the sector profitable.

According to Heseltine and Silcock (1990), the potential for high profits is what encouraged more investment into the railway transport system in Argentina. They however add that profits alone were not the only driver of most investors; others committed their investment into the sector owing to the potential for growth in the country's railway transport. Growth of the sector meant that there would be sustainability hence rising profits every year. Peters (1993) on the other hand noted that the Venezuelan cargo shipping sector had seen a reduction in the number of investment to the

sector owing to the increase in shipping costs by 30 per cent which most investors thought would significantly affect their profits. With the high transaction costs of creating markets for some infrastructure (such as urban and rural roads) coupled with the strategic and distributional consequences of the absence of effective markets, governments must also continue to be responsible for structural, fiscal and investment planning. Such initiative will see most of the costs incurred reduced at the favor of most investors (Peters, 1993).

Peters (1993) and Heseltine and Silcock (1990) conclude their studies by asserting that perceived losses in the stability, operation and reliability of transport services, as well as the consequential losses in patronage reductions in vehicle occupancy should be dealt with if the transport service is anything expected to attract many capable investors. Chitere and Kibua (2004) concluded that some of these costs have been managed in the Kenyan transport sector through control of speed which has led to reduction in fuel consumption hence the saving in purchases and lowered maintenance costs. Sinha and Fiestas (2011) argue that when costs are kept low in any business, investors are guaranteed of high profits. They further inform that when an investor is assured of high profits if he invests in a given business, then it is justifiable that the investment climate is conducive for even more investments that can ensure growth and stability.

It is also argued that when the public transport sector promises high profits to investors, others doors of good things, both to the investors and the nation are opened. For instance, a profitable transport sector will mean that a lot of revenue will be provided to the government in terms of tax which significantly contributes to economic development. Consequently, lenders will only be comfortable to loan investors if they are sure that the business in which the investment will be put promises profits that can be used to repay the loans (Sinha & Fiestas, 2011).

# 2.3.3 Access to Financing in Transport Industry

Transport is crucial for economic development in any nation. To achieve economic growth and poverty reduction, good physical access to resources and markets must be available. In many developing nations, the availability of the said resources is sometimes challenging thus the underfunding of the transport sector (Thoopal, 2000). Chitere and Kibua (2004) argue that the availability of adequate capital is very key to the development and growth of the public transport sector. The concern is therefore how to source this crucially needed financing to invest in the public transport sector. Chitere and Kibua (2004) further lament that the initial capital to invest in public transport is large hence difficult to rise. They add that most operators finance their purchases through work-and-pay system of through their own finances, a source that is limiting most of the time.

Though Chitere and Kibua (2004) elaborate the importance of access to external financing in business, Sinha and Fiestas (2011) discuss that in many developed nations, the binding constraints theory established that access to financing is not an inhibiting factor to private investment. However, the theory agrees that to most developing nations like Kenya, access to

finance is a constraint to private investment. Salon and Shewmake (2011) add that having access to adequate financing is very key towards having a transport sector that has potential to work efficiently. Republic of Kenya (1995) notes that having access to finances enables the availability of extra financing that is necessary to cover the extra costs incurred during the course of business.

Significant returns on Matatus are only anticipatable when the costs of fuel, maintenance, wages and insurance are low. However with the current shifts in fuel prices in the world as well as in Kenya, together with the poor Kenyan roads and the high insurance costs due to numerous accidents, lenders have hardened their potential to lend to investors in the public transport sector unless the collateral is well matching (Republic of Kenya, 2010). Sinha and Fiestas (2011) argue that such conditions have locked out many potential investors whose investment could significantly change the performance of the public transport sector. Salon and Shewmake (2011) estimate that this low access to finance coupled with the high taxation public transport vehicles are charged make the cost of running the public transport business a steep mountain hill to most investors. The effect of this has been witnessed on the inability of the available transport to meet the demand. This can be confirmed with the large numbers of people who jam bus stops during pick hours waiting for long hours for Matatus to pick them. Wright (1993) on a similar account posits that the Chinese Railway Transport got a boost in its performance after a group of investors stepped in to cover the financial deficits the government had not covered. To date, the Chinese railway networks is among the best railway transport services in the world.

Chitere and Kibua (2004) point out that one of the major hindrances to investment in Matatu sector is the high cost of funds. Most formal lending institutions are known to deny public transport operators access to loan financing due to the high risks involved in the industry (Sinha & Fiestas, 2011). Though access to external financing is limited to investors in the transport sector, Chitere and Kibua (2004) found that some owners of PSV vehicles had good jobs-some even working in government hence had an easy way of accessing loan facilities. Thee few investors had advantage over the others in terms acquiring better vehicles as well as maintaining them well. Investment into the smaller capacity vehicles is much difficult than the large capacity since lenders understand that the costs of running the smaller capacity vehicle is very high in relation to its returns as opposed to that of running a lager capacity vehicle (Republic of Kenya, 2009).

Chitere and Kibua (2004) also point out that the preferred insurance cover for most PSV motorists is the third party insurance cover. The preference emanates from the fact that a comprehensive cover is very expensive owing to the high number of accidents and theft cases in Kenya. Odero et al. (2003) argues that this high costs in insuring PSV vehicles makes it impossible for personal financing to be adequate. The effect of this is that the low cost insurance covers bought by the PSV operators is not adequate enough to cover for most of the risks arising from accidents (Republic of Kenya, 2010) an incident that leads to operators going out of business after an accident either after

their vehicles are auctioned to cover arising compensation claims or are damaged seriously that the cost of repairing them overwhelms the operator (Odero et al., 2003).

Inadequate access to financing leads most willing investors to go for second-hand vehicles which have been used somewhere else. This is because the cost of acquiring newly assembled or imported vehicles is enormously high (Chitere & Kibua, 2004). Odero et al. (2003) argues that most of the second-hand vehicles operating on Kenyan roads, particularly those over eight years old are not only harmful to the environment but are also a safety hazard to the lives of users. Most of them emit harmful gaseous emissions to the environment hence contributing to pollution. Their old age means that they can easily breakdown hence causing accidents. There cost of maintenance is also high as well hence putting pressure on operators to hike fares to meet the cost (Chitere & Kibua, 2004). This explanation shows that lack of access to finances does not only lock out investors from the public transport business but also encourages the acquisition of vehicles that are potentially harmful to stakeholders and the environment. Raballand and Macchi (2008) add that given the significant role the public transport sector plays in the economy, hiked fares indirectly affects economic growth since the public's movement and transportation is restricted. Thoopal (2000) and Wright (1993) argue that this has influenced most governments to intervene by controlling prices. The Kenyan government has however not heeded to this; in fact recent surveys have established that hiking of prices has become a common thing particularly during festive seasons or when the demand is high.

Having understood the effects of lack of access to finances, Sinha and Fiestas (2011) posed the question: What causes lack of access to finance? This study believes that this question is very important given the significance access to finance can have to the overall performance of the transport sector and the overall economy. The answer Sinha and Fiestas give to this question is the level of development of the financial sector. Since the development of the financial sector is influenced by such factors like regulation and supervision; development of institutions that help to increase the level of information available to lenders; the transaction costs involved in lending; the extent of competition and hence pressure to improve efficiency; the investment financial institutions make to enhance accessibility of their services; whether they have been able to raise long term savings for long term lending; and the level of development of capital markets to provide exit routes for equity finance". Since most of these reasons can be controlled by the government, it is therefore goes with the observation that the government should come up with policies and bank regulation rules that will see most or all of these issues addressed. The role of bank supervision should also be enhanced to enable banks to offer the financial services.

# 2.3.4 Effect of Cartels in Transport Industry

According to Mukabanah (2008), since the year 2000, the public transport sector has seen the rise of cartels whose main aim has been to extort public service operators as well as passengers. He refers to the Mungiki as the main known extortionist according to him. Republic of Kenya (2009) agrees that before the 2002 general election in Kenya, the effect of

cartels on most of city routes was significantly felt by operators. However, during the reign of the late John Michuki as the minister for transport, most cartel groups were hunted down by the strict regulations that were set including the Legal Notice No.161. By mid 2000's the roles of managing PSV was already taken by owners from the cartel groups. Local authorities also took up the responsibility of managing stages from the cartels (Chitere & Kibua, 2004).

Raballand and Macchi (2008) discuss that much of the transport price burden in Africa has to do with the overall political economy of freight logistics as well as the role played by cartels. African countries provide an easier market for cartels to exist due to the thinness the markets have particularly when compared to the Asian and European markets. However, it should be noted that market thinness does not necessarily lead to the existence of cartels (Ibid).

In the transport industry, there are two kinds of cartels-those that arise to protect the interests of Matatu operators and those that arise to extort the operators illegally. Those that arise to protect the interest of Matatu operators are mostly formed by the operators themselves with their main aim of preventing new entrants into 'their routes' so that they can instead harvest high profits (Raballand & Macchi, 2008). This kind of cartels can impose high penalties on any new or any other PSV vehicle plying on their routes with an aim of transporting passengers/goods. For those who fail to obey the demands of these cartels, the consequence can range from being beaten to the vehicle being blacklisted or even set on fire. The other type of cartels is those whose formation is not influenced with the need to protect the

interests of PSV operators. These cartel charges any PSV vehicle plying on the routes they have possessed. The consequences of not obeying their extornist calls leads to abuse of the vehicle's tout and driver and/or even burning the vehicle so that it will not operate on that route again (Opala, 1998; Khayesi, 1999). The Mungiki are an example of such a cartel. Raballand and Macchi (2008) argue that the effects of theses cartels are many ranging from inculcating fear among drivers and touts of the consequences of plying on their routes without committing the requested charges. This reduces competition on such routes since only a few PSV vehicles will be allowed to operate; resulting into high fares which might induce an outcry from the public. PSV owners can also risk losing their vehicles-in case they are burnt hence incurring losses. Additionally, investors will be prevented from investing on the 'attacked' routes. All these consequences lead to a less well performing transport sector unless the government and other security organs intervene. Just as Wright and Thiriez (1987) reported, the involvement of the government in public transport will see the control of prices which will deny cartels their share hence driving them away.

The presence of cartels is also associated with extorting passengers as well as branding the public transport industry as unsafe. According to the Republic of Kenya (2009) report on policy integration in public transport, cartel groups harass passengers by forcing them to board the vehicles they are touting on. During this process passengers lose personal items or even their luggage. The commotion caused also create unsafe environment for passengers. Khayesi (1999) agrees by asserting that some cartel groups-best identified as 'stage managers' force

passengers to board the vehicles they (the stage managers) desire and since the process is normally forceful, it turns out to be harassment to passengers. Matatu 'conductors' on the other hand stay mum either for being helpless or for the satisfaction that their vehicles will get full before competitors'. According to Muune (1998), just as other product/service consumers may do, when passengers are harassed, they will dislike the given bus/matatu company for which they are harassed or wholly the route from which they are harassed. When this happens to many the passengers, disadvantaged vehicle company may lose a lot of revenue to well mannered competitors. In case it is the whole route, it is possible of a migration to other cities which are perceived not to have the same conditions.

According to Khayesi (1999, p. 10), "the existence of strong interest groups in the matatu sector (made of stage workers, owners and other stakeholders) partly explains the regular violence and conflicts that occur in this industry". This presents that the composition of different stakeholders to form cartels in itself is a source of the common conflicts marrying our PSV sector. Some of the common conflicts as presented by Khayesi (1999) include: owners fighting against fellow owners triggered by a given fleet of PSV operating on a route it is not licensed to operate; and owners fighting against touts triggered by the owners wanting to take over stages from the touts (Muune, 1998). Some of these conflicts have been very severe leading to lose of lives (Mulumby, 1998). Other conflicts include those between Matatu crew and the police which are very common. In most cases the crews complain of extortion from the police while the police blame the crew of not adhering to traffic regulations (Khayesi, 1999). Another form of conflict comprises the opposition leaders ganging with Matatu crew to oppose government of poor regulation or rules affecting the Matatu sector (Ibid).

# 2.4 Critique of the existing Literature

The current literature on public transport in Kenya have focused more on the regulatory frameworks as the main area of improvement to attract more investors onto the field without looking at other factors like the cartels, access to Finance and profitability being tackled in this study. Chitere and Kibua (2004), Hesel and Silcock (1990), Sohail et al. (2006) have all expounded on regulatory formulation and implementation as the main reason for poor performance in public transport.

## 2.5 Research Gap

The public transport sector in Kenya is characterized with chaos and seemingly unending disorganization that has continuously been a burden to the common citizen who uses the public means every day. The main problem is the sky rocketing cost of fares that is not controlled and this leads to the citizens at the mercy of the operators. Despite the numerous writers highlighting the challenges ailing the sector, no literal undertaking is aiming at pointing to these challenges in a view to demystifying the sector to attract investors into the industry and hence lower the demand and consequently price. This study aims at investigating these challenges in-depth for Nairobi city and perhaps some of the learning can be replicated elsewhere or open for more research in other setting.

#### 2.6 Summary of the Chapter

The Literature review chapter above considered the various major theories shaping this research project for specific study objectives identified mainly on Government Regulations, Profitability in the transport sector, Access to financing and the effect of the cartels. These were grouped as independent variables affecting the dependent variable which is investment in the public transport in Nairobi Kenya in a conceptual framework. The various theories point to the fact that in most developed economies, the public transport sector has played major role and there is higher propensity for the government involvement to sustain its gains and move to the next level.

#### RESEARCH METHODOLOGY

This chapter presents the design as well as the methodology the researcher aims to use to collect valid and less biased data that will address the gaps identified in the reviewed literature. The chapter is arranged such that it explains the research design first before the methodology. After the design, the chapter presents the population to be studied, the sampling procedures as well as the sample size, the data collecting methods, and the data analysis method as well.

## 3.1 Research Design

A research design gives the blue print of how the researcher will collect the desired data (Churchill & Iacobucci, 2009; Bryman, 2008). According to Bryman (2008), case studies, surveys and experiments are the major designs a researcher can choose from. Bryman and Bell (2003) on the other hand added two other designs: cross section and social survey designs, longitudinal design and comparative designs.

This study will adopt a cross section survey design. According to Olsen & Marie (2004), a cross section design involves collecting data from a population at a given single point in time. A cross sectional survey design examines phenomena to identify change occurring in the variables of interest in a population at a single point in time (Rubin & Babbie, 2009). This study aims to investigate the determinants of investment in public transport in Kenya thus will target the larger group of current investors. Since the Matatu sector has very many private investors, a survey will form a relevant design for interviewing them. The cross section survey will be important since the study only aims to investigate determinants in the current transport sector thus the irrelevance of longitudinal surveys.

# 3.2 Target Population

Bryman & Bell (2003) identify a population as the whole group of individuals a researcher aims to generalize the study findings to. The target population for this study is owners of Matatus and buses for public transport in Nairobi Kenya. Members of the Matatu Owners Association (MOA) will be targeted as the population. This population comprises investors in the public transport sector who are in a better position to give the study accurate information concerning the determinants o investment in the sector. Nairobi MOA is chosen as the population based on their large numbers. Infrastructural development Nairobi is also better thus making it possible for a focus to be drawn on the variables under study. According to estimates from the MOA, there are about 3800 active owners of Matatus/buses in Nairobi.

# 3.3 Sampling Techniques

Babbie (2010) identifies a sampling technique (also known as sampling design) as a strategy through which the researcher will arrive to the most qualified respondents to the study questions. Since the population comprises investors of who all are assumed to be aware of the determinants of investing in the public transport sector, a sampling method that will give each individual in the population equal chance of participating in the study is preferred. The study therefore will adopt simple random sampling.

## 3.4 Sample Size

A sample size refers to the actual respondents to be interviewed by a researcher (Babbie, 2010). When the population of a study is large, Yamane (1967) came up with the following formula as best to estimate the sample size.

Equation 3: 
$$n = \frac{N}{1 + N(e)^2}$$

Yamane noted that in the formula:

n= is the required sample size.

N= is the population

e = is the level of precision

Using this formula, the study has calculated the sample size to be 97.44 which the study will round off to 100 at a confidence level of 95% and a desired accuracy level (level of precision) of 10%. The researcher estimates that the sample size of 100 is adequate enough for the

study to collect findings that can be generalized to the whole population. More so, this sample meets the 10% requirements expressed by Mugenda and Mugenda (2003).

### 3.5 Data Collection Methods

This study puts to use both primary and secondary data. Primary data has been reviewed from journals, books, periodicals and reports, electronic sources and articles. There are several data collection methods a researcher can engage in the process of collecting primary data. This study adopts a closed ended questionnaire as the data collection instrument. Α closed ended questionnaire will collect quantitative data which is considered easy to analyze. Rubin and Babbie (2009) note that quantitative data emphasizes the collection of precise data that is generalizable. The closed easily ended questionnaire is preferred for this study since it will lead the researcher to focus on specific variables of interest to the study. It is also easy and cheaper to administer this kind of data collection method (Babbie, 2010). However, stratified data will also be made in use with simple random method on the sample will be in use.

# 3.6 Data Collection Procedures

The data collection procedure will see the researcher first seek authorization to conduct a research study from the responsible authorities. The researcher shall then identify the individuals who will respond to the study questions, educate them on the aim and objectives of the study as well as on the ethical issues the study is going to observe. Among the ethical issues the study will keep are

confidentiality, informed consent and free will of the respondent to participate in the study. The researcher shall then set study dates when questionnaires will be delivered to the sample size. The questionnaires shall be distributed through the drop-and-pick method to ensure high return rate. The researcher shall also follow up the respondents to ensure a high return rate.

#### 3.7 Data Analysis and Presentation

Burns and Grove (2003) define data analysis as a mechanism for reducing and organizing data to produce findings that require interpretation by the researcher. The data collected was quantitative and qualitative. Once the questionnaires were received they were coded and edited for completeness and consistency. Data analysis entailed editing, coding and tabulation of data collected into manageable summaries (Mugenda & Mugenda, 2003).

To ensure easy analysis, the questionnaires were coded according to each variable of the study to ensure accuracy during analysis. Quantitative data was analyzed by employing descriptive statistics and inferential analysis using statistical package for social science (SPSS) version 21 and excel. This technique gave simple summaries about the sample data and present quantitative descriptions in a manageable form, (Orodho, 2003). Together with simple graphics analysis, descriptive statistics formed the basis of virtually every quantitative analysis to data, (Kothari, 2005).

The study further adopted multiple regression model at 5% level of significance and 95% level of confidence to establish the strength and direction of the relationship between the independent variables and the dependent

variable. Investment in public transport industry was regressed against four variables namely government regulations, profitability of the industry, transport cartels and access to finance. The equation was expressed as follows:

# $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon,$

Where;

Y= Investment in public transport industry,  $\beta 0$ = constant (coefficient of intercept),  $X_1$ = Government regulations;  $X_2$ = Profitability of the industry;  $X_3$ = Access to finance;  $X_4$ = Transport cartels;  $\epsilon$  = error term;  $\beta_1...\beta_4$ = regression coefficient of four variables.

An Analysis of Variance (ANOVA) was used to measure statistically the significance in predicting government regulations, how profitability of the industry, transport cartels and access to finance influence Investment in public transport industry. The test significance involved the use of squared moment correlation coefficient, the R square, as a measure of significance. The coefficient is a standard measure of an assumed linear relationship between variables. A coefficient of value between (+ve) 0.5 and (-ve) 0.5 or higher indicates a strong relationship and by extension a significant variable in influencing the trend of the dependent variable.

The findings were presented using tables, charts and graphs for further analysis and to facilitate comparison. This generated quantitative reports through tabulations, percentages, and measure of central tendency. Descriptive statistics such as measures of central tendency and dispersion along with percentages were used to organize and summarize numerical data whose results were presented in tables, pie charts, column and bar graphs for easy interpretation of the findings (Kothari, 2008).

# DATA ANALYSIS, FINDINGS AND INTERPRETATIONS

#### 4.1 Introduction

This chapter discusses the interpretation and presentation of the findings obtained from the field. The chapter presents the background information of the respondents, findings of the analysis based on the objectives of the study. The primary data was gathered from the questionnaire as the research instrument. For this purpose, the various statistical analysis tools like Cronbach's alpha, correlation analysis and multiple regression analysis have been employed to investigate the challenges affecting investment in public transport industry in Nairobi-Kenya

## 4.1.1 Response Rate

The study targeted a sample size of 100 respondents from which 71 filled in and returned the questionnaires making a response rate of 71% as shown in Table 4.1.

**Table 4.1 Response Rate** 

	Oastia	Questionnaires	
	Questionnaires	filled &	Percentage
	Administered	Returned	
Respondents	100	71	71

This response rate was satisfactory to make conclusions for the study. Mugenda & Mugenda (2003) states that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Based on the findings of this study, the response rate was excellent.

#### 4.1.2 Reliability Test Results

A pilot study was carried out to determine reliability of the questionnaires. The pilot study involved the sample respondents. Reliability analysis was subsequently done using Cronbach's Alpha which measured the internal consistency. The findings were as shown in Table 4.2.

Table 4.2: Reliability test results

Scale	Cronbach's Alpha	Comments
Government regulations	0.953	Accepted
Profitability	0.888	Accepted
Access to finance	0.875	Accepted
Transport cartels	0.935	Accepted

Gliem & Gliem (2003) established the Alpha value threshold at 0.7, thus forming the study's benchmark. Cronbach Alpha was established for every objective which formed a scale. The table shows government regulations had the highest reliability ( $\alpha$ = 0.953) and this also illustrates that all the four variables were reliable as their reliability values exceeded the prescribed threshold of 0.7.

### 4.1.3 Validity Analysis Results

The content validity formula by Amin (2005) was used in this study. The formula is; Content Validity Index = (No. of judges declaring item valid) / (Total no. of items). It is recommended that instruments used in research should have CVI of about 0.78 or higher and three or more experts could be considered evidence of good content validity (Amin, 2005). The results were as shown in Table 4.3:

**Table 4.3; Content Validity Index** 

Variable	CVI	Comment
Government regulations	0.8890	Accepted
Profitability	0.9895	Accepted
Access to finance	0.8686	Accepted
Cartel barriers	0.8486	Accepted

From the results in Table 4.3, it illustrates that all the four variables were valid as their CVI values exceeded the prescribed threshold of 0.78. This infers that the instrument was reliable as emphasized by Amin (2005).

## 4.2 Demographic Information

information Demographic provides regarding research participants and is necessary for the determination of whether the individuals in a particular study are a representative sample of the target population and testing appropriateness of the respondent in answering the questions for generalization The demographic information purposes. comprised of the gender, age, level of education, work experience and position in the organization.

### 4.2.1 Gender of the respondent

The study sought to determine the gender composition of the population. The information is as illustrated in Figure 4.1.

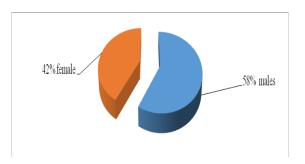


Figure 4.1: Gender category

From the findings, it was established that majority of the respondents as shown by 58% were males whereas 42% of the respondent were females, this is an indication that both genders were well represented in this study and thus the finding of the study did not suffer from gender bias all through the study.

### 4.2.2 Age Distribution

The study requested the respondents to indicate their age category. The results were as shown in Figure 4.2.

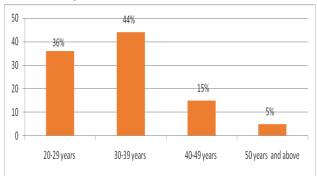


Figure 4.2: Age Distribution

From the research findings, the study revealed that most of the respondents as shown by 44% were aged between 30 to 39 years, 36% of the respondents were aged between 20 to 29 years, 15% were aged between 40 to 49 years whereas 5% of the respondents were aged 50 years and above. This implies that respondents

were well distributed in terms of their age in regard to investment in public transport industry.

# **4.2.2** Duration of investment in public transport Sector

The study requested the respondents to indicate their years of investment in public transport sector. The results were as shown in Figure 4.3.

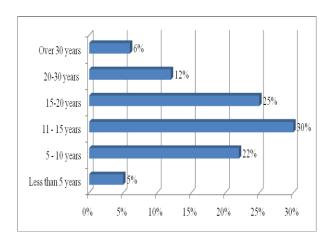


Figure 4.3: Duration of investment in public transport Sector

From the research findings, the study revealed that most of the respondents as shown by 30% had invested between 11-15 years, 25%% of the respondents indicated between 15 to 20 years, 22% between 5 to 10 years, 5% less than 5 years whereas 6% of the respondents indicated over 30 years. This implies that respondents were well distributed in terms of their investment in regard to investment in public transport industry and could provide information sought on the study.

# 4.3Government regulation

The first objective of the study was to establish the effect of government regulations on investment in public transport industry in Nairobi – Kenya.

The research sought to determine respondent's level of agreement with the statements relating to effects of government regulations on investment in public transport industry in Nairobi - Kenya. . A scale of 1-5 was used. The scores "Strongly disagree" and "Disagree" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale (1 ≤ Disagree≤ 2.5). The scores of 'Neutral' were represented by a score equivalent to 2.6 to 3.5 on the Likert scale  $(2.6 \le \text{Neutral} \le 3.5)$ . The score of "Agree" and "Strongly agree" were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale (3.6  $\leq$  Agree  $\leq$  5.0). The results were presented in mean and standard deviation. The mean was generated from SPSS version 21 and is as illustrated in Table 4.4

**Table 4.3: Statements relating government regulations** 

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree	Mean	Std Deviation
There are better regulations which enhance a better performing transport sector	2	7	13	34	15	4.26	0.26
Available regulations only ensure that legal activities are carried out in the transport sector	4	2	15	12	15	1.99	0.35
There better designed and implemented regulations which ensure fair competition	5	2	14	12	15	2.14	0.28
The regulations bind all stakeholders like the government to play their role towards making the transport sector attractive to investors	1	2	0	52	16	4.43	0.27
The regulations enhance safety on roads hence increasing investor confidence	3	2	9	16	17	2.21	0.28

There is poor							
implementation of							
regulations leading							
to PSV crew							
engaging in unsafe							
acts like over	7	4	11	36	14	4.14	0.28
speeding and	•	·		50			0.20
overloading which							
put investors'							
investments at risk							
of e.g. accidents							
Available							
regulations show							
potential for							
growth in public	3	4	42	15	18	2.12	0.31
transport sector							
which attracts							
investors							
Available							
regulations have							
perpetuated liberal		_					
market as well as	4	3	16	17	10	2.19	0.26
removed barriers		5					
to market entry							
,							
Available							
regulations control							
the number of PSV	2	3	8	14	10	2.18	0.26
on routes for	_	8	5		_0	10	0.20
sustainable profits							

From the research findings, majority of the respondents agreed that there are no better regulations which enhance a better performing transport sector as shown by a mean of 4.26, they disagreed that available regulations only ensure that legal activities are carried out in the transport sector as shown by a mean of 2.99 and there better designed and implemented regulations which ensure fair competition as

shown by a mean of 2.14. The respondents disagreed that the regulations bind all stakeholders like the government to play their role towards making the transport sector attractive to investors as shown by a mean of 2.43, the regulations enhance safety on roads hence increasing investor as shown by mean of 2.21, agreed that there is poor implementation of regulations leading to PSV crew engaging in unsafe acts like over speeding and overloading which put investors' investments at risk of e.g. accidents as shown by a mean of 4.14. The respondents also disagreed that the available regulations show potential for growth in public transport sector which attracts investors as shown by a mean of 2.12. The respondents disagreed that the available regulations have perpetuated liberal market as well as removed barriers to market entry as shown by a mean of 2.19 and available regulations control the number of PSV on routes for sustainable profits as shown by a mean of 2.18.

### 4.4Profitability of the transport industry

The second objective of the study was to determine the effect of profitability of the transport industry on investment in public transport industry in Nairobi – Kenya.

The research sought to determine the respondent's level of agreement with the statements relating to effects to profitability of the transport industry on investment in public transport industry in Nairobi – Kenya.. A scale of 1-5 was used. The scores "Strongly disagree" and "Disagree" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ( $1 \le \text{Disagree} \le 2.5$ ). The scores of 'Neutral' were represented by a score equivalent to 2.6 to 3.5 on the Likert scale ( $2.6 \le 1.5 \le 1.5$ 

Neutral  $\leq$  3.5). The score of "Agree" and "Strongly agree" were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale (3.6  $\leq$  Agree  $\leq$  5.0). The results were presented in mean and standard deviation. The mean was generated from SPSS version 21 and is as illustrated in Table 4.4

Table 4.4: Statements relating profitability of transport sector

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree	Mean	Std Deviation
Investors in public							
transport sector							
are driven by need	2	27	13	14	15	2.26	0.26
for higher profits							
A profitable public transport sector promises opportunities for growth of investors' investment	4	6	15	32	15	3.93	0.35
Need for high profits will determine the number and size of vehicles one will invest in	5	5	14	32	15	4.14	0.28
Profitable transport sectors promise growth and stability in the sector	1	2	0	52	16	4.43	0.27
Profits alone do not encourage	3	26	9	16	17	2.22	0.28

investment							
without growth							
Profitable							
transport sector							
promises							
economic growth	7	4	11	36	14	4.84	0.28
hence future							
growth of the							
sector							
A profitable							
transport sector							
opens more	3	4	2	35	17	4.12	0.31
external sources							
of finance							

From the research findings, majority of the respondents disagreed that investors in public transport sector are driven by need for higher profits as shown by a mean of 2.26, they agreed that a profitable public transport sector promises opportunities for growth of investors' investment as shown by a mean of 3.93 and need for high profits will determine the number and size of vehicles one will invest in as shown by a mean of 4.14. The respondents disagreed Profitable transport sectors promise growth and stability in the sector as shown by a mean of 4.43, the regulations enhance safety on roads hence increasing investor as shown by mean of 2.22, agreed that Profits alone do not encourage investment without growth as shown by a mean of 4.84. The respondents also disagreed that the profitable transport sector promises economic growth hence future growth of the sector as shown by a mean of 2.12. The respondents disagreed that the available regulations have perpetuated liberal market as well as removed barriers to market entry as shown by a mean of 2.19 and agreed that a profitable transport sector opens more external sources of finance as shown by a mean of 4.12.

#### 4.5 Access to Finance

The third objective of the study was to determine the effect of access to finance on investment in public transport industry in Nairobi – Kenya.

The research sought to determine the respondent's level of agreement with the statements relating to effects of access to finance on investment in public transport industry in Nairobi – Kenya.. A scale of 1-5 was used. The scores "Strongly disagree" and "Disagree" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale (1 ≤ Disagree≤ 2.5). The scores of 'Neutral' were represented by a score equivalent to 2.6 to 3.5 on the Likert scale (2.6  $\leq$  Neutral  $\leq$  3.5). The score of "Agree" and "Strongly agree" were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale (3.6  $\leq$  Agree  $\leq$  5.0). The results were presented in mean and standard deviation. The mean was generated from SPSS version 21 and is as illustrated in Table 4.4

Table 4.4: Statements relating access to finance

	Strongly	Disagree	Neutral	Agree	Strongly	Mean	Std Deviation
Access to							
finances enables							
investors cover	2	7	13	34	1	4.26	0.26
extra costs	2	,	13	54	5	4.20	0.26
incurred in PSV							
operations							

without affecting							
the business							
negatively							
Inadequate							
access to finance							
leads to an							
inefficiently	4	6	15	42	5	4.93	0.35
working							
transport sector							
Inadequate							
financing leads to investment in							
smaller capacity	5	_	1.4	22	1	4.14	0.20
vehicles which	5	5	14	32	5	4.14	0.28
are not cost							
effective enough							
Inadequate							
financing drives							
motorists out of							
business any	_				1		
time a serious	2	1	0	52	6	4.03	0.27
accident							
happens							
паррепз							
Inadequate							
access to							
finances leads to							
acquisition of							
vehicles that are	6	3	9	36	1 7	4.22	0.28
'unroadworthy',					,		
unsafe and costly							
to maintain							

From the research findings, majority of the respondents agreed that Access to finances enables investors cover extra costs incurred in PSV operations without affecting the business negatively as shown by a mean of 4.26, they agreed that Inadequate access to finance leads to an inefficiently working transport sector as shown by a mean of 4.93 and inadequate financing leads to investment in smaller capacity vehicles which are not cost effective enough as shown by a mean of 4.14. The respondents also agreed inadequate financing drives motorists out of business any time a serious accident happens as shown by a mean of 4.03 and inadequate access to finances leads of vehicles acquisition that 'unroadworthy', unsafe and costly to maintain as shown by mean of 4.22.

# 4.6 Transport cartels

The fourth objective of the study was to examine the effect of transport cartels on investment in public transport industry in Nairobi – Kenya.

research sought to examine respondent's level of agreement with the statements relating to effects of cartels on investment in public transport industry in Nairobi - Kenya. A scale of 1-5 was used. The scores "Strongly disagree" and "Disagree" were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale (1 ≤ Disagree≤ 2.5). The scores of 'Neutral' were represented by a score equivalent to 2.6 to 3.5 on the Likert scale (2.6  $\leq$  Neutral  $\leq$  3.5). The score of "Agree" and "Strongly agree" were represented by a mean score equivalent to 3.6 to 5.0 on the Likert Scale (3.6  $\leq$  Agree  $\leq$  5.0). The results were presented in mean and standard deviation. The mean was generated

from SPSS version 21 and is as illustrated in Table 4.4

**Table 4.4: Statements relating cartels** 

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Disagree	Mean	Std Deviation
Cartels lead to the fare prices being increased hence reducing revenue	4	7	13	2	45	4.44	0.12
Cartels raise the cost of investing in transport industry	6	4	15	42	5	4.93	0.32
Cartels make investors fear to invest in public transport sector	5	5	14	32	15	4.64	0.54
Extortion from cartels on certain routes leads to investors blacklisting the routes hence stagnating growth of transport sector in such areas/routes	2	2	1	49	16	4.53	0.66
Cartels harass customers hence giving a bad image to affected routes	6	3	9	36	17	4.00	0.28
Cartels form a hub of conflicts in the public transport sector	5	5	14	32	15	3.99	0.28

From the research findings, majority of the respondents agreed that cartels lead to the fare prices being increased hence reducing revenue as shown by a mean of 4.44, cartels raise the cost of investing in transport industry r as shown by a mean of 4.93, cartels make investors fear to invest in public transport sector as shown by a mean of 4.64. The respondents also extortion from cartels on certain routes leads to investors blacklisting the routes hence stagnating growth of transport sector in such areas/routes as shown by a mean of 4.53 and cartels harass customers hence giving a bad image to affected routes as shown by mean of 4.00 and cartels form a hub of conflicts in the public transport sector as shown by a mean of 3.99.

# 4.7.2 Multiple Regression Analysis

The study adopted a multiple regression analysis so as to establish the relationship between the independent variables and dependent variables. The study applied SPSS version 21 to code, enter and compute the measurements of the multiple regression. According to Green & Salkind (2003) regression analysis is a statistics process of estimating the relationship between variables. Regression analysis helps in generating equation that describes the statistics relationship between one or more predictor variables and the response variable. The results are shown in Table 4.4.

Table 4.4: Model summary

Model	R	R	Adjusted	Std. Error
		Square	R Square	of the
				Estimate

 a. Predictors: (Constant), Government regulations, profitability of the transport industry, access to finance and transport cartels

The coefficient of determination (Adjusted R<sup>2</sup>) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Investment in public transport industry) that is explained by all four independent variables (Government regulations, profitability of the transport industry, access to finance and transport cartels). According to the four independent variables studied, they explain only 69.50% of the Investment in public transport industry in Nairobi – Kenya as represented by adjusted R<sup>2</sup>. This therefore means that other factors not studied in this research contribute 30.50% of the Investment in public transport industry in Nairobi - Kenya. Therefore, a further study should be conducted to investigate the other factors that contribute 30.50% which influence the Investment in public transport industry in Nairobi – Kenya.

# 4.7.3 Analysis of Variance (ANOVA)

Table 4.5: Analysis of Variance<sup>a</sup>

Model		Sum of Squares	þ	Mean Square	L.	Sig.
1	Regressi	105.	4		122.39	.0005 <sup>b</sup>
	on	654		26.4135	8	
	Residua	14.2	66	.2158		
	I	47				
	Total	109.	70			
		901				

- a. Dependent Variable: Investment in public transport industry
  - b. Predictors: (Constant), Government regulations, profitability of the transport industry, access to finance and transport cartels
  - c. Critical value = 12.453

From the Anova statistics, the study established the regression model had a significance of 0.5% which is an indication that the data was ideal for making a conclusion on the population parameters as the value of significance(p-value) was less than 5%. The calculated value was greater than the critical value(122.398 > 12.543) an indication that Government regulations, profitability of the transport industry, access to finance and transport cartels all affect Investment in public transport industry.

# 4.7.4 Regression Coefficients

Table 4.6: Coefficients<sup>a</sup>

		Unstandardi zed Coefficients		Standa rdized Coeffic	Т	Sig.
	Model					
				ients		
		В	St	Beta	-	
			d.			
			Err			
			or			
1	(Constant)	55.4	2.		2.309	.001
		65	06			
			5			
	Government	.744	.5	.702	2.455	.003
	Regulations		85			
	Profitability of the	.703	.5	.635	3.266	.006
	Industry		56			
	Access to finance	.693	.4	.615	2.011	.008
			87			
	Transport cartels	-	.3	.709	2.069	.002
		.751	56			

a. Dependent Variable: Investment in public transport industry

The general form of the equation was to predict Investment in public transport industry from Government regulations, Profitability of the industry, Access to finance and Transport cartels is:

# $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ Where

Y= Investment in public transport industry;  $\beta 0$  = Constant Term;  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  = Beta coefficients;  $X_1$ = Government regulations;  $X_2$ = Profitability of the industry;  $X_3$ = Access to finance;  $X_4$  = Transport cartels and  $\epsilon$  = Error term. The model equation would be; Y=55.465 + 0.744 $X_1$  + 0.703 $X_2$  + 0.693 $X_3$  - 0.751 $X_4$ . The predicted Investment in public transport industry = 55.465 + (0.744 x Government

regulations) + (0.703 x Profitability of the industry) + (0.693 x Access to finance) - (0.751 x Transport cartels). From above regression equation; the study found out that when all independent variables (Government regulations, profitability of the transport industry, access to finance and transport cartels) are kept constant at zero the Investment in public transport industry will be at 55.465. At one unit change in Government regulations will lead to 0.744 increases in —Investment in public transport industry. Also a one unit change in Profitability of the industry will lead to 0.703 increases in the Investment in , public transport industry. Further, a one unit change in Access to finance will lead to 0.693 increases in the Investment in public transport industry and one unit change in Transport 8 cartels will lead to (0.751) decrease in Investment in public transport industry. This 2 concludes that a transport cartel contributes more to Investment in public transport industry. This can be used to conclude also that there is a positive significant relationship between Government regulations, Profitability of the industry, Access to finance and Transport cartels on Investment in public transport industry.

To test for the statistical significance of each of the independent variables, it was necessary to test at 5% level of significance and 95% level of confidence of the p-values and from the table 4.5 the Government regulations had a 0.003; Profitability of the industry showed a 0.006 level of significance, Access to finance showed a 0.008 level of significance and Transport cartels had a 0.002 level of significance. Therefore, the most significant factor was transport cartels.

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The study sought to establish challenges affecting investment in public transport industry in Nairobi-Kenya. The study examined theoretical and empirically how various variables contributed to investment in public transport industry in Nairobi-Kenya. In assessing the challenges, the study focused on how select factors (Government regulations, Profitability of the industry, Access to finance and Transport cartels) influenced investment in public transport industry in Nairobi-Kenya. This chapter captures the summary of findings, from which conclusions were drawn and recommendations made.

## **5.2. Summary of the Findings**

### 5.2.1 Government regulations

From the research findings, majority of the respondents agreed that there are no better regulations which enhance a better performing transport sector, they disagreed that available regulations only ensure that legal activities are carried out in the transport sector and there are better designed and implemented regulations which ensure fair competition. The respondents disagreed that the regulations bind all stakeholders like the government to play their role towards making the transport sector attractive to investors, the regulations enhance safety on roads hence increasing investor and agreed that there is poor implementation of regulations leading to PSV crew engaging in unsafe acts like over speeding and overloading which put investors' investments at risk of e.g. accidents. The respondents also disagreed that the available regulations show potential for growth in public transport sector which attracts and disagreed that the available regulations have perpetuated liberal market as well as removed barriers to market entry and available regulations control the number of PSV on routes for sustainable profits.

# 5.2.2 Profitability of the transport industry

The study established that, majority of the respondents disagreed that investors in public transport sector are driven by need for higher profits, they agreed that a profitable public transport sector promises opportunities for growth of investors' investment and need for high profits will determine the number and size of vehicles one will invest in. The respondents disagreed Profitable transport sectors promise growth and stability in the sector , the regulations enhance safety on roads hence increasing, agreed that profits alone do not encourage investment without growth, profitable transport sector promises economic growth hence future growth of the sector, the available regulations have perpetuated liberal market as well as removed barriers to market entry and agreed that a profitable transport sector opens more external sources of finance.

## 5.2.3 Access to Finance

From the research findings, majority of the respondents disagreed that access to finances enables investors cover extra costs incurred in PSV operations without affecting the business negatively, they agreed that inadequate access to finance leads to an inefficiently working transport sector, inadequate financing leads to investment in smaller capacity vehicles which are not cost effective enough. The respondents also agreed inadequate financing drives motorists out of business any time a serious accident happens and inadequate access to

finances leads to acquisition of vehicles that are 'unroadworthy', unsafe and costly to maintain. Additionally, the study revealed that the variable statistically, strongly and significantly influenced investment in the public transport industry positively at 5% level of significance as it had a positive relationship with the dependent variable. This infers that accessing finance play an important role in investment in the public transport industry.

# 5.2.4 Transport cartels

From the research findings, majority of the respondents agreed that cartels lead to the fare prices being increased hence reducing revenue, raise the cost of investing in transport industry, make investors fear to invest in public transport. The respondents stated that extortion from cartels on certain routes leads to investors blacklisting the routes stagnating growth of transport sector in such areas/routes and cartels harass customers hence giving a bad image to affected routes and form a hub of conflicts in the public transport sector. Additionally, the study revealed that the variable statistically, strongly and significantly influenced investment in the public transport industry positively at 5% level of significance as it had a negative relationship with the dependent variable. This infers that transport play an important role in investment in the public transport industry.

## **5.3 Conclusions**

The study revealed and agreed that there are no better regulations which enhance a better performing transport sector, available regulations only do ensure that legal activities are carried out in the transport sector and there are no better designed and implemented regulations which ensure fair competition. The

regulations do not enhance safety on roads hence reducing investors' confidence increasing investments or attracting new investors to fill gaps and there is poor implementation of regulations leading to PSV crew engaging in unsafe acts like over speeding overloading which put investors' investments at risks of example such risks as the numerous accidents and high cost of repairs and maintenance. The study also revealed that available regulations do not show potential for growth in public transport sector and have perpetuated liberal market as well as removed barriers to market entry and available regulations control the number of PSV on routes for sustainable profits.

Additionally, the study established that investors in public transport sector are driven by need for higher profits, a profitable public transport sector promises opportunities for growth of investors' investment and need for high profits will determine the number and size of vehicles one will invest in. The transport sector does not promise growth and stability hence reducing profits and profits alone do not encourage investment without growth

Further, access to finances enables investors cover extra costs incurred in PSV operations and inadequate access to finance leads to an inefficiently working transport sector, inadequate financing leads to investment in smaller capacity vehicles which are not cost effective enough. It was also established that inadequate financing drives motorists out of business any time a serious accident happen, leads to acquisition of vehicles that are 'unroadworthy', unsafe and costly to maintain.

Finally, transport cartels lead to the fare prices being increased hence reducing revenue, raise the cost of investing in transport industry and make investors fear to invest in public transport. The extortion from cartels on certain routes leads to investors blacklisting the routes hence stagnating growth of transport sector in such areas/routes. They also harass customers hence giving a bad image to form a hub of conflicts in the public transport sector.

#### 5.4 Recommendations

Referencing on the global perspective study on the public transport sector especially for the developed countries like the USA, it is evident that with high involvement of the federal government for instance in their railway system, there is huge success from a control, efficiencies and none exploitation of the citizens by the poor transport system perspective. Kenya can heavily borrow on their legal framework to better this sector.

The study recommends that there should be better regulations which enhance a better performing transport sector as the available regulations do not ensure that legal activities are carried out in the transport sector. There should be better designed and implemented regulations which ensure fair competition and the regulations should enhance safety on roads hence increasing investor for potential growth in public transport sector to have perpetuated liberal market as well as removed barriers to market entry for sustainable profits to encourage investment in the sector.

Additionally, the study recommends public transport sector should have policies that promise opportunities for growth of investors' investment and need for high profits as it determine the number and size of vehicles one will invest in. This will encourage investment in

the transport sector as there will be sustainable profits.

Further, there should be ways of encouraging investors to access to finances to invest in the transport industry especially on cover extra costs incurred in PSV operations, bigger capacity vehicles which are cost effective enough and reduces motorists out of business any time a serious accident happen and reducing acquisition of vehicles that are 'unroadworthy', unsafe and costly to maintain.

Finally, there is need to have rules and regulations to control transport cartels who continuously lead to the fare prices being increased hence reducing revenue, raise the cost of investing in transport industry and make investors fear to invest in public transport. This will reduce extortion from cartels on certain routes which lead to stagnating growth of transport sector in such areas/routes. This will also reduce harassment to customers hence giving a good image and reduce conflicts in the public transport sector.

### 5.5Recommendations for Further studies

Since this study sought to establish the challenges affecting investment in public transport industry in Nairobi- Kenya, it was established that from literature review most studies are conducted in developed countries and scanty studies are available in developing countries and specifically in Kenyan organization and urban set up. Additionally, very little has been undertaken to explore factors affecting public transport industry reason why the researcher call for further studies to be undertaken in other areas for generalization of the findings of this study.

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