MODERATING EFFECT OF BUSINESS REGULATORY REQUIREMENTS ON THE EFFECT OF FIRM SPECIFIC FACTORS ON FINANCIAL PERFORMANCE OF PRIVATE SECURITY FIRMS IN KENYA

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DECLARATION

I hereby declare that this thesis is my original work and to the best of my knowledge has not been presented for a degree award in this or any other university.

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APPROVAL

The undersigned certify that they have read and hereby recommend for acceptance of Murang'a University of Technology a thesis entitled **"Moderating Effect of Business Regulatory Requirements on the Effect of Firm Specific Factors on Financial Performance of Private Security Firms in Kenya."**

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DEDICATION

To my beloved wife, Ann, our children Gian, Hadassah, and Elianah thank you very much for the moral support and unending love.

To my Father, John Kuria who went to be with lord, it was one of my lowest moments, but I always admire how you used to celebrate my academic achievements. May you rest in eternal peace.

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ABSTRACT

Even though Kenya enacted Private Security Regulatory Act of 2016, majority of private security companies have continued to operate without complying with the regulation thus inhibiting their performance. For private security firms to survive and thrive, they need to be provided with a friendly business climate. The research therefore investigated the effect of firm specific factors and business regulatory requirements on the financial performance of private security firms. The firm specific factors included firm's financial aspects, entrepreneur's attributes and firm's characteristics, making the independent variables. In the study, business regulatory requirements were the moderating variables. Business regulatory requirements included finance access regulations and private security industry regulation. The research findings will be useful to various groups including academia, government and management of private security firms. The research was guided by public interest, credit access, scale efficiency, Miller- Orr model and social network theories. Further, the research was based on descriptive survey research design. The study population was 75 private security firms operating in Kenya forming the census with no sampling being carried out. The study made use of primary and secondary data with primary data being sourced using structured questionnaires. The instrument was taken through pretesting to ensure validity and reliability of each construct measurements before actual study. Statistical tools including frequency distribution, mean, standard deviation and coefficient of variation were used as descriptive statistics. Multivariate OLS regression was applied to examine the effect of firm specific factors on financial performance. Stepwise regression was adopted to examine the moderating effect of business regulatory requirements on the relationship between firm specific factors and financial performance. The study established that firm financial aspects had a significant direct effect on financial performance of private security firm in Kenya. The study also revealed that firm entrepreneur attributes had a direct significant effect on private security firms' financial performance in Kenya. The study also noted that firm characteristics had a significant direct effect on private security firms' financial performance. Finance access regulations did not have a significant effect on the effect of firm specific factors on financial performance. Further, private security industry regulations had a significant moderating effect on the effect of firm specific factors on private security firms' financial performance in Kenya. The study thus concluded that all firm specific factors significantly explained financial performance of private security firms in Kenya. The study also concluded that finance access regulations was not a moderator of the effect of firm specific factors on financial performance of private security firms in Kenya. Further, the study concluded that private security industry regulations moderated the effect of firm specific factors on financial performance of private security firms in Kenya. The study recommends that private security firms should enhance their financial aspects such as improving their cash flow and having financial statements audited. The owners of private security firms should enhance their entrepreneur attributes such as networking and financial literacy. The study also suggests to management of private security firm to enhance their firm characteristics such as firm size. The research also noted that the management of private security firms ought to align their operations with private security industry regulations such as minimum wages and training for staff to enhance their financial performance

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ACRONYMS AND ABBREVIATIONS

ACCA	:	Association of chattered certified accountants
ANOVA	:	Analysis of Variances
AU	:	African Union
BM	:	Bob Morgan
CBK	:	Central Bank of Kenya
CBR	:	Central Bank Rate
CCTV	:	Closed circuit television
CEO	:	Chief Executive Officer
CoESS	:	Confederation of European Security Services
CV	:	Coefficient of Variation
DF	:	Degree of Freedom
DRC	:	Democratic Republic of Congo
EAC	:	East African Community
EU	:	European Union
FEM	:	Fixed Effect model
G4S	:	Group 4 Securicor
GDP	:	Gross Domestic Product
GISES	:	Global Intelligence and Security Environmental Sustainability
GMM	:	Gaussian Mixture Model
GoK	:	Government of Kenya
IDRC	:	International Research Development Centre
ISECOM	:	Institute for Security and Open Methodologies
ISS	:	Institute of Security Studies
KLR	::	Kenya Law Report

KNPSWU	::	Kenya National Private Security Workers Union
Ksh	:	Kenya Shillings
KSIA	:	Kenya Security Industry Association
L	:	Lower
LEAA	:	Law Enforcement Alliance of America
M	:	Mean
MFIs	:	Micro-Finance Institutions
NGO	:	Non-Governmental Organization
NATO	:	North Atlantic Treaty Organization
NPS	:	National Police Service
NSE	:	Nairobi Securities Exchange
OECD	:	Organization for Economic Cooperation and Development
OLS	:	Ordinary Least Square
PLS	:	Partial Least Square
PMCs	:	Private Military Companies
PMSCs	:	Private Military and Security Companies
PP	:	Probability Plot
PSCs	:	Private Security Companies
PSIA	:	Protective Services Industry Association
PSIRA	:	Private Security Industry Regulatory Authority
PSRA	:	Private Security Regulatory Authority
PSTF	::	Private Security Task Force
REM	:	Random Effect Model
ROA	:	Return on Assets
ROE	:	Return on Equity

SD	:	Standard Deviation
SEM	:	Structural Equation Modelling
SMEs	:	Small and Medium Enterprises
SNT	:	Social Network theory
SPSS	:	Statistical Package for Social Scientists
SSR	:	security Sector Reform
UK	:	United Kingdom
UN	:	United Nations
US	:	United States
USSR	:	Union of Soviet Socialist Republics
VIF	:	Variance Inflation Factor
VIP	:	Very Important Person

DEFINITION OF TERMS

Business Regulatory Requirements	:	These are set of laws, both domestic and global, that govern the practice of business (Geringer, 2012).
Entrepreneur Attributes	:	Qualities possessed or required of an entrepreneur that are critical in successful running of the business venture such as financial literacy, networks and leadership (Nguyen, Kim, Quoc, Trung, 2021)
Finance Access Regulations	:	External rules and laws set by financial institutions governing access to credit by firms in need of credit such as interest rate and collateral requirements (Olanrewaju, Ansary & Agumba, 2016).
Firm Characteristics	:	These are firm specific qualities that are critical for the performance of a firm. Such qualities include firm size, age, location, diversification among others (Naikuru, Gathenya & Kamaku, 2016).
Firm Financial Aspects	:	These are financial attributes of a company such as cash flows and quality of audited financial statements (Sibanda, Hove-Sibanda, & Shava, 2018)
Private Security firm	:	A legally registered business organization that offers professional security services such as armored protection, investigation, alarm, guard, patrol and lie detection (Cook, 2017).
Private Security Industry Regulations	:	These are specific laws and rules governing the registration and operation of private security firms within a country including laws on minimum wage of contracted staff and training of staff (Nalla, Gurinskaya & Rafailova, 2017).

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In one of its first studies, Rand corporation described private security as "all types of private organizations and individuals providing all types of security-related services, including investigation, guard, patrol, lie detection, alarm, and armoured transportation" (Nemeth, 2017). The central function of most of the private security firms is detection and prevention of criminal acts. Hallcrest provided a more comprehensive definition of private security that involves information, employment related, physical and information: it is thus a better capture of the functions performed by private security in contrast to definition by Paek, Nalla and Lee (2019) that limits private security to the private police label. Lincoln and Lincoln (2019) argued that private security protects individuals and organizations against crime, accidents, waste, accident, unethical practice and error.

The definition of private security that emphasises on crime provided by Rand was critiqued by the Private Security Task Force (PSTF), a group established by the Law Enforcement Alliance of America (LEAA), on two bases. First, the definition did not include quasi-public police (e.g., park and recreation police) and second, the definition omitted the client relationship and profit-based nature of the industry (Holley, Mutongwizo & Shearing, 2020). Therefore, the PSTF recognised a definition that encompasses organizations, private funded businesses and self-employed individuals providing services that are security related to specific clients at a fee for entities or

individual persons that contracts them for the purpose of protecting their private property, person and interests against various hazards (Nalla & Gurinskaya, 2020). Further, The PSTF restricted its definition to profit oriented organizations and omitted quasi-public police organizations that were paid by public funds.

However, Fielder, (2020) criticised profit oriented or fund source distinction as not being helpful given that not-for profit organizations such as schools, hospitals, airports and schools usually contract for private security. Fielder (2020) defined private security as organization, individuals and services, apart from those of public law enforcement agencies, that is mainly utilised in the protection of individuals, organizations or their property against crime, harm or loss (Lincoln and Lincoln, 2019).

Global Perspectives on Private security

Not less than half of the world's population lives in economies that have more private security workers than public security agencies (Guardian, 2017). In particular, over 40 nations, including Canada, the US, China, The UK and Australia, have more employees contracted to offer protection to specified clientele than police officers who have a specific mandate to protect the public at large. In Britain alone, 232,000 private security officers were hired in 2015 in contrast to 151,000 police in the same period (Guardian 2017). The market for private security services was valued at an estimated value of $180bn (£140bn) globally and was forecasted to expand to $240bn by 2020. This figure is more than aggregate global aid directed at eradicating poverty ($140bn a year) and the GDPs of over 100 nations such Morocco and Hungary. Globally, private security staff are on guard in gated communities, shopping malls and some public streets. They usually dress in uniforms that are like those used by police. In

some nations and states such as Italy and Spain, private security officers are armed with handguns (Guardian, 2017).

Private security staff are on standby to restrict access to elite residential areas from the general public in places such as El Salvador to Vietnam. In Myanmar's central business district, private security officers and metal detectors restrict access to luxury hotels that are towering poverty-stricken neighbourhoods (Nouwens, 2019). Generally, it is estimated that there are about 20 million private security officers worldwide. In the UK, the private security industry was valued at more than £6bn in 2015 (Freedonia, 2017). Further, UK's Confederation of European Security Services (CoESS) reported existence of 232,000 private security guards in 2015. This was slightly less than the number of secondary teachers (about 250,000) and greatly surpasses Britain level of Police: the total number of police officers operating within UK in March 2016 was 151,000 police officers (excluding police community support officers, special constables and support staff) (Martin, 2022). According to the Department of Labor statistics, there are more than 1.1 million private security guards in the US– compared with about 660,000 police and sheriff's officers. Studies shows that US is hiring many private security guards as high school teachers (Kurtenbach & Ansorg, 2020).

Regional Perspectives on Private Security

In African, most of the private military and security firms offer military training and security services. Petersohn (2021) noted that the term private military firm implies private businesses providing professional services to warfare clientele. Private security firms ought to be distinct to military companies. The operation of private security firms should focus on protecting individuals and companies and their

properties and not States (Schreier & Caparini, 2005). They ought not to offer military services. In Africa, the distinction between the role of private security firms and those of private military firms have become blurred in conflict ridden settings especially those fuelled by natural resource curse.

African states are still conflict ridden and can explode into war with the slightest provocation within or externally. However, there are a few States and regions in Africa where instability is not present (Stead, 2006). An analysis of situations in Africa, both during peace and war, ought not to be in isolation rather in the context while accounting for issues. Ekwenye, Theuri and Mwenda, (2018) compares the African continent to a forest that cannot be fully appreciated and understood by examining individual trees. The private security industry in Africa can be categorised into private security companies (PSCs) and private military companies (PMCs). Both kinds of categories are in operation in both unstable and stable countries. The expansion and growth of the private security industry in Africa can be linked to a number of reasons.

Therefore, any analysis of challenges associated with PSCs and PMCs must be based on comprehending the nature of growth and environment the companies operate. Ndlovu-Gatsheni (2006) in addressing the link between growth of private security and weak states in Africa noted that the weak African countries came into existence at the end of the Cold War spitting US and its western allies under the umbrella of NATO on one side against the USSR. The end of the cold war witnessed disarmament, demobilization and reintegration processes that left many soldiers stranded without resources. Accordingly, the study explains that the weak African state is ‘not just an innocent political formation in need of humanitarian rehabilitation’ but ‘a dangerous

phenomenon if conceptualized from a security perspective.' The observation in Ndlovu-Gatsheni (2006) work is critical in the debate in that weak African States leaders' resort to private security sector to gain and maintain power hence making regulation of the industry an uphill task.

Foaleng (2005) examined the link between civil war and natural resources and the involvement of the private security sector. Taking Kisiangani's 'Forest-Africa' example, Foaleng evaluates the 'forest' by examining growth at the ground of the forest. Private security firms are involved in conflict in countries with natural resources for protecting and giving power to those who wants control over the resources. The most 'popular' African states with operation of 'soldiers of fortune' include Mozambique, Angola, Sudan, Liberia, Sierra Leone, Congo (Brazzaville) and Democratic Republic of Congo (DRC). The states have one common denominator being natural resource endowment. The conflict over use and control of such resources results to poor civilians who are molested, being displaced and abused including killing by hired private military security. African conflicts have no doubt resulted in an exceedingly high number of refugees (Krahmann & Leander, 2019).

This study noted the risk of using private military companies to provide security services as well as the link between civil wars and natural resources endowment (Brosig & Sempijja, 2018). Further, the study explains that the relationship between wars and exploitation of natural resources in African countries is made worse by involvement of private military groups to instigate war while protecting leaders who takes advantage of war to exploit natural resources for their own wealth accumulation (Verweijen, Thill, & Hendriks, 2019). When presented choice between 'get rich or die

trying' dilemma, private security actors in African states, do not think twice about it. The private security players' main agenda is that of economic gain from the natural resources and has little to do with peace and stability they claim. Foaleng's further, concludes that private security players do not want an organised country with presence of public security hence they would thwart all efforts towards that in an attempt to remain in control over key natural resources within such countries (Foaleng, 2005).

Messner (2006) however disputes the criticisms level against private security actors by Foaleng. Messner (2006) holds that private security actors are 'angels' of security and peace in Africa arguing that the industry has become part and parcel of peace and stability worldwide. Further, Messner differentiates between legitimate security companies that are critical to peace and stability operations and the illegitimate security players often involved in most of Africa's war and conflict in the past. The scholar further argues that security and peace-oriented operations are criticized using term 'mercenary' based on the fact that the term has not been defined credibly and legally hence often used by industry distractors to disparage the image of critical players aiming at peace and stability of Africa (Messner, 2006).

Further, the clientele of the private security firms is broad and it includes the US, the UN and the AU among others. This context implies that there is urgent need for services of private security in peace and stability given that accountability and professionalism is at the centre of their operations. Given their profitability goal and their reputation being on the line, private security contractors more often tend to incline their service provision to risky areas and conflict affiliated zones in order to protect the lives of their employees they consider vital. Profitability is the central issue

that act as motivator for private security investors to act in a way that does not compromise their business (Button & Stiernstedt, 2018). Private security investors have to balance between profit maximization and better services that does not compromise quality and client expectation. Messner further discloses that domestic and international law, contracts and industry standards are critical tools for regulating the private security sector. In conclusion, Messner asserts that private security has a role to play in peace and stability (Gheciu, 2018).

Further, Bearpark and Schulz (2007) supports Messner's argument with regards to the critical role of private security investors in peace and stability and particularly in African setting. However, they argue that private security in Africa can also pose risk to same security and stability. They noted that in regard to improving peace and stability, private security players can enhance security in contexts where the State fails to provide such services accountably and professionally. However, the scholars noted that where there are no existing professional standards, private security activities may pose a security threat complicates the existing security challenge. Therefore, any initiative to regulate the sector must take into consideration the context in which private security operates. The regulation for private security actors ought to ensure that there are set minimum standards above which services providers must always meet, however, the feasibility of the regulations is another matter altogether (Bearpark & Schulz, 2007).

Regarding definition of private security, this study mapped out the functions performed by PSCs and then grouped them into broad categories. 1) Companies with headquarters or offices in several countries. 2) Companies that offer both unarmed and

armed private security services. 3) Companies that offer ‘premium’ security services (i.e., static armed guarding facilities of embassies, oil fields and pipeline, international corporations, mines and critical infrastructure) (Bearpark & Schulz, 2007). Further, the study argued that the distinction between PSCs and PMCs are largely semantic rather than operation. They also noted the need for regulating private security sector in African by adopting matric approach. The matrix approach they suggested was regulations all the way from the international, national, regional as well as industry level. They concluded by stating that the government of the day has the overall responsibility of securing the public and should put in place policies and regulations under which private security firms should operate in an effort to enhance peace and stability within the nations (Bearpark & Schulz, 2007).

Further, Williamson analyses the concept of criminal responsibility with a focus on war crimes and the holding of individual responsible for perpetrating war crimes as well as the role of state regulations in regards to war crimes. Williamson defined war crime as “grave breaches provided for under the Geneva Conventions and Additional Protocol I and other serious violations, covered in Additional Protocol II, Statutes of International Tribunals and national legislation.” The scholar further avers that States must take leading role in punishment of war crimes through legislating against it and holding people responsible accountable of such breaches (Bala & Tar, 2021).

Minnaar (2006) noted that the high crime rate and overall insecurity forces the citizens to seek for private security services in South Africa. Minnaar noted that private security practice in South Africa is well regulated, however, the scholar argues that regulation alone is not enough and an oversight body is critical. The study considered

the need for oversight, monitoring and public private partnership in security matters. This also calls for policing training and institution of accountability among private practitioners as elements of monitoring and oversight of the industry.

Local Perspectives on Private Security

In the Kenyan context, the private security sector emerged in the early 1960s on larger industrial sites. The rising crime rate and growing commercial demand for security services resulted to industry growth in the 1990s (Githae, 2019). However, the exponential growth in demand for private security services was precipitated by the Westgate mall terror attack in September 2013 that led to score of deaths with official deaths standing at 67 people. In Kenya, security guards and police officers execute varying roles when it comes to peace and security (Kirui, 2018). The private security officers in Kenya are not armed with firearms while on duty like their police counterparts. Private security officers and the police in Kenya have worked as partners for the past 20 years in different lines of duty. Such partnerships have often been formal and informal involving a few or a unit or even the whole police service (Mutonyi, Sirera, & Mwai, 2022).

The private security firms are considered auxiliary to the National Police Service as they play a supportive role. The private security firms act as source of intelligence and crucial information (Enns, Andrews & Grant, 2020). Some people describe private security officers as "eyes, ears, and wheels" of the police agency. Some quarters argue that Kenya as a country relies excessively on legislation as prescription to most of society menace. Kenyan has got numerous laws and regulatory institutions sometimes overlapping in their functions. However, the Private Security Regulation Act of 2016 is an exception (Guracha & Kiruthu, 2019). The passing of the act saw Mr. Fazul

Mahamed appointed to head the new Private Security Regulatory Authority (PSRA) in 2018. The passing of another legislation, the Private Security (General) Regulations in 2019, enforced the private security regulation 2016 to the core (Schetter, Mkutu & Müller-Koné, 2022). The private security services sector was left unregulated for too long in spite of it being critical to the country's national security. In addition, everyday security practices that were critical to Kenyans were essentially occurring in a legal vacuum (Elfversson & Höglund, 2019).

The clarification about this power by the private security law is quite important in light of the current push to regulate the use of personal data (Marisa & Oigo, 2018). There is need to manage this power to ensure that it is not in conflict with the provisions of the current Data Protection Bill of 2018 (Avant & Neu, 2019). The Bill bases the collection of personal data on consent of the person required to give the information. All persons will have the right to object to the collection and recording of their personal data. Therefore, PSRA should determine how the private security personnel can exercise this power without infringing on the citizens' right to privacy and the entitlements under the Bill should it become law (Diphoorn, 2016).

In Kenya there are 75 registered private security firms with the PSIA which all are under the category of small firms (PSIA, 2022). The nature of services offered by private security firms complicates their ease in financial accessibility. The private security firms in Kenya offer variety of professional services from the basic guarding to complex protection for Very Important Person (VIP) and cash on transit. Wairagu, Kamenju and Singo (2014) noted that private security firms in Kenya offer a wide range of services including; close protection of VIPs, cash in transit escort, physical

protection of private and public properties, safeguarding of strategic important properties, security and keeping order in sports and music events. The private security industry has therefore developed since its inception and has attracted global private security brands such as Wells Fargo and G4S among others. Wairagu, Kamenju and Singo (2014), noted that private security industry in Kenya bridges the gap that the Government of Kenya (GoK) is unable to with its classical security apparatus including the military, police, paramilitary, national youth service and intelligence services (Marisa & Oigo, 2018).

As noted by Nkaari (2018), private security sector in Kenya is powerful and fast growing. It has existed for long, drawing its credence to police power. The private security industry is critical player offering various security services to the residents and their business and property. The future of private security in Kenya is promising and it's not ending anywhere soon. The private security industry has over a thousand firms and entities delivering a variety of security services. The sector has created employment directly to over 500,000 people and had estimated yearly revenues of more than KSh.300 billion in 2018 alone (Nkaari, 2018).

In its annual report of 2014, the Group CEO of G4S plc (Almanza) quoted independent studies that showed that global demand for security services would grow at a compound average rate of 7% per annum between 2013 and 2023. It further forecasted the revenues to hit $260 billion mark by 2023 (Otieno & Maina, 2019). The key drivers of private security industry growth are numerous and diverse. They include regulation and the regulatory environment, GDP growth, customer attitudes to risk and focus on security, interest rates, levels of conflict and crime, infrastructure investment,

customer efficiency and outsourcing objectives, technological change and innovation and the role and policies of central banks regarding the handling of cash in the industry (Arduino, 2017).

According to a report by the Swedish business in Kenya team, the Kenyan government has made great efforts to the strengthening of the private security sector due to increased security concerns following the recent terror attacks in the country (Kimulwo, 2020). In their estimate there are between 2,000-4,000 private security firms operating in Kenya. However, this number is contentious since most of the small companies are not registered. The two rival private security industry associations: Protective Services Industry Association (PSIA) and Kenya Security Industry Association (KSIA) have registered only a fraction of the estimated number of security companies in operation. A strengthened public-private partnership is a priority of the vision 2030 to enable the country enhance security in public places (Business Sweden in Kenya, 2017).

The private security industry in Kenya is dominated by a few large multinational companies such as KK and G4S security services in which they control 3% and 5% market share respectively. The more established companies are affiliated to KSIA which claims that their members operate within the law. They adhere to the minimum wage guidelines, train their employees and have a code of conduct. The smaller companies formed the PSIA group, they rejected the minimum wage guideline claiming it was unaffordable and will push them out of business. Another challenge is the proliferation of brief case private security companies which are contributing to saturation in the industry (Abrahamsen & Williams, 2005). The government has not enforced the regulations contained in the Private Security Regulation Act, 2016 to the

letter resulting to inflated cost of doing business for some firms and disharmony in the sector.

Financial Performance

The proponents of firm performance have advocated for and advanced a variety of proxies and indicators of performance to capture varying dimensions of performance. The aim is to avail the most comprehensive and balanced view and opinion on performance of a firm (Otto, Szymanski & Varadarajan, 2020). The performance measures include output measures, efficiency and productivity measures, service quality measures, customer satisfaction measures, profitability measures among others. Output measures captures the quantity of, or a unit of service provided (Taouab & Issor, 2019). Efficiency and productivity measures are often ratios that capture output per unit cost spent in producing products. Service quality measures represent a variety of qualitative dimensions of the outputs or services produced. Customer satisfaction measures are allied to service quality measures; however, their focus is on customers (Porter, 2008).

The rise in crime rates in Kenya resulted to rapid development of the private security sector. The security services from the government of Kenya began worsening in the late l980s through the l990s. The period witnessed diminishing Kenya's investment and spending accompanied by economic decline (Ngugi, 2004). Further, financial malpractices and other forms of fraud increased greatly. The combined effect was spike in crime and insecurity particularly in Kenya's capital city, Nairobi (Wairagu, Kamenju &Singo. 2014). The situation of lawlessness in most parts of the city necessitated the growth of private security industry becoming one of the areas with the fastest growth in Kenya's economy (Schreier & Caparini, 2005).

Further, Mkutu and Kizito, (2007) noted the inability and inefficiency associated with the police service gave rise to private security firms in towns and vigilante groups in the rural and sub urban areas. Moreover, the public opinion about effectiveness of the police in fighting crime was at its lowest resulting to greater demand for private security. The private security firms offer affordable security services compared to hiring the same services from official state security. However, PSCs main goal is profitability and not corporate responsibility resulting to a number of them acting contrary to wider public interest including that of their clients in some cases. Additionally, the state has little control over the inner working of most PSCs, hence the country faces the risk of private security industry taking advantage of the situation to compromise the quality of service offered as well as the security of the state at large (Mkutu & Kizito, 2007).

The private security industry has been in operational in Kenya since the 1960 and has since grown exponentially in the last two decades (Diphoorn, 2016). According to Kenya National Private Security Workers Union (KNPSWU), the private security industry has about 2000 registered companies with over 300,000 security guards of which G4s has employed over 15,000 employees in Kenya. In addition, there are a large number of informal private security firms employing many more security guards but are neither registered nor operate from a recognized office (Omolo, 2011, 2015).

Firm's Specific Factors

Firm specific factors are those factors that are identified with a firm and differs from one firm to another. The firm specific factors are within the discretion of the management of a firm (Ullah et al. 2020). The major firm specific of concern to the researcher included firm financial aspects, entrepreneur attributes and firm

characteristic. Firm financial aspects are financial attributes of a company such as cash flows and quality of audited financial statements (Sibanda, Hove-Sibanda, & Shava, 2018). Financial aspects considered in the study were cash flow and quality of audited financial statements. Cash flow includes cash inflow and cash outflow. It is the movement of liquid cash into and out of an organization. The cash flow influences the firm's ability to settle its debts and operate in the short term and long term hence it has an impact on performance (Liman & Mohammed, 2018). Another aspect of firm financial aspect is quality of audited financial statements. According to Pandula (2011), the audited financial statements are critical documents when a business wants to access credit from financial institutions thus key to SMEs performance. Quality audited financial statements are critical as it can help the lender to predict possible risks as regards loan repayment (Lovell & MacKenzie, 2011).

Entrepreneur attributes is another critical firm specific factor of concern in this study. Qualities possessed or required of an entrepreneur that are critical in successful running of the business venture include financial literacy, networks and leadership (Nguyen, Kim, Quoc, Trung, 2021). Entrepreneur attributes of concern in the study were financial literacy, gender and owner's network. Financial Literacy is the capacity of a person to interpret how cash functions, how it is managed, how it is earned and invested. Financial literacy is the level to which an individual comprehends critical financial concepts and is able to competently make decisions regarding personal funds and those of the businesses (Remund, 2010). Gender is the role allocated to an individual based on biological sex disposition. Traditionally business ownership has for a long time been associated with male gender. Women are rarely involved in business and when involved, they are expected to be invisible or silent partners

(Darma, 2001). Owners Network; Paasche, Petterson and Solem (1993) defined networks as "a specific type of relations linking a specific group of people, events and goals". The most important networks included Business, Administrative and Social networks (Stephens, 2013).

Firms Characteristics was the final firm specific factor considered in the study. Firm characteristics are firm specific qualities that are critical for the performance of a firm. Such qualities include firm size, age, location, diversification among others (Naikuru, Gathenya & Kamaku, 2016). Firm's characteristics that affect business performance considered under the study included size, age and location. Naikuru, Gathenya and Kamaku (2016) established that performance was directly and significantly affected by firm size. Firm age in years is frequently used as a measure for the fact that older firm are presumed of being more experienced on running the business such that it can withstand economic challenges and are more resilient to business difficulties. Further, financial life-cycle trends are uniform over time for different industry (La Rocca, La Rocca & Cariola, 2011). Location is the choice of mode of entry into business including local or external entry and operations (Ilian & Yasuo, 2005). Orloff (2002) argued that location is an indispensable variable of production that influences the success or failure and probability of a business in the future.

Business Regulatory Requirements

Business regulatory requirements are set of laws, both domestic and global, that govern the practice of business (Geringer, 2012). The study considered two major categories of business regulatory requirements including finance access regulations and private security industry regulations. Finance access regulations are external rules and laws set by financial institutions governing access to credit by firms in need of

credit such as interest rate and collateral requirements (Olanrewaju, Ansary & Agumba, 2016). Financial access regulations include the interest rate and collateral security. Interest rate is the amount that is calculated from outstanding loan balance and is paid together with the principal amount. High interest rates influence a business income in that one needs to put aside more cash to finance the principal and interests (Bekaert, Harvey, and Lundblad, 2001). Collateral are asset against which credit is taken from financial institutions. The collateral is considered as a last resort measure in case of loan default where the pledged security is disposed by the lender to recover the remaining principal and interest thereof (Kung'u, 2011).

Private security regulations are specific laws and rules governing the registration and operation of private security firms within a country including laws on minimum wage of contracted staff and training of staff (Nalla, Gurinskaya & Rafailova, 2017). The introduction of regulations targeting the private security industry was a matter of urgency leading to the enactment of Private Security Industry Regulation of 2016 and establishment of the Private Security Industry Regulatory Authority (PSIRA). A better-regulated private security industry would generate more benefits including enhancing security conditions in Kenya and creating more employment opportunities. Private security market in Kenya is relatively highly developed compared to counterparts in East African states. This regulation has significantly increase the cost of doing business in the security sector thus affecting private security firms' performance with private security firm expected to observe the minimum wage and training for its workforce.

1.2 Problem Statement

Even with the enactment of the Private Security Regulatory Act of 2016 in Kenya, majority of private security companies have continued to operate outside the law.

Based on data availed by the Kenya Security Industry Association (KSIA), there are about 2,500 registered private security firms in Kenya. However, only 600 companies are currently active, of which about 150 are transnational firms. The other 1,900 companies, mostly Kenyan, are collapsing due to the non-payment of staff wages that could be attributed to poor financial performance. Most of the market share in private security industry is controlled by the transnational firms. The smaller private security firms are finding it tough to compete with larger firms due to lack of financial prowess resulting from poor financial performance (KSIA, 2021). The data from the private security firms revealed that the financial performance of the industry has been falling over the last three years. Performance declined by 6.5% in 2019 and further it declined by 7.6% in 2020.

As the industry became harsher, smaller private security companies formed the PSIA group and rejected the minimum wage guidelines claiming it was unaffordable and was pushing them out of business. Due to operationalization of the Act 2016 a significant number of small private security operate illegally and this has affected their performance. For private security firms to meet the expected performance and contribute to overall economic growth of the nation, they need an enabling business environment. Such supportive environment can only be availed by the government implementing business regulations that are supportive to all industry players including small private security firms (Mulupi, 2014).

From the reviewed literature, there has been limited studies touching the regulatory framework and its effect on financial performance of private security firms in Kenya. The study thus sought to evaluate the effect of firm specific factors on financial

performance of private security firm in Kenya as moderated by business regulatory requirements.

1.3 Objectives

1.3.1 General Objective

To investigate the moderating effect of business regulatory requirements on the effect of firm specific factors on financial performance of private security firms in Kenya.

1.3.2 Specific Objectives

i. To assess the effect of firm's financial aspects on financial performance of private security firms in Kenya.
ii. To explore the effect of entrepreneur's attributes on financial performance of private security firms in Kenya.
iii. To investigate the effect of firm's characteristics on financial performance of private security firms in Kenya
iv. To probe the moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.
v. To ascertain the moderating effect of private security industry regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.
vi. To establish the joint effect of firm specific factors and business regulatory requirements on financial performance of private security firms in Kenya.

1.3.3 Research Hypothesis

H_{01}**:** There is no statistically significant effect of firm's financial aspects on financial performance of private security firms in Kenya.

H_{02}**:** There is no statistically significant effect of entrepreneur's attributes on financial performance of private security firms in Kenya.

H_{03}**:** There is no statistically significant effect of firm characteristics on financial performance of private security firms in Kenya

H_{04}**:** There is no statistically significant moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.

H_{05}**:** There is no statistically significant moderating effect of private security industry regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.

H_{06}: There is no statistically significant joint effect of firm specific factors and business regulatory requirements on financial performance of private security firms in Kenya.

1.4 Justification

The research regarding the effect of firm specific factors and business regulatory requirements on financial performance of private security firms is a critical area that needed to be examined. Since the enactment of Private Security Regulatory Act of 2016, majority of smaller PSCs have continued to operate unregulated thus inhibiting their growth. The smaller companies rejected the minimum wage guideline stating it was unaffordable and will push them out of business. A study to examine the role of firm specific factors and business regulatory requirements for private security firms' performance was thus critical. The findings should thus generate critical information needed for regulation purposes regarding how regulations are impacting the financial performance of PSCs in Kenya. Moreover, the literature review has shown that there was scanty literature on role of regulations on financial performance of private security

firms both globally and locally in Kenya. The study thus sought to evaluate the effect of firm specific factors on financial performance of private security firm in Kenya as moderated by business regulatory requirements.

1.5 Significance of the study

Government

The study would benefit the government in general and the ministry of internal security when planning for security provision. The study would become handy to the ministry of internal security in evaluating how regulations by the government is impacting on the financial performance of private security firms in Kenya. The government should evaluate various regulations affecting private security firms. This would encourage growth of the industry by reducing tax on imports of security equipment and regulating the registration of new companies to maintain profitability. The study would therefore be insightful when the government is formulating new policies regarding the regulation of the private security sector.

Academia and Researchers

The research adds to the body of knowledge that already exists on the relationship between firm specific factors, business regulatory requirements and financial performance of private security firms. The study extends the breath of the application of public interest, Miller- Orr model, credit access, social network and scale efficiency theories in understanding the relationship between firm specific factors, business regulatory requirements and financial performance among private security firms. Further, the study serves as base literature for future studies on the firm specific factors, business regulatory requirements and financial performance nexus.

Private Security Industry

The study will also be critical to management of private security firms in informing management decisions. The study specifically informs management of private security firms how various firm specific factors such as financial aspects, entrepreneur attributes and firm characteristics impacts on financial performance. Additionally, the study informs the management of private security firms the impact of business regulatory requirements on financial performance of their entities. The industry players, apart from providing security they are entrepreneurs and are in business for profit. The study will provide a thorough analysis of the major forces in the industry environment which impacts their performance. The study will assist them to identify opportunities they can capitalize on and threats they can mitigate.

1.6 Scope of the Study

The study focused on private security registered under PSIA in Kenya. The current number of private security firms registered under PSIA is 75 firms. The list composes of private firms categorized as small or medium sized. The conceptual scope of the study was on the moderating effect of business regulatory requirements on the relationship between firm specific factors and financial performance. The independent variable is firm specific factors operationalised in terms of firm financial aspects, entrepreneur attributes and firm characteristics. The moderating variables is business regulatory requirements operationalised as private security industry and finance access regulations. The dependent variable is financial performance operationalised using return on equity. The time scope of the study was three years period with financial performance data covering 2018,2019 and 2020.

1.7 Limitations of The Study

The study was performed successfully, however a few limitations exist. First, the study was limited to three firm specific factors (financial aspects, entrepreneur attributes and firm characteristics) and business regulatory requirements (finance access regulations and private security industry regulations). There are other explanatory variables affecting financial performance of private security firms that were not within the scope of the current study. The parameters estimates should thus be used with caution when making management decisions. Secondly, the study findings have limited ready application for decision making in private security firms in Kenya. Thus, application of the parameter estimates for decision making in non-private security firms should be done with caution. Finally, the study adopted primary data to measure explanatory variables of the study. There are aspects of the explanatory variables that may not be adequately measured by primary data compared to, if secondary data was adopted.

1.8 Contributions of the Thesis

The contributions made by this study are highlighted below:

i) The study has considered private security firms performance using financial aspects, entrepreneur attributes, firm characteristics and business regulatory requirements. The combined variables will add literature in the area of financial performance management.

ii) The study has given additional solutions to small and medium sized private security firms on how to survive in the tough market.

1.9 Organization of the Thesis

The content of this research is organized into five chapters as highlighted below:

Chapter One is the Introduction. It discusses Background of the Research, the Problem Statement, the Objectives of the Study, the Research Questions, the Justification, the Significance of the study, the Scope of the Study, the Limitations of the study, Organizations of the Study.

Chapter Two presents the Literature Review. The chapter elaborates on both theoretical and empirical literature relevant on the relationship between firm specific factors and financial performance as well as the influence of regulatory requirements on financial performance.

Chapter Three is Methodology. Research methodology explains the research approach, research design, target population, sample and sampling procedures, instrumentation, sample frame, data collection methods, data analysis and data presentation.

Chapter Four presents results and discussion of the thesis findings. The study sought to investigate the effect of firm specific factors (financial aspects, entrepreneur attributes, firm characteristics) business regulatory requirements (Finance access regulations and private security industry regulation) on financial performance of private security firms in kunya. The general objective was disaggregated into six specific objective and hypotheses.

Chapter Five covers the summaries, conclusions and the recommendations of the research based on the research objectives.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter elaborates on both theoretical and empirical literature relevant on the relationship between firm specific factors and financial performance as well as the influence of regulatory requirements on financial performance. The purpose of theoretical and empirical review was to identify knowledge gaps for further studies leading to the conceptualization of the present study.

2.2 Theoretical review

The section examines relevant theories anchoring the study including Public Interest theory, Miller- Orr Model, Credit Access Theory, Social network theory and Scale Efficiency Theory.

2.2.1 Public Interest theory

The theory should be evaluated in the context of optimal resource allocation for the benefit of investor and collective good of the whole society. Scholars, have noted that market failure can lead to sub optimal resource allocation hence there is need to intervene to achieve equity and improve the welfare of the general society (Francis, 1958). The theory is based on two key propositions: 1) Markets do fail due to monopoly and externalities, 2) The state is capable of correcting these failures by use of regulation and other forms of government involvement.

Over time, a more comprehensive variant of the public interest theory has developed. The new variant is popularly referred to as ‘New Haven’ or ‘progressive school’ as it incorporates costs that are transactional and informational in nature. The theory

proposes governmental regulation in situations of market failure; however, it recognises the fact that regulations are not a perfect universal remedy to market failures. The theory assumes that politicians often act in the best interest of the public and that information regarding costs and benefits of regulation is openly accessible to the public (Roger, 1983).

Even with its critical contribution to enhancing resource allocation, public interest theory has been criticized by scholars especially those attached to the Chicago school of law and economics (Tyler, 1988). The critiques are of the view that; 1) markets can solve market failures without the need for any intervention. 2) If the market does not resolve market failure, then private regulation offers optimal solutions compared to public regulations. 3) The market and private regulation fail to resolve market failure when the government regulators are inept, corrupt and captured (Peltzman, Levine & Noll, 1989).

Public interest theory was critical for the study on the role of regulatory requirements on the financial performance among private security firms in Kenya. The theory informs the enactment of Private Security Regulatory Act of 2016 in an effort to regulate the sector. The regulation was critical to protect the interest of the public as far as operation of the private security firms was concerned. The security services are a public good that should be provided by state and any private security firm allowed to offer security services ought to be regulated by government. The theory thus justifies the moderating variable; business regulatory requirements for private security firms in Kenya.

2.2.2 Miller- Orr Model

The Miller- Orr model was developed by Miller and Orr (1966) to study cash management. The model was an improvement of Baumol's Economic Order Quantity model. The model was developed to handle challenges of fluctuation in cash inflows and outflows. Firms were facing the challenge of either holding too much cash or too little cash. The model is based on the assumptions that daily cash needs is normally distributed and that the level of cash balance in a business could be some lower or higher value. The model proposes that upper (U) and lower (L) cash control limits can be set. The model also proposes that target cash balance be set such that target cash balance lies between Upper and lower limits of cash balances. The model explains that the firms should allow its cash balances to oscillate between upper and lower limits and that the firm should not do any interventions about cash as long as the cash balance is between upper and lower limit (Nyamweya & Obuya, 2020).

The theory explains further that when cash balance reaches upper limit, the firm should use the excess cash beyond targeted cash balance (U-Z) to purchase marketable securities. The intervention leads to cash balance falling back to targeted level (Z). Consequently, when cash balance reaches the lower limit (L), the firm should dispose of some marketable securities (Z-L) and convert them into cash. The intervention should increase cash balance up to targeted level of cash (Z). The process of purchasing marketable securities when cash balance reaches upper limit and selling marketable securities when cash level reaches lower limit is associated with transactional costs. The opportunity cost of holding cash is the benefits foregone if the cash were invested in interest bearing securities (Olang, Akenga & Mwangi, 2015).

The model is relevant on the association between firm financial aspects and financial performance of private security firms in Kenya. The model is specifically useful in

explaining the relationship between the financial aspect indicator; cash flow and financial performance of private security firms. The model explains the level of cash and marketable securities held by private security firms in Kenya oscillates between Upper and Lower limit. Private security firms with inadequate cash balances and whose cash assets are at or below lower limit should either convert non-cash assets into cash or borrow to seal gaps in cash imbalances. Additionally, private security firms with adequate cash balances and whose cash assets is at or above the upper limit should purchase markable securities with excess cash. Private security Firms holding adequate cash and that have invested excess cash balances in marketable securities realises improved financial performance from being able to settle obligations on time and earning interest on marketable securities.

2.2.3 Social Network Theory

Social Network theory (SNT) was advanced almost the end of 19th century. The theory attempts to explain how individuals link with each other in their community or groups (Barnes & Milgram, 1967). The adoption of social SNT in entrepreneurship begun in 1980s noted as by Birley (1985). The theory evaluated the social relations on the basis of ties and nodes. The ties describe the links between players, while the node describes the significant players in the networks. Therefore, social network is a map of all useful or beneficial ties between nodes. The network forms the social capital of a player within the network. When social network is presented diagrammatically, the ties are the lines while the nodes are the points. What matters in social network is the benefits players can achieve from being connected in network with other players. The individual attributes of a player in a network subordinates the useful ties in the network (Koch, 1998). The understanding of the intricacies involved in the social network is critical in understanding how the network can improve the worth of an

individual player by simply being connected to other players within the network. The theory has been praised on how it explains how random players are linked with other players within a given network (Liu, Sidhu, Beacom & Valente, 2017). The resources residing on one player can easily be shared with other players within the network such that each player in the network has some worth that can benefit another player in the network. However, the theory has been criticised based on difficulty to scientifically duplicate networks in the process of understanding the ties and nodes in network (Krause, Croft & James, 2007).

The theory was critical to the conceptualization of the study especially on the causal effect link between entrepreneur attributes and financial performance of private security firms in Kenya. The theory explains how entrepreneurs' networks including political, business is critical to the financial performance. The entrepreneur can easily get referrals from other entrepreneurs, customers regarding his products leading to more sales that drive profitability upwards. The theory was helpful in establishing how relationships and connections among owners of private security firms in Kenya develops a social structure that can explain the financial performance of the firms.

2.2.4 Credit Access Theory

Access to finance is central to the firm performance. Different economic and financial experts believe that an efficiency and elaborate financial sector is important in directing funds to those who need them. The funds are transferred from those with excess to those with deficit (Olawale, 2011). Through this process, productive resources are transferred to risk takers who can use the funds to create ventures that in return lead to improved economic growth, resolving poverty and improving opportunities and income distribution. Moreover, the level of regulation of the

financial sectors with its associated institutions act as a barrier to financial access hence leading to magnified poverty in society. The access component of finances is the key area of concern for credit access theory (Demirguc, Beck & Honohan, 2008).

Increasing access to finance and ensuring finance inclusion is a critical development goal for all economies regardless of their level of development. Financial accessibility should be tailored to equitable reach of financial products to those who needs them and exploit available opportunities to create wealth and overall economic growth. Further, finance access is concerned with access and quality of credit, insurance products, savings facilities and payment services in an effort to facilitate productivity and growth especially for SMEs (Demirguc, Beck & Honohan, 2008).

Therefore, this theory is very relevant to this study especially on the effect of finance access regulation on financial performance. Credit access theory informs the study regarding how finance access regulation such as interest rate and collateral introduces inefficiencies and barriers in the financial system. Finance access regulation lowers the ease of movement of financial resources from financial institutions to private security firms that need such finances to exploit opportunities and create wealth in form of profits. Reduced credit access due to finance access regulation leads to declining profitability.

2.2.5 Scale Efficiency Theory

According to Koopmans (1951), scale efficiency theory credits its existence to Scale productive efficiency. Scale efficiency is a concept that emanates from microeconomics referred to economies of scale. Economies of scale are the advantages enjoyed by an expanding firm. The advantages are cost in nature such that

as the scale of operation of a firm increases, the average cost of operation falls. The sources of the cost advantages may be internal or external. Internal economies are associated with technical, specialization, financial, management, marketing economies. External economies are cost advantages enjoyed by the whole industry such as regulations, infrastructure, inter firm trade among others. Further, Lotto (2018) noted that maximum operational efficiency is achieved by a firm in the short run period at a level of operation where all economies of scale are being utilised in an efficient manner.

Balk (2001) argued that optimal level of operation achieved through efficiency and optimality in one period may not be optimality in another period hence primality is a continuous goal that is achievable with improving efficiency of operations and processes over time. A firm therefore, has to organize its operational processes in line with economic and technical efficiency. This would mean maximizing the output from a given set of productive factors (Celli, 2013). Broadly speaking, productive efficiency is achieved when increasing output is associated with less than proportionate increase in the cost of factors of production i.e., average cost is declining as output level increases (Celli, 2013).

The theory informs the variable firm characteristics and how it influences financial performance of private security firms in Kenya. It is critical that private security firms need to maximize output through their product offering and minimize their operating costs such as training cost, minimum wage levels among other costs to achieve operational efficiency. Private security firm should efficiently use their economies of scale resulting from size and age so as to maximise their returns to equity.

2.3 Empirical Review

The section evaluates relevant empirical literature regarding the effect of firm specific factors and business regulatory requirements on financial performance of firms. The sub sections have been organized according to study explanatory variables including firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and private security industry regulations.

2.3.1 Firm's financial Aspects and Financial Performance

Afrifa (2016) evaluated the interrelation between firm performance and cash flows. The study collected secondary data from 6926 non-financial firms in UK from 2004 to 2013. Unbalanced panel data regression model revealed that firms with adequate cash inflows should invest the excess liquidity into interest earning financial assets, while those with inadequate cash inflows should invest less in interest earning securities to enhance performance. Afrifa (2016) was based in UK Firms with different operating environment hence another study in Kenya would improve the breadth of the study especially in the private security sector.

Chukwunwike, Ofoegbu, Okoroiwu, & Okafor, (2018) examined how bank profitability was affected by operating cash flows in banking sector in Nigeria. The study adopted secondary data obtained from the cash flow statements contained in the annual reports between 2009 and 2013. The study adopted multivariate regression in hypotheses testing. The research established direct causal effect link between profitability and operating cash flows. Chukwunwike et al. (2018) was based in banking industry in Nigeria and another study in Kenya in the private security industry would expand the applicability of the findings.

Nguyen and Nguyen (2020) evaluated whether cash flow statements affect lending decisions among commercial banks in Vietnam. The data was sourced from one hundred and sixty (160) credit officers in Vietnamese commercial banks. The study adopted student T-tests with findings revealing that poorly reported cash flow statement had a negative effect on profits as well as confidence of credit officers. The study also noted that banks' lending decisions is majorly influenced by the statement of cash flow. Nguyen and Nguyen (2020) was carried out in banking institutions and another study in private security sector would expand the breadth of the study.

In Nigeria, Augustine and Jacob (2017) evaluated the role of cash flows on the performance of companies. Ex post facto research design was used to collect and analyse secondary data used in the study. The study relied on Pooled OLS model with findings revealing a direct effect of cash holding and cash conversion cycle on ROA of firms. Further, ROA was inversely related with firm size and cash flow. Augustine and Jacob (2017) was carried out in Nigeria that has different regulatory environment from Kenya.

In another study in Nigeria, Ogbeide and Akanji (2017) examined whether cash flow influenced financial performance of insurance firms. The research relied on OLS regression model for data analysis. The results showed that indeed cash flow had a major effect on financial performance of the firms studied. The study suggested that improving cash flow was key in enhancing financial performance of insurance firms. Ogbeide and Akanji (2017) study was in insurance sector that has different operating environment from private security firms in Kenya.

In Hong –Kong China, Martínez-Ferrero, Banerjee and García-Sánchez (2016) evaluated how corporate performance was influenced by financial reporting quality.

The research was based on a sample of 1960 firms from 25 counties with data being collected from 2002-2010. The study adopted system of simultaneous equations analysed via the GMM estimator. The study noted direct influence of financial reporting on quality performance. Further, the study showed that firms with better reported financial statements depicted superior financial performance. Martínez-Ferrero et al. (2016) adopted simultaneous equation to correct indigeneity problem. Such models often suffer from problem of unique solutions.

In Kenya, Ouma (2017) investigated on the factors explaining the quality of financial statements among commercial banks that have shares floated at NSE, and operating in Nakuru. Data was collected from 164 respondents and analysed based on descriptive research design where simple random sampling was used to pick individuals that actually participated in the study. The study established that the major factors explaining quality of financial reporting included professional development of the accountant, computerized accounting, and internal skills development. Ouma (2017) was carried out in banking industry and another research ought to be based on the private security firms to establish whether findings hold in different context.

Gaynor, Kelton, Mercer and Yohn (2016) examined the factors affecting quality of financial reporting. The research adopted two hundred and thirty-one financial reports of listed firms in US, UK, and Dutch stock markets in the period from 2005-2007. The results showed that annual financial statements were reliable, comparable, timely and understandable. Gaynor et al. (2016) focused on quality of financial reports based on qualitative data and another study examining how financial performance is affected by quality of financial statements would expand the breadth of the research.

An investigation of the determinants of quality accounting in European Union was carried out by Paiva, Lourenço & Branco, (2016). The study collected secondary panel data from 2006 to 2008. The dependent variable was quality of financial statements while explanatory variable included firm size, earnings level, disclosure level, growth, turn over, cash flows, leverage and a dummy variable on whether a company was audited by big four or not. The study established direct effect of absolute discretionary accrual, earnings, leverage, and sales turnover on financial reporting quality. Paiva et al. (2016) failed to perform diagnostic tests on the robustness of the model adopted hence the parameter estimates may be misleading.

In Ghanaian, Mensah (2021) evaluated the factors explaining quality of financial reports. The study was based on explanatory variables including ownership concentration, profitability, independent directorship, firm size, liquidity and leverage. The study relied on cross sectional data collected in 2012. The findings showed major influence of board ownership, leverage, shareholder's concentration and independent directorship on quality of financial reporting. Mensah (2021) study focused on quality of financial reporting and another study examining effect of cash flows would expand the breadth of the study. Further, the research was in Ghana with different operating environment from Kenyan case.

2.3.2 Entrepreneur's Attributes and Financial Performance

Among European Union countries, Van Stel et al. (2021) tested the hypothesis that performance of an entrepreneur is affected directly by education level of entrepreneur and that of the population. The study adopted a panel data of 15 EU countries based on eight-year period. The research revealed that education and human capital were

critical drivers of the performance of ventures. Van Stel et al. (2021) focused on level of education hence another study focusing on other entrepreneur attributes such as networks and gender would expand the breadth of applicability of the study.

Page-Noel, Jafari-Sadeghi, and Xu (2019) evaluated whether venture performance was affected by the networking activity, starting new venture and entrepreneur's knowledge. The study adopted a correctional survey design on 177 entrepreneurs. The study adopted multivariate regression model with results showing that networking and entrepreneur knowledge had a direct impact on the venture performance. Page- Noel et.al (2019) carried out performance of ventures in general and a study focusing on private security firms would contextualise the finding further.

Abbas, Raza, Nurunnabi, Minai (2019) evaluated the causal effect link between business networks and SMEs performance. Further the study evaluated the indirect influence of dynamic capabilities on business network and SMEs performance. The study adopted multivariate regression. The results showed that entrepreneurial business network had a direct effect on firm performance. Further dynamic capabilities moderated business networks- performance relationship. Abbas et al. (2019) was limited to entrepreneur networks and dynamic capabilities and another study examining the effect of other entrepreneur attributes like financial literacy training and gender would expand study's breadth.

Baum (2017) examined the influence of entrepreneur's attributes on venture growth. The study adopted longitudinal design where data was sourced from 229 entrepreneurs' executive officers and one hundred and six associates. The study

collected six years' longitudinal data with SEM being adopted to reveal relationships that influence the growth of venture. Results showed that self-efficacy, motivation and communicated vision directly impacted growth of ventures. Baum (2017) focused on communicated vision, motivation and self-efficacy. Another study focusing on aspects of entrepreneur attributes such as networking and financial literacy would expand the breadth of the study further.

In Taiwan, Chen, Chang and Chang (2017) evaluated the direction of causation between venture performance, entrepreneur's human capital, motivation, entrepreneurial leadership, entrepreneurial experience and manpower. The study was a survey of 155 tech-based firms. The study adopted simulation analysis. The results established that entrepreneurial experience and manpower affected venture performance directly. Chen et al. (2017) was carried out in Taiwan that has different operating environment from Kenya. Besides, the study focused on entrepreneurial experience and manpower and another study on other attributes of entrepreneur like networking would expand the breadth of the study.

Diaka, Soom, and Asenge (2018) examined how firm performance was influenced by entrepreneur's experience. The research was based on descriptive research design where ordinary least squares (OLS) regression model was adopted for data analysis. The results showed direct impact of entrepreneur's experience on firm performance. Diaka et al. (2018) focused on firm performance in general and another study on financial performance would condense further the findings of the study. Besides, the study was focused on entrepreneur experience and another study evaluating other attributes of entrepreneur would expand the breadth of the study.

Wekesa, Maalu, Gathungu and Wainaina (2016) evaluated whether entrepreneur's experience affected firm performance. Regression model was adopted to process the data collected from the field. Results showed that firm performance was directly affected by entrepreneur's experience. The study suggested that the training of entrepreneurs to enhance long term survival and growth of businesses is paramount. Wekesa et al. (2016) examined the performance of the firm in general and another study specifically focusing financial performance would expand the breadth of the study applications.

In Nigeria, Abiodun (2016) evaluated the influence of financial literacy on SMEs performance. The research was based on ex-post facto design with simple random sampling being used to pick study respondents. Further, multivariate regression analysis was carried out with results showing direct influence of financial literacy on performance of SMEs. Abiodun (2016) was limited to financial literacy and another study examining other entrepreneur attributes would expand the breadth of the study.

2.3.3 Firm Characteristics and Financial Performance

In Kenya, Mulwa (2020) evaluated the causal effect link between firm performance and size of the firm among DT-Sacco's. The research adopted panel data stretching from 2011 to 2018. The study adopted both FEM and REM in hypotheses testing. The study established significant effect of firm size on financial performance. Mulwa (2020) was based on secondary data alone and another study utilising primary data would expand the breadth of the study given that there are some aspects of firm size that cannot be adequately be measured based on secondary data.

Nguyen, Kim, Quoc and Trung (2021) evaluated the causal effect link between SMEs performance and firm-specific variables. The study utilized ROE as measure for financial performance. The study adopted GMM with explanatory variables including firm size, profitability, revenue growth, GDP growth, leverage ratio and local governance quality. The findings showed that firm specific and macroeconomic variables explained financial performance of SMEs. Nguyen, Kim, Quoc and Trung (2021) omitted impact of firm specific variables such as age and location of firm on performance hence another study based on them would expand the breadth of the study.

Charles, Ahmed, Joshua (2018) evaluated how profitability was influenced by firm characteristics among Nigerian firms that are listed. Profitability was measured using Return on sales. The study targeted 22 firms with secondary data sourced from 2011 to 2016. The research adopted panel data regression models including dynamic and fixed effect models. The research revealed that profitability was majorly influenced by firm size, leverage and sales growth. However, the study noted minor influence of liquidity and firm age. Charles, Ahmed, Joshua (2018) was based on secondary data exclusively and another study utilising primary data should be carried out to capture aspects of firm size and age that cannot be adequately be measured by secondary data alone.

In Turkey, Dogan (2017) examined how profitability was influenced by size of the firm. Relevant data was sourced from 200 firms between 2008-2011. The results indicated direct and major effect of firm sizes on profitability of the firms. Dogan (2017) focused on firm size only and another study that examines other firm characteristics in addition to firm size would expand the breadth of the study. Besides, the study adopted ROA as measure of financial performance hence another study using

ROE as dependent variable would enable study establish whether findings holds when a different proxy of financial performance is used.

Akinyi (2018) evaluated the mediating effect of debt equity ratio on the link among financial performance and firm size in sugar industry Western Kenya. The explanatory variables included firm size, leverage level. Financial performance was measured using proxies including ROE and ROA. Correlational type research was used and data was sourced from the concerned firms. The research adopted secondary data that was analysed based on panel data with data being collected from 2007 to 2016. The finding showed financial performance was directly affected by firm size. Akinyi (2018) was limited to sugar processing firms and another study in private security firms would expand the breadth of the study.

In Karachi, Abbasi and Malik, (2015) examined how financial performance was influenced by firms' Size. The paper gathered secondary cross-sectional data from fifty firms listed in Karachi stock Exchange. The study adopted cross sectional research design with secondary data being gathered from 50 companies that had offered their shares at the stock exchange market. The research used regression equation with results revealing that firm size was a moderator in the relationship between Firms' growth and Firms' performance. Abbasi and Malik, (2015) was carried in listed firms that has different operating environment from private security firms.

In Sri Lanka, Velnampy and Niresh (2015) examined the link between profitability and size among firms in manufacturing industries. The study adopted causation design

with secondary sourced from 15 firms, between 2008 to the year 2012. The findings revealed that profitability was significantly affected by firm sizes. Velnampy and Niresh (2015) was carried out in manufacturing sector in Sri Lanka and another study in private security context in Kenya would expand the breadth of the study further.

In Kenya, Mahfoudh (2015) examined whether financial performance was influenced by firm age among agricultural firms at the NSE. The study adopted correlational research design and covered a period of 5 years between 2007 and 2012. The results indicated that firm age had a direct influence on financial performance. Mahfoudh (2015) was limited to impact of firm size on financial performance hence another study should be carried out using other aspects of firm characteristics such as age and location besides firm size so as to extend the breadth of the study.

In Europe, Loderer and Waelchli (2015) evaluated how performance was affected by firm age. Explanatory research design was adopted to collect and analyse relevant data. The results indicated that financial performance was explained by firm age. In Kampala Uganda, Osunsan et al. (2015) evaluated the causal effect link between performance and age. The findings revealed that firm age significantly affects the level of performance among small business enterprises in Kampala. Pervan, Pervan and Curak (2017) sought to establish how firm performance was affected by age in Croatian Food Industry. A descriptive research design was carried out among 956 companies. The results indicated that firm performance was negatively influenced by age. A study in private security firms combining other aspects will add more value to the study.

2.3.4 Finance Access Regulations and Financial Performance

In Kenya, Mumin (2018) evaluated the factors affecting ease of getting credit from commercial banks. The factors of concern included SME's profile, financial performance and collateral. Descriptive research design was adopted with data being collected from one hundred and twenty-six SMEs in Nairobi. The study adopted Primary data that was analyzed based on Pearson Correlation and ANOVA. The study showed that banks need collateral before disbursement of credit and that most SMEs owners were denied loans because they did not have sufficient collateral. The research also revealed that lack of management and finance skills was a barrier in accessing finance. Mumin (2018) did not examine how the factors affecting access to finance affected financial performance hence a study in this line would expand the breadth of the study.

Msomi and Olarewaju (2021) evaluated factors affecting financial sustainability among SMEs in South Africa. The study adopted purposive sampling with primary data being sourced from a sample of 300 firms. The study adopted multivariate regression analysis for data analysis. The study established that budgeting, financial awareness, accounting skills and access to finance directly influenced financial sustainability. The study concluded that entrepreneur training would improve financial literacy hence enhancing entrepreneurs' ability to use budgeting and accounting skills that meets the conditions of financial institutions. Msomi and Olarewaju (2021) was limited to SMEs in South Africa with different operating environment.

In a study among export-oriented SMEs in Zimbabwe, Sibanda, Hove-Sibanda and Shava (2018) evaluated impact of finance access on performance. The research adopted a cross-sectional study to collect and analyse relevant data. The research

employed Structural Equation Modelling (SEM) and (Partial Least Square) PLS with results revealing a direct relationship between performance and access to finance among firms studied. Sibanda, Hove-Sibanda and Shava (2018) was limited to Zimbabwe that has different operating environment from Kenya and another study in Kenya would expand the breadth of the study further.

In a study among SMEs in Nyeri County, Kenya, Thuku (2017) examined the factors influencing credit access among SMEs. Independent variables included firm's characteristics, entrepreneur's characteristics, and financial characteristics. Descriptive design was employed to source and analyse primary data collected from 26 SMEs picked from a target population of 200 in agricultural sector. Pearson and OLS regression showed that Firm characteristics such as size and location influenced access to credit. Further, financial characteristics such as adequate bookkeeping affected access to credit. The study also revealed that entrepreneur characteristics such as networking is important. Thuku (2017) did not capture interest rate and collateral as determinants of credit access hence another study ought to be done that includes them in the analysis.

Ndungu (2016) examined factors influencing credit access among SMEs. The study targeted 1020 SMEs with stratified sampling being adopted to pick one hundred and two SMEs. The study adopted factor and regression analysis with findings revealing that collateral security, interest charged on loans, and literacy levels significantly influenced credit access. Ndungu (2016) was localized in Muranga and another study in Kenya among private security firms would be necessary for wide application in security sector.

In Nigeria, Olanrewaju, Ansary, and Agumba (2016) examined SMEs barriers to credit access from financial institutions. The study adopted regression equations to establish the causal effect relationship. The study revealed access to credit was constrained by lack of tangible assets to use as collateral. Banks uses collateral for protection in case a borrower fails to make payment. Collateral also helps solve information asymmetric problems. Olanrewaju et al. (2016) focused on challenges in accessing credit. Another study on the effect of challenges such as collateral and interest rate among private security companies would expand the breadth of the study.

Buyinza, Tibaingana and Mutenyo (2018) evaluated the determinants of access to credit and how credit access influences performance of EAC firms. The research adopted simple OLS and probit models. The study revealed that some business constraints to access to credit included costs and availability of collateral. The study showed that access to credit enhanced financial performance. Buyinza et al. (2018) focused on export-based firms and another study on private security firms would expand the breadth of the study and improve its applicability.

In a study among small-scale farmers in Kiambu County, Kenya, Edward and Newton (2015) studied conditions that effect agriculture. The study adopted OLS regression to establish the causal effect link between study variables. The results revealed that there was a direct correlation on access to credit and availability of collateral. The study suggested that Financial Institutions ought to tailor made their financial products to suit small scale farmers. Edward and Newton (2015) was limited to Agriculturally based firms and another study in private security firms would enable the researcher establish how findings hold in other contexts.

In Kenya, Memba (2015) evaluated whether growth of SMEs in Kenya was determined by venture capital. The study sourced data from different ventures with data analysis proceeding with multivariate regression. The results showed that the growth of SMEs was directly associated with venture capital that financed their operations. The research concluded that businesses that adopted venture capital experienced improved growth. Memba (2015) was limited to effect of venture capital on growth. Future studies should examine factors affecting access to external capital such as interest rate and collateral.

In India, Banerjee and Duflo (2017) evaluated performances of firms both before and after they accessed loans in India. By using a survey of 296 organizations in the region the research showed that additional loan sources led to expansion of firms hence the study concluded the firms expanded because lack of financing may have constrained their growth due to the affordability and accessibility of the loans. Banerjee and Duflo (2017) was limited to India with different operating environment and another study in Kenya would expand applicability of findings locally. In Mozambique, Osano and Languitone (2016) evaluated factors that affect credit access among SMEs. The results showed that collateral influenced credit access. According to Bouazza, Ardjouman and Abada (2015), some of barriers to credit access on Algerian firms included high collateral requirements demanded by financial institutions.

2.3.5 Private Security Industry Regulations and Financial Performance

Ashywel, Olasojumi and Opone (2021) evaluated the impact of training of staff on performance of microfinance banks. The study adopted OLS regression with findings showing that training has a direct effect on productivity of the organization. The study concluded that a trained employee is able to apply knowledge and skill acquired in improving firm productivity. Ashywel et al. (2021) was limited to training aspect of

human resource as stated in the private security industry regulation and another study should examine other aspects including minimum wage to establish how they impact financial performance.

In a study in India, Bakr (2019) evaluated whether job satisfaction was a mediating factor link between public organization performance and motivation in public sector banks in India. The study adopted SEM, passed PLS model with results revealing that motivation had a direct effect on performance. Further, it was noted that job satisfaction had a mediating effect on the relationship between motivation and performance implying that motivated employees are more satisfied leading to improved financial performance. Bakr (2019) was focused on effect of motivation strategies like salaries and training on firm performance hence another study in Kenyan context would expand the breadth of the study further.

Mutonyi and Sirera (2018) examined whether commercial security improved security of Kenyan citizens. Cross sectional survey design was adopted with a target population being adult residents in Nairobi. The study adopted purposive sampling to select management and customers of the commercial security industry. Further, the public were chosen based on systematic sampling. Qualitative data was sourced based on interviews. It was then analysed thematically. Further, quantitative data was analysed based on descriptive statistics. Results showed that there is urgent need for regulations to improve efficiency in private security industry. Mutonyi and Sirera (2018) however, failed to establish effect of regulation on financial performance of private security companies.

Ojiambo, Francis and Joseph (2020). Evaluated the impact of orientation of the market on private security firms' performance. The study was based on descriptive analysis where data was sourced based on questionnaire and KII with CEO of private security firms. The study relied on RBV theory. The study targeted thirty-nine firms who were members of KSIA. The study was thus a census study with regression being adopted for purpose of analysis. The study established that market orientation directly affected financial and non-financial indicators of performance. The study focused on market orientation on financial performance and another study examining effect of regulations on financial performance would expand the breath of the study.

A study of commercial security firms in Nigeria by Inyang and Abraham (2016) explored the function of the commercial security companies in improving security. A qualitative design was adopted and data was collected based on interview schedule. The results showed that the commercial security sector has been compromised. Unregistered firms were contributing to insecurity in the country. The study thus concluded that lack of proper regulation has led to private security firms causing insecurity. Inyang and Abraham (2016) focused on role of crime control and another study examining effect of private security regulations on performance in Kenya would extend and improve study applicability.

Bradley (2016) observed that, despite its relative anonymity, commercial security has the potential to harm innocent members of society, hence necessitating a need for a robust legal framework for regulation to avoid violence, harassment, trespassing and false arrests. This equivocal view of commercialized security by Bradley (2016) provided the impetus to conduct this study to verify the business regulatory requirements and other factors that affect performance of small private security firms.

Shaheen, Naqvi and Khan (2017) examined the causal effect relationship between staff training and performance of organizations. Both quantitative and qualitative methods were applied; 220 questionnaires were administered amongst school teachers. The response rate was 90 %. SPSS tool was used for data analysis. The findings showed a major direct impact of staff training on organization performance. Shaheen et al. (2017) focused on employee alone and another study examining the remaining aspects of private security industry regulations would expand the breadth of the study. The empirical review has been summarised in the appendix IV.

2.4 Conceptual Framework

A conceptual framework is a diagrammatical representation of the relationship between independent and dependent variable (Young, 2009). The variables being represented includes independent, dependent, moderating and mediating and sometimes control. A dependent variable is the outcome variable that is being studied to establish how the independent variables are explaining its value. Independent variable is the variable causing change in the dependent variable (Saunders, 2003). A moderating variable is one that has catalyst or inhibitor effect on the relationship between independent and dependent variable (Sekaran, 2010). Mediating variable is one that connects the independent and dependent variable in a relationship. Control variable is the one that is not of interest to the study objectives but it is controlled to avoid influencing the outcomes. Figure 2.1 presents the conceptual framework used in this study.

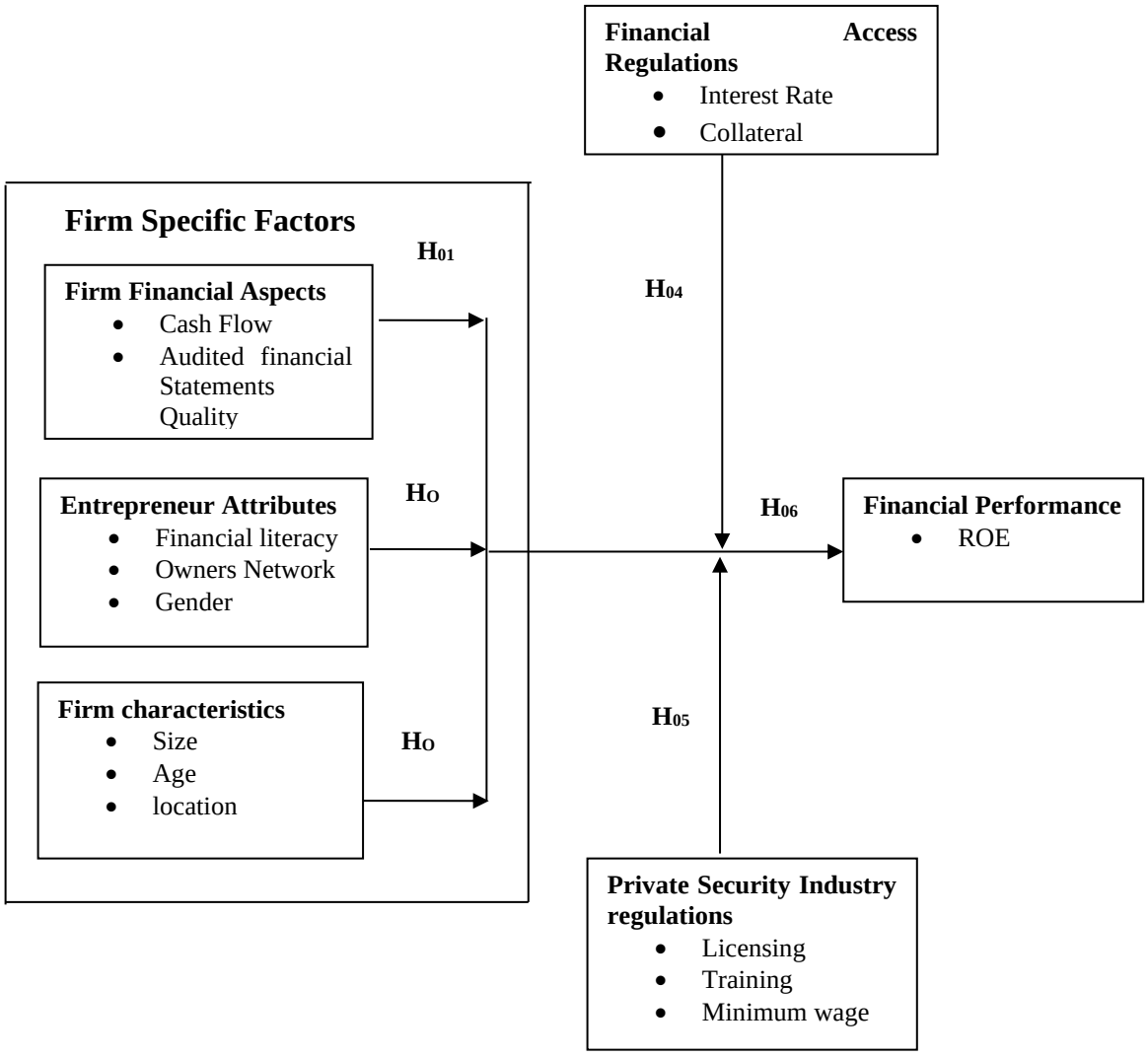

Figure 2.1: Conceptual Framework

2.4.1 Firm's financial aspects

Financial aspects considered in the study were cash flow and quality of audited financial statements. Cash flow includes cash inflow and cash outflow. It is the movement of liquid cash into and out of an organization. The cash flow influences the

firm's ability to settle its debts and operate in the short term and long term hence it has an impact on performance. Adequate cash means more cash for re-investment. On the other hand, a deficit cash inflow affects the ability of the business to settle obligations as they fall due. It also affects the ability of the business to operate normally through purchase of stock and other supplies (Liman & Mohammed, 2018).

Quality of Audited Financial Statements: Quality audited financial statements are critical as it can help the lender to predict possible risks as regards loan repayment (McKenzie & Baker, 2011). Quality audited financial statements offers true and fair view of the financial position and health of the business. This makes it easy for the business and the lender to make projections into the future regarding returns and ability of the business to repay back credit offered. Quality audited financial statements are thus critical for lending decisions by financial institutions. Quality audited financial statements are critical in bridging the information gap between the lender and the business in regard to risk associated with the credit facility the borrower needs (Ball, 2006).

2.4.2. Entrepreneur Attributes

Entrepreneur attributes of concern in the study were financial literacy, gender and owner's network. Financial Literacy: Alludes to the capacity of a person to interpret how cash functions, how it is managed, how it is earned and invested (Coleman, 2016). The finance literacy decisions can be narrowed to the four major financial decisions which include Capital budgeting or long-term investment decision, Capital structure or Financing decision, Dividend pay-out decision and Working Capital management decision (Nunoo, Andoh & Darfor,2015). The growth and sustainability of a business is restricted when owners do not have adequate attitude, knowledge, skills and

required awareness that is critical in managing the business finances in a professional way. Business owners and managers must have adequate understanding of financial literacy and cash cycle if the business has to operate efficiently (Mazzarol & Benjamin, 2011).

Gender: Gender responsibility is the role allocated to an individual based on biological sex disposition (Ugwuozor, 2020). Traditionally business ownership has for a long time been associated with male gender. Women are rarely involved in business and when involved, they are expected to be invisible or silent partners. Cole, Mehran and Giombini (2018) noted that businesses owned by women more often experiences challenges in accessing credit because they undergo more hurdles in seek for finances than their male counter parts. On the contrary, Beck and Cull (2014) noted that female owned and managed businesses tends to have adequate access to finances than businesses managed by male counter parts in most parts of Africa as evidenced by growing number of females owned and managed businesses in sub-Saharan Africa.

Owners Network: Paasche et al. (1993) defined networks as "a specific type of relations linking a specific group of people, events and goals". Such definition contains in different specific elements which are: specific types of relations, specific group of people (identified or known participants in the network as well as events and goals or aims). This means that the networks can contain types of events and activities, and that a single network can contain different entities such person, company or institution (Hyvarinen, 1996). Business relations and ties can overcome challenges and problems facing SMEs because these links or networks will enhance the access to finance leading to better performance through the availability of finance from these

networks (Premaraten, 2001). Networks play important role in providing informal consultancy and advice by different people (Fuller & Thomas 2004).

2.4.3 Firm's Characteristics

Firm's characteristics that affect business performance considered under the study included size, age and location. Firm size is a critical factor that relates to firm performance. SMEs are relatively more constrained financially compared to large firms (Carpenter & Petersen, 2002). SMEs are riskier given their high failure rate compared to large firms. Schiffer and Weder (2001) did a study of whether business obstacles are related to size. It was established that performance was directly and significantly affected by firm size. Smaller firms are often exposed to high lending rate in addition to collateral requirement while in real sense they do not have adequate collateral given their size (Berger & Udell, 2002). Firm size affects credit access by SMEs from financial institutions such that larger firms are favoured compared to smaller firms (Fatoki & Asah, 2011).

Age of the Firm: Firm age in years is frequently used as a measure for the fact that older firm are presumed of being more experienced on running the business such that it can withstand economic challenges and are more resilient to business difficulties. Further, financial life-cycle trends are uniform over time for different industry (La Rocca, 2011). Businesses at start up stage often have the challenges on how to source funds needed for investment in fixed and working capital. Businesses at exponential growth life cycle often do not have so much pressure in sourcing finances needed for expansion and growth. The longer a business stays in operation, the more likely they are able to withstand challenges posed by economic upheavals (Chandler, 2009).

Location of the Firm: Location is the choice of mode of entry into business including local or external entry and operations (Ilian & Yasuo, 2005). Kala and Guanghua (2010) defined location as the choice of a place where the business will be situated and established that could be urban or rural area. Esteban, Yancy and Christian (2010) referred to location as the choice of place where the business will operate which could either be rural or urban centre which is also further related to type of product the firm offers. Kala and Guanghua (2010) noted that firm performance is directly affected by firm specific factors such as strategic location. They also noted that location provided a springboard where local firms achieve prosperity and success. They further noted that firm location can equally help in achieving sustainable performance.

2.4.4 Finance Access Regulations

Financial access regulations considered under the study included the interest rate and collateral security. Interest rate: It is the amount that is calculated from outstanding loan balance and is paid together with the principal amount (Lee, Sameen & Cowling, 2015). Interest expense is an expense of the credit which is income to the lender that negatively affects an organization's development plans. They not just influence advance instalments, yet they likewise affect an undertaking subsidizing (Ogolla, 2013). High interest rates lessen business profit that affects the business ability to develop. High interest rates likewise influence a business income in that one needs to put aside more cash to finance the principal and interests. This minimizes its extra disposable cash subsequently influencing capacity to meet short term obligations.

Collateral security: Collateral alludes to an asset against which credit is taken from financial institutions. The collateral is considered as a last resort measure in case of loan default where the pledged security is disposed by the lender to recover the

remaining principal and interest thereof. Kung'u (2011) noted that loans that are considered safe from default often enjoy low interest rate. Majority of SMEs do not have enough collateral required by lenders for loan advancement. This have constrained their performance hindering their growth. Collateral for firms often take the form of the business itself, houses, cars, land, shares and anything that could be quickly disposed to recover the principal amount in case of loan default (Garrett, 2009). A good collateral ought to be an asset that can be disposed under normal conditions in the market at a fair value within a reasonable time.

2.4.5 Private Security Industry Regulations.

Private Security Industry Regulation of 2016 and establishment of the Private Security Industry Regulatory Authority (PSIRA) has been critical to performance of private security firms (Diphoorn, 2016). This regulation has significantly increase the cost of doing business in the security sector thus affecting private security firms' performance with private security firm expected to observe the minimum wage and training for its workforce. Private security firms barely pay as the minimum wage requirements. The low wages negatively affect guards' performance and the overall firm's performance (Krahmann, 2016). A common practice among PSCs is to apply wage differentiation where some guards are paid highly compared to others based on the contract signed by them leading to discontent among those who are lowly paid and have same qualification as those earning higher pay (Ombati, 2012).

Training: Training is the acquisition of skills, knowledge and attributes necessary to perform a job better. Argwalla (2010) noted that the purpose of training is to improve the work performance on employees and fulfil current and future staff needs in an organization. Training programs must have needs assessment; training design; training

programme; training implementation and evaluation. Akhar et al., (2011) revealed that training is directly associated with job engagements and work performance. Khanfar (2011) noted that the performance level of the employee is directly associated with kind of training acquired. Khan (2011) noted that training is critical in improving the task process quality and bringing improvement in the performance of employees as they acquire useful skills necessary to perform their jobs satisfactorily. In security industry training is important.

2.4.6 Financial Performance

The proponents of firm performance have advocated for and advanced a variety of indicators of performance to capture varying dimensions of performance (Peter et al, 2018). The aim is to avail the most comprehensive and balanced view and opinion on performance of a firm. The performance measures include output measures, efficiency and productivity measures, service quality measures, customer satisfaction measures, profitability measures among others (Roffia, Simón-Moya, & Sendra García, 2021). Output measures captures the quantity of or unit of service provided. Efficiency and productivity measures are often ratios that capture output per unit cost spent in producing a product. Service quality measures are qualitative measures on service offered. Customer satisfaction measures are related to service quality measures; however, their focus is on customers (Porter, 2008). The current study measured financial performance based on accounting measure. The study specifically adopted return on equity as the measure of financial performance. Return on equity is generated by dividing profit before tax with total equity of the firm.

2.5 Chapter Summary

The chapter elaborates on both theoretical and empirical literature relevant on the relationship between firm specific factors and financial performance as well as the

influence of regulatory requirements on financial performance. The chapter specifically examines the theoretical review, empirical review and conceptual framework. Theoretical framework examines relevant theories anchoring the study including Public Interest theory, Miller- Orr Model, Credit Access Theory, Social network theory and Scale Efficiency Theory. The empirical review considers leading empirical studies such as Afrifa (2016) who evaluated the interrelation between firm performance and cash flow finding that firms with adequate cash inflows should invest the excess liquidity into interest earning financial assets, Van Stel et al. (2021) who revealed that education and human capital were critical drivers of the performance of ventures, Mulwa (2020) who established significant effect of firm size on financial performance. The chapter finalises with conceptual framework.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter features different methodology utilized in sourcing and processing data. Research methodology explains the research approach, research design, target population, sample and sampling procedures, instrumentation, sample frame, data collection methods, data analysis and data presentation.

3.2 Research Philosophy

The study was based on positivist approach given that positivist studies examine previous empirical studies and theories with an aim of formulating empirical and conceptual framework for examining and testing hypotheses (Mkansi & Acheampong, 2012). Positivist is therefore often used when the researcher is interested in testing hypothesis based on scientifically observed data. The positivist approach also relies on taking large samples. In this case the researcher studied the entire population of private security firms registered with PSIA so as to generalize the findings (Padilla-Díaz, 2015). Numerous research paradigms can be adopted in social science research. Each paradigm is unique to the question of how research should be carried out. Therefore, each research paradigm has a different ontological and epistemological related with it. “Ontology is the study of what is real while epistemology is the study of how we come to know what is real.” There are four main research paradigms used in social research which includes positivism, social constructionism, critical and postmodernism (Žukauskas, Vveinhardt & Andriukaitienė, 2018).

3.3 Research Design

The research adopted descriptive survey design in an effort to achieve the objectives of the study. The design was considered suitable for the study given that it enables the examination of the effect of one variable (independent) on another variable (dependent) using ex post facto data (Gupta & Gupta, 2022). The study collected data on private security firm's specific factors, regulatory requirements and performance that is essentially qualitative and quantitative in nature. A descriptive study enables the researcher to examine the effect of one variable on another without having to control the environment where the values of the variables are determined. Descriptive studies often introduce control variable to establish the effect of independent variable with and without the control variables. The study adopted moderating variables to examine how independent variable affects the dependent variable with and without the moderation effect.

3.4 Research Population

The target population comprised 75 private security firms registered by PSIA. Data available from PSIA offices indicates the total number of firms registered in its umbrella body that can be categorised as small or medium are 75. This is report up to December of 2020. In each firm, the CEO (Managing director) or General Manager or Operational manager filled the questionnaire. The study took census because the number of private security firms registered under PSIA is 75 with the CEO (Managing director) or General Manager or Operational manager of each firm participating in the study. Private security firms not registered with the PSIA were excluded from the study. The list of the 75 private security firms registered under PSIA had been attached. Censuses are preferred when the size of the population is small or when

complete study of the population is necessary to eliminate sampling error associated with picking representative samples from the population.

3.5 Data Collection Method

In collecting data regarding explanatory variables, the study adopted primary data sourced using closed ended questionnaires and administered to the respective staff. The use of structured questions is preferred in an effort to reduce time wastage and amount of thinking respondent has to do before responding to a questionnaire item (Kothari, 2004). Thus, the use of structured questionnaires improved the response rate on items and ensured that information that is more accurate is collected. Closed ended questionnaires are also easy to code and analyse (Daniel & Sam, 2011). The primary data was sought for explanatory variables including firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and private security industry regulations. The questionnaires were administered through drop and pick later method (Chawla & Sodhi, 2011). The respondents were given five days to fill questionnaire after which they were collected back for eventual coding, entry and analysis. Secondary data were collected based on data collection sheet attached to the questionnaires delivered to private security firms. The data needed to calculate ROE included profit before tax and total equity of the firms. The data was collected over a period three years from 2018 to 2020.The secondary data was used in measuring financial performance of private security firms in Kenya.

3.6 Pilot Study

The purpose of pilot study was to examine the feasibility of the study in an effort to identify and eliminate possible problems that may be faced in the field before the actual study (Kumar, 2018). The pilot test was carried out to identify problems in the

data collection instruments and the research design (Blumberg, Cooper & Schindler, 2014). In this study, the questionnaire was tested among three (3) respondents from three firms. The number of 3 is adequate in pilot testing as supported by Kumar (2018) who held that a number of about three is adequate for pilot study. The information generated was used in determining the reliability and validity of the questionnaire. The three firms used during piloting were omitted from the final study.

3.6.1 Validity Test

Validity is the quality of the data collection tool used to generate information that will answer the research questions and achieve study objectives. The purpose of examining validity was to ensure questionnaires measures what they are intended to measure (Heale & Twycross, 2015). Any problem in questionnaire items was to be redesigned or eliminated to ensure validity is established (Saunders, Lewis, and Thornhill, 2007). The questionnaire was tested for face validity by being subjected to a group of experts. Construct validity considers both the theory and the measuring instrument being used. Construct validly was examined based on factor analysis of the data collected in pre-study (Cooper & Schinder, 2007). Factor analysis was based on underlying variable inter- item correlation. The items are said to have construct validity if they have a correlation higher than 0.5. The construct validity was determined based on mean variance extracted in each construct. The average variance extracted was generated by getting the mean of all variance extracted under each variable or construct. Construct was said to be good if the average variance extracted was greater than 0.5. The construct validity results were presented in the below table. Table 4.3 showed all the constructs had an average variance extracted above 0.5 meaning the construct validity was established (Mayer, 2015).

3.6.2 Reliability Test

The study also examined reliability of the data collection tool adopted. Reliability is the extent to which items in the data collection tool consistently measure what they are supposed to measure and give consistent results when used in the same setting with the same size (Saunders et al., 2011). Reliability is the stability of measurement tool over a variety of conditions (Nunnally, 1978). Mugenda and Mugenda (2013) argued that reliability is a measure of the extent to which data collection tools generates consistent results or data after repeated studies. Reliability in social sciences is often tested based on alternative forms, test-retest method, split-halves method, internal consistency measure and inter-rater reliability (Drost, 2011). The study used the internal consistency measure which relies in calculation of Cronbach alpha. A Cronbach alpha of 0.7 and above would signify reliable instrument of data collection. The study established that Cronbach values of all the constructs were above 0.7 hence the instrument was reliable for data collection

3.7 Data Analysis

The collected data from the field was first checked for completeness and adequacy in the responses after which the questionnaire was coded and data entered in the data analysis tool (SPSS). The entered data was checked for missing values, wrong entries in what is called data cleaning. Missing values were filled automatically with the software based on average responses for given item in the questionnaires. Data was analysed based on descriptive and inferential statistics. Descriptive statistics measures used included percentages, mean, standard deviation and coefficient of variation. Descriptive analysis was done for response rate, respondent demographic information and the independent and dependent variables in isolation. The purpose of descriptive

analysis was to identify presence of outliers that could interfere with inferential analysis.

Before performing inferential analysis, diagnostic tests were carried out to establish the robustness of the regression model used in the analysis for estimating parameters. Inferential statistics analysis was based on Pearson correlation coefficients and regression analysis. Correlation analysis was critical in examining the relationship among independent and dependent variables of the study. The study specifically adopted bivariate Pearson correlation coefficient to establish the correlation between study variables. The study examined the relationship between firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics), business regulatory requirements (finance access regulations and private security regulations) and firm performance among private security firms in Kenya.

The Pearson correlation coefficient values are between 0 and 1 where 0 imply no correlation and 1 imply perfect correlation. A Pearson correlation coefficient value between 0.1 – 0.3 imply weak correlation. A Pearson correlation coefficient between 0.4- 0.6 imply moderate correlation and a Pearson correlation between 0.7 – 0.9 imply strong correlation. Ordinary least squares (OLS) regression models were adopted in testing hypotheses and examining the effect of firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics), business regulatory requirements (finance access regulations and private security regulations) on financial performance among private security firms in Kenya. The parameter estimates were adopted to explain the influence of each explanatory variable on the dependent variable.

Regarding the null hypotheses (H_{01}-H_{O3}) the study adopted multivariate regression models presented in equation [3.1]. The multivariate regression model enabled the study to establish the effect of firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics) on financial performance of private security firms. The p-value associated with coefficients of independent variables was used to test each of the first three hypotheses where if the coefficient is less than 0.05 level of significance, the specific null hypotheses is rejected and study concluding that the firm specific factor has a significant effect on financial performance of private security firms,

Regarding hypotheses (H_{04}-H_{05}), the study adopted stepwise regression model presented in equations. The stepwise regression model enabled the study to examine the moderating effect of business regulatory requirements on the relationship between firm specific factors and financial performance of private security firms. The business regulatory requirements included finance access regulations and private security industry regulations. The stepwise regression model for moderation was undertaken in three steps as suggested by (Baron & Kenny, 1986).

The first step involved regressing financial performance against firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics) as shown in equations [3.2]. For equation [3.2], p values associated with F test should be < 0.05 as first condition for rejection of null hypotheses (H_{04}-H_{05}). The second step involved regressing financial performance against firm specific factors, and the moderators (finance access regulations and private security industry regulations) as presented in equations [3.3 and 3.6]. The p-values of coefficients of the moderators (finance access regulations and private security industry regulations) should be less 0.05 for

moderation to exist and the second condition of rejection of null hypothesis be satisfied.

The third step involved regressing financial performance against firm specific factors, business regulatory requirements and the interaction term (product of moderator and sum of firm specific factors as presented in equations [3.4 and 3.7]. For equation [3.4 and 3.7], p-values associated with coefficients of the moderators and interaction terms should be < 0.05 for moderation to be said to exist. If all the three conditions in the three-step regression models hold, then there is some form of moderation and Null hypothesis should be rejected. The models adopted in the analysis were presented in the Table 3.1.

Regarding hypothesis (H_{06}), the study adopted multivariate regression analysis model as shown in equation [3.8]. The multivariate regression model enabled examination of joint effect of firm specific factors and business regulatory requirements on financial performance of private security firms. The p-value generated in the ANOVA was expected to be less than 0.05 level of significance for joint effect to be said to exist and the null hypothesis rejected.

Models for analysis are presented in Table 3.1

Table 3. 1: Data Analysis Models

Objectives	Hypotheses	Analysis Model	Statistics	Decision Rule
To assess the effect of firm's financial aspects on financial performance of private security firms in Kenya.	**H01:** There is no statistically significant effect of firm's financial aspects on financial performance of private security firms in Kenya	**Multivariate Regression Model** $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \varepsilon_{it}$ .....(3.1) Where Y is Financial Performance proxy (ROE) (Dependent Variables) X_1 = firm's financial aspects X_2 = entrepreneur's attributes X_3 = firm characteristics i= cross sectional units= 1, 2, 3……...75 **ε** = error term β_0= Intercept term βi= coefficients of explanatory variables	F test T test R^2 β_i	For equation [1], If p values associated with coefficients of firm specific factors are less than 0.05 Reject the Null hypotheses (1-3)
To explore the effect of entrepreneur's attributes on financial performance of private security firms in Kenya.	**H02:** There is no statistically significant effect of entrepreneur's attributes on financial performance of private security firms in Kenya.			
To investigate the effect of firm's characteristics on financial performance of private security firms in Kenya	**H03:** There is no statistically significant effect of firm characteristics on financial performance of private security firms in Kenya			
To probe the moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.	**H04**: There is no statistically significant moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya	**Stepwise Regression Model** $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \varepsilon_{it}$ .....(3.2) $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \beta_4 Z_{1i} + \varepsilon_{it}$.....(3.3) $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \beta_4 Z_{1i} + \beta 5 Z_1(X_1+X_2+X_3) + \varepsilon_{it}$...(3.4) Where Z_1 = Finance access regulations (moderating variable), $Z_1(X_1+X_2+X_3)$ = Interaction term	F test T test R^2 βi	For equation [1], p values associated with F test should be < 0.05 For equation [2] p-values of β_4 should be < 0.05 For equation [3], p-values of β_4 and β_5

				should be < 0.05 If all the three conditions (in equations [1-3) hold, then there is some form of moderation and Null hypothesis should be rejected
To ascertain the moderating effect of private security industry regulations on the effect of firm of firm specific factors on financial performance of private security firms in Kenya.	**H05:** There is no statistically significant moderating effect of private security industry regulations on the effect of firm specific factors on financial performance of private security firms in Kenya	**Stepwise Regression Model** $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \varepsilon_{it}$ .....(3.5) $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \beta_4 Z_{2i} + \varepsilon_{it}$.....(3.6) $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \beta_4 Z_{2i} + \beta_5 Z_1(X_1+X_2+X_3) + \varepsilon_{it}$... (3.7) Where Z_2 = Private security industry regulations (moderating variable), $Z_2(X_1+X_2+X_3)$ = Interaction term		For equation [1], p values associated with F test should be < 0.05 For equation [4] p-values of β_4 should be < 0.05 For equation [5], p-values of β_4 and β_5 should be < 0.05 If all the three conditions (in equations [1,4,5) hold, then there is some form of moderation and Null hypothesis should be rejected
To establish the joint effect of firm specific factors and	H_{06}: There is no statistically significant joint effect of firm specific	**Multivariate Regression Model** $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_3 + \beta_4 Z_{1i} + \beta_5 Z_{2i} + \varepsilon_{it}$.....(3.8)	F test T-test R^2 Bi	If p value associated with F are < 0.05 Reject Null hypotheses

business regulatory requirements on financial performance of private security firms in Kenya	factors and business regulatory requirements on financial performance of private security firms in Kenya			

3.8 Diagnostic Tests

The study performed diagnostic tests or test of regression assumptions to establish whether the model adopted for a parameter estimation was fit for the purpose. A fit model should generate robust findings that can be relied on for decision-making and forecasting purpose. The diagnostic tests ensured that OLS assumptions were not violated. Key assumptions tested were normality, collinearity and homoscedasticity.

3.8.1 Test for Multicollinearity

Multicollinearity is the compromised quality of statistical data where explanatory variables in a study are highly correlated among themselves. Multicollinearity results to large standard errors of the parameter estimates associated with each variable. According to Mugenda and Mugenda (2012), multicollinearity is a problem for multivariate regression models such that some of the explanatory variables are significantly correlated among themselves. The study adopted Variance Inflation Factor (VIF) to measure presence of multicollinearity. The multicollinearity assumption is based on the VIF of 10 as the cut-off point (Daoud, 2017).

3.8.2 Normality Test

The assumption of normality holds that regression residuals should follow a normal distribution. Normally distributed data should have mean equalling to median and should be depicted on normal distribution curve (Gel & Gastwirth, 2008). The current

study adopted normal curves to establish whether the residuals were normally distributed. The curve ought not to be skewed on either side of the plot hence normality. Further, the study adopted normal probability plot (PP) of regression standardised residuals where the data points should be spread along the normal probability plot line.

3.8.3 Heteroscedasticity Test

The fitting of OLS models assumes that the stochastic term has constant and finite variance in what is referred to as homoscedasticity. The opposite of homoscedasticity is heteroscedasticity (Jamshidian & Jalal, 2010). A condition in statistics where the variance of the error term is not constant and finite is called heteroscedasticity. Heteroscedasticity is problematic in regression analysis as it leads to spurious regression results such that the error terms depict clash in the model and the error terms are larger than they ought to be. The study adopted scatter plot where residuals were plotted against the predicted values.

3.9 Variable definition and Measurement

Variables are the observable characteristics or events that assume a range of values during the research. Dependent variable is also called outcome variable or predicted variable. It is the variable being observed to reveal how it is affected when independent variables are manipulated. The basis of the topic of this study was the increased concerns about regulatory requirements that affect performance of small and medium sized private security firms in addition to other firm's specific factors that affect firm's performance. Wrong operationalization of variables is associated with misleading results and interpretation thereof. The operationalization of study variables is the way in which the variable is measured in the research. Different studies can measure same

concept using different measures. The study adopted ordinal scale that was in the form of 5-point Likert scale type to measure independent variables of the study.

The operationalization of the study was involved in identifying indicators or parameters or proxies of each independent variable. The Likert scale was then used to measure the indicators of the variables where each statement on the Likert scale was rated based on 5-point Likert type scale. The five-point (1-5) Likert scale had 1 as strongly disagree and 5 as strongly agree. A Likert scale is suitable measurement scale to measure effectively, cognitively and behaviorally based attitudes such as beliefs (Cooper and Schindler, 2006).

Table 3. 2: Definition and Measurement of Variables

Variables	Sub Variable	Notation	Scale	Measurement / Indicators	Expected Sign
Dependent Variable					
	Return on Equity	Y	Ratio Scale	-Profit before tax /Total equity	ROE
Independent Variable					
Firm specific factors	Firm finance aspects	X1	5-point Likert scale	-cash flow -Financial statement quality	+
	Entrepreneur attributes	X2	5-point Likert scale	-Financial literacy -owners network -gender	+
	Firm characteristics	X3	5-point Likert scale	-age -size -location	+
Moderating Variable					
Business Regulatory requirements	Finance Access Regulations	Z1	5-point Likert scale	-interest rate collateral	-
	Private Security industry regulations	Z2	5-point Likert scale	-Licensing -Training -Minimum wage	+

3.10 Ethical Considerations

Ethical issues are important and were considered in this research to safeguard the rights of human characters that used this research. The research observed honesty, confidentiality, truthfulness and sincerity. The participation in the study was based on voluntary decision by each respondent after explaining to them the purpose of the study, the possible psychological effect of the questionnaire items and the freedom to

exit from the study at any stage. The study also did not collect information that could be directly identified with the respondents hence maximum anonymity was ensured. According to Brace (2013) informed consent is necessary before engaging in research. As such the researcher will observe ethics throughout this research. The data collected was safely kept and only used for the purpose it was collected for.

3.11 Chapter Summary

This chapter features different methodology utilized in sourcing and processing data. Research methodology explains the research approach, research design, target population, sample and sampling procedures, instrumentation, sample frame, data collection methods, data analysis and data presentation. The research was based on descriptive survey research design. The study population was 75 private security firms operating in Kenya forming the census with no sampling being carried out. The study made use of primary and secondary with primary data being sourced using structured questionnaires. The instrument was taken through pretesting to ensure validity and reliability of each construct measurements before actual study. Statistical tools including frequency distribution, mean, standard deviation and coefficient of variation were used as descriptive statistics. Multivariate OLS regression was applied to examine the effect of firm specific factors on financial performance. Stepwise regression was adopted to examine the moderating effect of business regulatory requirements on the relationship between firm specific factors and financial performance

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The chapter presents a statistical summary results and discussion. The main objective was to investigate the effect of firm specific factors on financial performance as moderated by business regulatory requirements among private security firms. Specific objectives were: to assess the effect of firm's financial aspects on financial performance of private security firms in Kenya, to explore the effect of entrepreneurs attributes on financial performance of private security firms in Kenya, to investigate the effect of firm's characteristics on financial performance of private security firms in Kenya, to probe the moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya, and finally, to ascertain the moderating effect of private security industry regulation on the effect of firm specific factors on financial performance of private security firms in Kenya. Descriptive and inferential statistical analysis was adopted.

4.2 Response Rate

The research distributed 72 questionnaires to managers of PSCs of which 71 were successfully filled and returned. The returned questionnaires gave a response rate of 98.6%. The response rate was adequate for further analysis. According to Mugenda and Mugenda (2003) a response rate of 50% is considered adequate, 60% is considered good and 70% and above is considered excellent hence the response rate in this research was excellent. The study was able to achieve a high response rate by following up on the questionnaires filling and assuring the respondents that

information collected from them were going to be treated as confidential as possible. Response rate is displayed in Table 4.1:

Table 4.1: Response Rate

Issued Questionnaires	Frequency	Percent
Adequately Filled	71	98
Unreturned	1	2
Total	72	100.0

4.3 Pilot study Tests

The study also carried out a pre-study to examine the validity and reliability of the questionnaires used in the study. Piloting was performed among 3 private security firms that is 4% of the target population using a pre-set questionnaire. The study superficially tested for construct validity and internal consistency of the questionnaire items with findings given in succeeding sub-sections.

4.3.1 Reliability Test

The study adopted internal consistency test of Cronbach alpha to examine the reliability of the instruments adopted. A value of Cronbach of 0.7 and above showed that the construct adopted was reliable enough. George and Mallery (2012) held that Cronbach Alpha value greater than 0.7 is considered satisfactory reliability level. The results generated were summarised in table 4.2 that shows the reliability of each variable adopted in the study. The findings showed that all the variables had a Cronbach Alpha greater than 0.7. Financial aspects (0.889), entrepreneur attributes (0.720), firm characteristics (0.982), financial access regulations (0.873) and Private Security industry regulations (0.977). The reliability alpha statistics of all the variables were above 0.7.

Table 4.2: Cronbach Alpha

Variable	Cronbach's Alpha	Number of items	Comment
Financial Factors	.889	6	Accepted
Entrepreneur Attributes	.720	7	Accepted
Firm Characteristics	.982	5	Accepted
Financial Access Regulations	.873	5	Accepted
Private Security Industry Regulations	.977	6	Accepted

4.3.2 Construct Validity

The research also examined construct validity. Construct validity is the extent to which a sequence of statements or questions describes the underlying factors. Construct validity is examined based on factor analysis of the data collected in pre-study (Cooper & Schinder, 2007). Factor analysis is based on underlying variable inter- item correlation. The items are said to have construct validity if they have a correlation higher than 0.5. The construct validity was determined based on mean variance extracted in each construct. The average variance extracted was generated by getting the mean of all variance extracted under each variable or construct. Construct was said to be good if the average variance extracted was greater than 0.5. The construct validity results were presented in the below table. Table 4.3 showed all the constructs had an average variance extracted above 0.5 meaning the construct validity was established (Cronbach & Meehl, 2017).

Table 4.3: Average Variance Extracted

Construct	Average Variance Extracted
Financial Factors	0.673
Entrepreneur Attributes	0.683
Firm Characteristics	0.577
Financial Access Regulations	0.586
Business Regulations	0.752

4.4 Demographic Information

The section sought to describe demographic information of the respondents who participated in the research. The demographic qualities considered included; Gender, Age, education qualification, and period of experience in their respective organizations. The findings were presented within the section.

4.4.1 Gender of Respondents

The research sought to establish the gender of the respondents with gender being categorized into males and females. The research established that most of the respondents who participated in the study were males at 60 (84.5%) and the remaining being females at 11 (15.5%). This was evidence that male entrepreneurs dominate private security industry. The results are shown in Table 4.4.

Table 4. 4: Gender

Variable	Category	Frequency	Percent
Gender	Male	60	84.5
	Female	11	15.5
	Total	**71**	**100.0**

4.4.2. Age of the respondents

Most of the study respondents were aged above 40 years as shown in the Table 4.5. They represented a 73.2 %, followed by those whose ages range from 31-40 years, representing 21.1% of the total respondents. This is an indication that the industry is mainly managed by people above 40 years of age.

Table 4. 5: Age of Respondents

Variable	Category	Frequency	Percent
Age	20-30 years	4	5.6
	31-40 years	15	21.1
	above 40 years	52	73.2
	Total	71	100.0

4.4.3 Education Level

Majority of the respondents attained certificate as the highest level of education. They were represented by 54.9% of the total respondents. They were followed by those who attained diploma, with a proportion of 23.9% of the respondents. Only 2.8 % attained master's degree. This is an indication that the majority of those who run the industry are not highly learned as presented in Table 4.6.

Table 4. 6: Education Level

Variable	Category	Frequency	Percent
Education	Certificate	39	54.9
	Diploma	17	23.9
	Degree	12	16.9
	Masters	2	2.8
	PhD	1	1.4
	Total	**71**	**100.0**

4.4.4 Age of the firm

The research revealed that a large number of the firms have existed for above 10 years represented by 57.3% of the total number of firms. The period above 12 years is a

long time to enable business to overcome various challenges that may come along the way. Coad, Holm, Krafft and Quatraro, (2018) states that the longer a firm stay in operation, the more persistence it is to unpleasant economic circumstances. The longer a business stays in operation, the more likely they are able to withstand challenges posed by economic upheavals (Coad, et al. 2018). Further, young SMEs find it difficult to access credit from lenders and are exposed to high cost of fund given the information asymmetry concerning their credit worthiness (Mallinguh, Wasike & Zoltan, 2020). Given that, young and small businesses most of the time have the challenge of not keeping adequate books of accounts and some lack audited financial statements hence limiting their ability to access external funding. The low access to credit due to information asymmetry negatively affects their financial performance, as they will often have liquidity challenges (Coad, 2018).

Table 4.7: Age of the Firm

Variable	Category	Frequency	Percent
Age of the firm	less than 5 years	5	7.0
	5-10	26	36.6
	Above 10 years	40	56.3
	Total	71	100.0

4.5 Descriptive Analysis of Study Variables

The section presents result of the variables used in the study including independent, moderating and dependent variable. The variables included financial aspects, entrepreneur's attributes, firm characteristics, financial access regulations, business regulations and firm performance. The study analysis adopted frequency distribution, measures of central tendency and measures of dispersal.

4.5.1 Firm's Financial Aspects and Performance

The first independent variable was firm's financial aspects. The study presented respondents with various statements about financial aspects of performance and the respondents were expected to evaluate the statements based on a five- point scale as presented in the succeeding Tables [4.8- 4.13].

Table 4.8: Proper Financial Statements

Statement	**Scale**	**Frequency**	**Percent**
The firm keep proper financial statements	Neutral	8	11.3
	Agree	5	7.0
	strongly agree	58	81.7
	Total	71	100.0

Table 4.8 presented the findings on the statement where respondents were asked whether they felt their firms kept proper financial statements. A whooping number, 81.7% agreed strongly, implying that financial records have a major influence on firm performance. This aspect of the firm is in line with a number of literature reviews, including one done by Vander Bauwhede, De Meyere and Van Cauwenberge (2015) that revealed that quality of financial statements has a significant positive association with finance accessibility. In addition, Vander Bauwhede (2015) stated that if no relationship is found between quality of a financial statement and access to finance, this may imply that SMEs owners/managers lack the literacy of how the quality of their financial statements, perceived risk and information asymmetry affect their chances of receiving financing. Further, Vanauken, Ascigil, and Carraher (2017) established that the ability of SMEs to get access to credit finance from lenders depends on the quality of the audited financial statements. Additionally, Vanauken et al (2017) revealed that SMEs with poor quality financial statements finds it hard to

access credit from financial institutions compared to their counterparts with quality audited financial statements.

Table 4.9: Competent Account

Statement	Scale	Frequency	Percent
The firm has a competent account who oversees the accounts department	Neutral	3	4.2
	Agree	6	8.5
	Strongly agree	62	87.3
	Total	71	100.0

Table 4.9 presented findings on the statement that the firm has a competent account who oversees the accounts department. Majority of the respondents also agreed strongly to have competent accountant who oversees the accounts department as shown in the table above. 87.3% agreed strongly. The results were in line with the study done by Setiyawati, Iskandar and Basar (2018) showing that the audited financial statements are critical documents when a business wants to access credit from financial institutions. Financial institutions will always demand audited financial statements before they can grant a business credit. Moreover, most SMEs in South Africa find it hard to access credit from lenders because most of the them do not have audited financial statements with them. In addition, most SMEs often prepare a variety of books but they are almost never audited based on conventional accounting standards hence they often do not get loans and if they get, the interest rate is very high hence eating in to the business profits. Quality audited financial statements are critical as it can help the lender to predict possible risks as regards repayment (Elemes & Filip, 2022). Quality audited financial statements offers true and fair view of the financial condition and health of the business hence making it easy for the business and the lender to make projections into the future regarding returns and ability of the

business to repay back credit offered. Quality audited financial statements are thus critical for lending decisions by financial institutions. Quality audited financial statements are critical in bridging the information gap between the lender and the business (Kharabadze & Mamukelashvili, 2016). This can only be attained by having a competent and skilled accountant.

Table 4.10: Audited Financial Statements

Statement	Scale	Frequency	Percent
The financial statements are audited by external auditor	Neutral	8	11.3
	Agree	50	70.4
	strongly agree	13	18.3
	Total	71	100.0

Table 4.10 presented the findings on the statement that the financial statements are audited by external auditor. 88.7% of the respondents who participated in the research agreed that the firm hires an external auditor who performs an independent examination of their books. This is an indication of how serious most of the firms are in matters of finance transparency and accountability. The results above were in line with a study conducted by Setiyawati et al. (2018) that established that the audited financial statements are critical documents when a business wants to access credit from financial institutions thus translate to better performance. Financial institutions will always demand audited financial statements before they can grant loan to a business. Moreover, most SMEs often prepare a variety of books but they are almost never audited based on Generally Accepted Accounting Principles hence they often do not get loans and if they get, the interest rate is very high hence eating in to the business profits. Quality audited financial statements are critical as it can help the lender to predict possible risks as regards repayment (Elemes & Filip, 2022).

Table 4.11: Meeting Financial Obligation

Statement	Scale	Frequency	Percent
The firm can comfortably meet its current financial obligation	Neutral	3	4.3
	Agree	27	38.0
	strongly agree	41	57.7
	Total	71	100.0

Table 4.11 presented the finding on the statement that the firm can comfortably meet its current financial obligation. Majority (95.7%) of the responses agreed that they can comfortably meet their current financial obligation. An indication that the sector is indeed thriving financially. Results may be an indication that majority of the firms in the industry are able to obtain financial assistance from money lending institutions, hence are able to meet their financial obligations. Despite a big number strongly agreeing to be able to meet their financial obligation, there was a small minority of 4.3% neutral. This is still an indication that some firms in the sector still requires financial assistance. Adequate cash means more cash to reinvest. On the other hand, a deficit cash inflow affects the ability of the business to settle obligations as they fall due. It also affects the ability of the business to operate normally through purchase of stock and other supplies (Liman & Mohammed, 2018).

Table 4.12: Projected Cash Flow

Statement		Frequency	Percent
The Cash Flow Are well projected for the firm's activities	Strongly Disagree	1	1.4
	Neutral	12	16.9
	Agree	12	16.9
	Strongly Agree	46	64.8
	Total	71	100.0

Table 4.12 presented the findings on the responses regarding the statement that the cash flow is well protected for the firms' activities of the private security firm.

Majority (64.8%) of the respondents strongly agreed that the firm's cash flows were well projected for firm's activities. The finding applies that majority of the private security firms that participated in the study were doing cash flow budgeting that enabled firms to have sufficient cash needed for daily operations for settling obligations as they fall due. The finding agrees with Rahman and Sharma, (2020) who showed that cash flow as reflected by a cash flow statement summarizes the cash inflow and outflows from operating activities, investing activities and financing activities. It helps to show the liquidity of the business concerned in making short-term payments and generating cash for that purpose.

Table 4.13: Return on Investment

Statement	Scale	Frequency	Percent
There is return on investment of company finances	Strongly disagree	1	1.4
	Agree	10	14.1
	strongly agree	60	84.5
	Total	71	100.0

Table 4.13 presented the findings on the response regarding the statement that there is return on investment of company finances. Most (84.5%) of the respondents strongly agreed that there is indeed return on investment, an indication of a thriving sector, 14.1% agree and 1.4% strongly disagreed. The finances that majority of owners are injecting into the business seemed to have direct association with positive performance in the sector. Majority of the respondents strongly agreed that the business has positive return on investment as a result of the finances injected into the business. This gives more hope to investors who may want to invest in the industry. The study also examined the mean, standard deviation and coefficient of variation regarding statements about financial aspects of the security firms in Kenya. The findings are presented in Table 4.14.

Table 4.14: Firms Financial Aspects

Statements on Firms Financial Aspects	Mean	SD	CV
The firm has a competent accountant who oversees the accounts department.	4.83	0.47	0.09
There is return on investment of company finances.	4.80	0.57	0.11
The firm keeps Proper financial statements	4.70	0.66	0.14
The firm can comfortably meet it current financial obligation	4.53	0.58	0.12
The cash flow is well projected for the firm's activities	4.43	0.87	0.19
The financial statements are audited by an external auditor.	4.07	0.54	0.13
Aggregate Mean Score	4.56	0.61	0.13

The findings presented in Table 4.14) reveals the evaluation of the respondents on the statements about firm's financial aspects. The responses on the statements have been ordered in descending order from the most supported to the least supported based on mean. The most supported statement was that the firm has a competent accountant who oversees the accounts department as evidenced by mean score (M = 4.831) tending to strong agreement with standard deviation (SD= 0.4776) showing that individual responses spread around the mean by about 0.47. The coefficient of variation (CV = 0.0988) revealed that responses for individuals were distributed from the mean by 9.8%. The finding implies that most firms studied were comfortably meeting their current financial obligations. The results were in line with the study done by Nanyondo (2014) who revealed a direct relationship between access to finance from financial institutions and the quality of financial statements (Setiyawati et al. 2018). Efforts to improve access to credit by SMEs for the benefit of managers and owners has to be based on financial literacy training. Further, Elemes and Filip (2022)

established that the ability of SMEs to get access to credit finance from lenders depends on the quality of the audited financial statements.

The least supported statement was that the financial statements are audited by an external auditor evidenced by mean score (M= 4.0704) tending to agreement. The finding implies that majority of private security firms in Kenya were getting their books of accounts audited by qualified external auditors. The standard deviation (SD= 0.5431) revealed that individual responses were spread around the mean by 0.54 units and the coefficient of variation (CV= 0. 0.1334) showed that individual responses were spread around the mean by 13.3%. The findings agree with Martinez-Ferrero et al (2016) who noted direct influence of financial reporting quality on performance. Further, the study showed that firms with better reported financial statements depicted superior financial performance. Ouma (2017) established that the major factors explaining quality of financial reporting included professional's development of the accountant, computerized accounting, and internal skills development. The overall means score on all statements showed that firm's financial aspects were critical for security firms operating in Kenya. The aggregate mean score (M= 4.563) tended to strong agreement implying that firm's financial aspects were important for performance of private security firms in Kenya.

4.5.2 Entrepreneurs Attributes

The second independent variable was entrepreneur attributes. The study presented various statements about entrepreneur attributes and the respondents were expected to evaluate the statements based on a five- point scale as presented in the succeeding Tables (4.15- 4.22].

Table 4.15: Knowledge of Owner of Firm

Statement	Scale	Frequency	Percent
The owner is knowledgeable about finances and strategic plan for the firm	Strongly Disagree	1	1.4
	Agree	11	15.5
	strongly agree	59	83.1
	Total	71	100.0

Table 4.15 presented the finding about statement that the owner is knowledgeable about finances and strategic plan for the firm. Majority (83.1%) of the respondents agreed strongly that the owners are knowledgeable about finance and strategic plan for the firms. None disagreed to any extent, thereby proving that professional attributes are highly upheld in most organizations. The results were in line with Agyapong and Attram (2019) that noted that owners of SMEs who received training on financial literacy reported better performance and improved growth and sales. Adomako, Danso and Ofori (2016) noted that inadequate, inappropriate and ineffective decisions is made by business owner who lacks financial knowledge and skills and refuses to get additional training on financial literacy. Financial literacy is therefore a critical ingredient for business performance that should be possessed by the owners and managers of a business.

Table 4.16: Academic Qualification of Owner

Statement	Scale	Frequency	Percent
The owner is academically qualified to propel the firm to the next level	Agree	2	2.8
	strongly agree	69	97.2
	Total	71	100.0

Table 4.16 presents the finding on the statement that the owner is academically qualified to propel the firm to the next level. Most (97.2%) of the respondents strongly agreed that the current owners are academically qualified to propel their respective firms to the next level. This was in line with a study done by Saptono (2018) who

revealed that businesses whose owners had high-level financial literacy were able to produce high quality financial records and books. They also showed that an entrepreneur who process financial statements frequently have a high loan repayment chances and lower probability that the business will be voluntarily be closed down. The ACCA (2014) holds that low level of financial awareness is one of the challenge financial institutions faces while lending. Nunoo, Andoh, and Darfor (2015) noted that utilization off financial services in financial institutions depends a lot of the financial literacy of the population. SMEs are often constricted in accessing and using financial products because their owners lack adequate financial literacy. These further limits the performance of such SMEs in terms of profitability, service delivery, growth and expansion.

Table 4.17: Employee Career Development

Statement	Scale	Frequency	Percent
The firm supports career development on its employees	Neutral	9	12.7
	Agree	1	1.4
	strongly agree	61	85.9
	Total	71	100.0

Table 4.17 presents the finding on the statement that the firm supports career development on its employees. Most (85.9%) of the respondents accepted strongly that their firms support career developments of their respective employees, an indication that entrepreneurship attributes are highly taken into consideration. The results were in accordance with the study done by Khan et al. (2016) that noted that the purpose of training is to improve the work performance on employees and also fulfil current and future staff needs in an organization. Training programs must have needs assessment; training design; training programme; training implementation and

evaluation. Anitha and Kumar (2016) revealed that training is directly associated with job engagements and work performance. Mozael (2015) noted that the performance level of the employee is directly associated with kind of training acquired. Training can be on-the-job or off the job and serves to improve efficiency of the worker and productivity enhancement of the labourer. Most organization view training as a worthwhile tool for promotion and improving firm performance (Younas, Farooq, Khalil-Ur-Rehman & Zreen, 2018). Further, the study noted that training is critical in improving the task process quality and bringing improvement in the performance of employees as they acquire useful skills necessary to perform their jobs satisfactorily.

Table 4.18: Networks of The Owner of The Firm

Statement	Scale	Frequency	Percent
The owner has great network that helps the business grow	Neutral	1	1.4
	Agree	1	1.4
	strongly agree	69	97.2
	Total	71	100.0

Table 4.18 presented the finding on the statement that the owner has great network that helps the business grow. The confirmation by 97.2% that the owners have great networks that help their respective businesses grow, to a greater extent, is a sign that the industry upholds entrepreneurship attributes, no wonder the profits achieved by the industry. The study finding was related to the one conducted by Franco, Haase, and Pereira (2016) which supports the view that networks are controlled by interaction and the social context among actors operating within the network and not just some economic factors. These networks play a very formal and important role. They are often in the form of providing informal consultancy and advice by different people (Jeong, 2016).

Table 4.19: Political Ties and Connections of Owner of the Firm

Statement Scale	Scale	Frequency	Percent
The owner has political ties and connections that have an impact in business growth	Disagree	1	1.4
	Neutral	3	4.2
	Agree	50	70.4
	Strongly Agree	17	23.9
	Total	71	100.0

Table 4.19 presents the findings on the statement that the owner has political ties and connections that have an impact in business growth. The findings revealed that most (94.3%) of the respondents either strongly agreed or just agreed. The findings imply that most private security firms have political connections that is impacting on business growth. Having political connection may be helpful in avoiding bureaucracies associated with government institutions especially regarding getting approvals for operation of private security firms. The findings are in line with Fatima and Bilal, (2019) who noted that social networks are necessary for businesses, and that the commercial behaviour and performance affected by the social structure and relations. Business networks, family and friend networks, as well as administrative networks are important types of networks as depicted in previous studies (Memba, 2015).

Table 4.20: Gender of The Owner and Firm Performance

Statement	Scale	Frequency	Percent
The gender of the owner affects performance of business	Strongly disagree	55	75.5
	Disagree	1	1.4
	Neutral	15	21.1
	Total	71	100.0

Table 4.20 presents finding on the statement that the gender of the owner affects performance of business. It was proven that the gender of the owner does not affect

business performance as 75.5% agreed with the statement. The results were in contrary with other studies, which include a study by Shava and Rungani (2016) which found businesses owned by women are few in absolute and comparative terms compared to their men counterparts. Further, women skill, knowledge and experience of starting and running a business was low and below average (Hoque and Awang, 2019). Further, the traditions still place women below men where men are considered bread winners who should go out there to work or do business to earn family money while female are expected to stay at home and take care of homes and family needs (Chinomona & Maziriri 2015).

Table 4.21: Gender Preference in Financing

Statement	Scale	Frequency	Percent
Women are more preferred for financing than men	strongly disagree	66	92.9
	Disagree	1	1.4
	Neutral	4	5.6
	Total	71	100.0

Table 4.21 presented the findings on the statement that women are more preferred for financing than men, Majority, 92.9% strongly disagreed that women are more preferred than men. 5.6% were neutral, and only 1.4 % of the respondents disagreed with the issue. This agreed with several studies. Mwangi (2020) showed that the participation of women in loan uptake is at a low rate compared to that of men. The entrepreneurial activity index adopted revealed that participation of women in business on average is just about 50 % lower than that of men. Coleman (2016) noted that business owned by women often more than not have challenges accessing credit because the owner is not confident enough to seek for finances since they have been discouraged by their male counter parts. On the contrary, Beck and Cull (2015) noted

that female owned and managed businesses tends to have adequate access to finances than businesses managed by male counter parts in most parts of Africa as evidenced by growing number of females owned and managed businesses in sub-Saharan Africa.

Table 4.22: Entrepreneurs Attributes

Statements on Entrepreneurs Attributes	Mean	SD	CV
The owner is academically qualified to propel the firm to the next level.	4.97	0.16	0.03
The owner has great network that helps business to grow	4.95	0.26	0.05
The firm supports career development on its employees	4.73	0.67	0.14
The owner is knowledgeable about finances and strategic plan for the firm	4.63	0.84	0.18
The owner has political ties and connections that have an impact in business growth	4.16	0.56	0.13
The gender of the owner affects the performance of business	1.43	0.82	0.57
Women are more preferred for financing than men	1.12	0.32	0.28
Aggregate Mean Score	3.71	0.52	0.14

The study also examined the mean, standard deviation and coefficient of variation regarding statements about entrepreneur's attributes of the private security firms in Kenya. The results were presented in Table 4.22. The responses on the statements about entrepreneur attributes have been ordered in descending order from the most supported to the least supported in terms of mean score. The most supported statement was that the owner is academically qualified to propel the firm to the next level as evidenced by mean score (M = 4.9718) tending to strong agreement implying that private security firms needed academically qualified employees. The coefficient of variation revealed individual responses were spread around the mean by about 3.3% which is narrow.

Agyapong and Attram (2019) noted that owners of SMEs who received training on financial literacy reported better performance and improved growth and sales. Adomako et al. (2016) noted that inadequate, inappropriate and ineffective decisions is made by business owner who lacks financial knowledge and skills and refuses to get additional training on financial literacy. Financial literacy is therefore a critical ingredient for business performance that should be possessed by the owners and managers of a business. The ACCA (2014) holds that low level of financial awareness is one of the challenge financial institutions faces while lending. Nunoo, Andoh, and Darfor (2015) noted that utilization off financial services in financial institutions depends a lot of the financial literacy of the population. SMEs are often constricted in accessing and using financial products because their owners lack adequate financial literacy. This further limit the performance of such SMEs in terms of profitability, service delivery, growth and expansion.

The least supported statement was that the women are more preferred for financing than men as shown by mean score (M= 1.12) tending to strong disagreement implying that gender of owner has no influence on private security firm's performance. Further, the coefficient of variation was 28.0% implying wide variation between individual values and mean response. The results did not agree with various studies, which include a study by Coleman (2016) noted that business owned by women often more than not have challenges accessing credit because the owner is not confident enough to seek for finances since they have been discouraged by their male counter parts. Further, women skill, knowledge and experience of starting and running a business was low and below average (Naudé, 2013). Further, the traditions still place women

below men where men are considered bread winners who should go out there to work or do business to earn family money while female are expected to stay at home and take care of homes and family needs (Chinomona & Maziriri 2015). The overall mean score was 4.169 tending to agreement implying that entrepreneur attributes are very critical for performance of private security firms in Kenya.

4.5.3 Firm Characteristics

The third independent variable was firm characteristics of private security firms in Kenya. The study presented various statements about firm characteristics and the respondents were expected to evaluate the statements based on a five- point Likert scale as presented in the succeeding Tables [4.23- 4.28].

Table 4. 23: Size of the Firm in the Private Security Industry

Statement	Scale	Frequency	Percent
Your firm is a larger firm in the private security industry	Disagree	1	1.4
	Neutral	18	25.4
	strongly agree	52	73.2
	Total	71	100.0

Table 4.23 presents the finding on the statement that the firm is a bigger firm in the private security industry. Most (73.2%) of the respondents agreed strongly that the firm is a bigger firm in the private security industry. 25.4% of the respondents were neural, while only 0.7% disagreed. The results were in line with several other studies which include: Kijkasiwat, and Phuensane (2020) who noted that owners of SMEs need to have more tangible assets that they can exploit to generate revenues as well as be used as security against credit facilities obtained from banks. According to Yoo, Choo, and Lee (2018) SMEs are facing serious financial constraints hence inversely affecting their growth and expansion. Further, small firms are not in a position to enjoy economies of scale that larger firms do enjoy and this impacts on their performance.

Table 4.24: Firm Size and Operation

Statement	Scale	Frequency	Percent
Your firm size is a hindrance to its operation	strongly disagree	1	1.4
	Disagree	3	4.1
	Neutral	1	1.4
	Agree	12	16.9
	strongly agree	54	76.1
	Total	71	100.0

Table 4.24 presented the finding on the statement that firms' size is a hindrance to their operation. Most (76.1%) of the respondents strongly agreed that firm size is a hindrance to its operation. 16.9% agreed with the same. This implies that small firms tend to cut their operation budget to remain afloat. The high initial capital required, which many small firms struggle to meet may affect the quality of service delivery. Wasiuzzaman, Nurdin, Abdullah, and Vinayan (2020) noted that firms with fewer tangible assets often borrow less compared to firms with more tangible assets. Given that SMEs have fewer tangible assets compared to large firms, FIs like banks usually adopt a risk adverse attitude when lending to small firm. They often focus less on potential income earning ability of SMEs when examining the probability of loan repayment.

Table 4.25: Financing and Private Security Firm Performance

Statement	Scale	Frequency	Percent
Financing boosts private security firm performance	Neutral	13	18.3
	Agree	14	19.7
	strongly agree	44	62.0
	Total	71	100.0

Table 4.25 showed the finding on the statement that financing boosts private security firm performance. The results showed that 62.0% of the respondents agreed strongly that financing boosts firm performance. 19.7% agreed with the statement, while only 18.3% were neutral. This study agrees with Memba (2015) who showed that the growth of SMEs was directly associated with venture capital that financed their operations. The research concluded that businesses that adopted venture capital experienced improved growth. Mwirigi, Gakure and Otieno (2019) evaluated the impact of external financing on the financial performance. The results revealed that financing and investment polices affected financial performance.

Table 4.26: Age of the Firm

Statement	Scale	Frequency	Percent
Your firm has operated for more than three years	Disagree	14	19.7
	Neutral	22	31.0
	strongly agree	35	49.3
	Total	71	100.0

Table 4.26 presented findings on the statement that firms have operated for more than three years. There was a consensus that most firms had operated for three years and above as depicted by 49.3% of the participants who strongly agreed with the statement. 31.0% were neutral while 19.7% of the study participants disagreed. This is supported by Santoro, Mazzoleni, Quaglia and Solima (2021) that noted the longer a firm stay in operation, the more persistence it is to unpleasant economic circumstances. Also, in line with the results is the study done by Lore (2007) that proved that older business owners tend to have high level of education, work experience, wealth and social contacts formed over time. Such competencies and resources are critical in their successful running of businesses enterprises. Further, advance in age of the firm and its owner is associated with higher level of entrepreneurial orientation. Davidsson et

al. (2010) noted that firms tended to be weaker financially in their initial years of operation compared to later stages.

Table 4.27: Location of the firm and Firm performance

Statement	Scale	Frequency	Percent
Firms in urban areas perform better than their rural counterparts	Disagree	1	1.4
	Neutral	20	28.2
	strongly agree	50	70.4
	Total	71	100.0

Table 4.27 presented the finding on the statement that firms in urban areas perform better than their rural counterparts. Most (70.4%) of the study participants strongly agreed that firms in urban areas performs better than those in rural. This may be due to high disposable income in urban areas. 28.2% of the respondents were neutral. This is in line with study by Gu, Yang, and Strange (2018) who argued that location is an indispensable variable of production that influences the success or failure probability of a business in the future.

Table 4.28: Firm Characteristics

Statements on Firm Characteristics	Mean	SD	CV
Your firm size is a hindrance to its operation	4.61	0.83	0.18
Your firm is a bigger firm in the private security industry	4.45	0.92	0.20
Financing boost private security firm's performance	4.43	0.78	0.17
Firms in urban areas performs better than their rural counterpart.	4.39	0.94	0.21
Your firm has operated for more than three years.	3.78	1.25	0.33
Aggregate Mean Score	4.33	0.94	0.22

Table 4.28 presented the findings on the firm characteristics of private security firms in Kenya. The responses have been ordered in descending order from the most

supported to the least supported based on mean score. The most supported statement was that firm's size is not a hindrance to its operation as shown by mean score (M= 4.6197) tending to strong agreement. The coefficient of variation (CV= 0.1806) revealed that individual responses are spread around the mean by about 18.0%. The finding implies that firm size is very critical in meeting financial obligations among private security firms in Kenya.

The least supported statement was that firms has operated for more than three years as depicted by mean response score (M = 3.7887) tending to agreement implying that slight majority of firms had operated for more than three years. The coefficient of variation (CV= 0.3306) means that individual responses were spread around the mean by about 33.0%. Chandler (2009) noted that the longer a firm stay in operation, the more persistence it is to unpleasant economic circumstances. Also, in line with the results is the study done by Santoro, Mazzoleni et al (2021) that proved that older business owners tend to have high level of education, work experience, wealth and social contacts formed over time. Such competencies and resources are critical in their successful running of businesses enterprises. Further, advance in age of the firm and its owner is associated with higher level of entrepreneurial orientation. The overall mean score was 4.56462 tending towards strong agreement implying that firm characteristics are very critical in determining the performance of private security firms in Kenya.

4.5.4 Finance Access Regulations

The fourth (moderating) variable was Finance access regulations facing private security firms in Kenya. The descriptive analysis was based on five-point Likert scale. The results included frequency distribution, mean, standard deviation and coefficient of variation. The findings are presented in succeeding Tables [4.29- 4.36].

Table 4.29: Access to collateral and Firm Performance

Statement	Scale	Frequency	Percent
Lack of collateral affects performance	strongly disagree	1	1.4
	Disagree	19	26.8
	Agree	14	19.7
	strongly agree	37	52.1
	Total	71	100.0

Table 4.29 presented the findings on the statement that lack of collateral affects performance. Slight majority (52.1%) of the study participants strongly agreed that collateral affects performance of the business. 19.7% agreed with the statement while 26.8% disagreed with the statement that lack of collateral affects performance of the business. This is in line with several studies. A good security ought to be an asset that can be disposed under normal conditions in the market at a fair value within a reasonable time. Most FIs require that the collateral must cover at least 100% or more of the loan taken. Sakwa, Rambo, and Osogo (2019) revealed that the requirement of collateral is a major barrier to credit access and business performance. The study also showed that most business had their loan application rejected or failed to apply knowing they would not qualify because of lack of collateral.

Table 4.30: Access to Financial Institution Funding

Statement	Scale	Frequency	Percent
Financial institutions are reluctant to lend to your private security firm	strongly disagree	6	8.5
	Disagree	1	1.4
	Neutral	2	2.8
	Agree	4	5.6
	strongly agree	58	81.7
	Total	71	100.0

Table 4.30 presented the results on the statement that financial institutions are reluctant to lend security firms. The research showed that 81.7% of the study

participants strongly agreed that financial institutions are reluctant to lend private security firms. This is an indication that the sector needs to be boosted financially in order to increase both in size and production. Results were in accordance with other studies, including a study done by Vuvor and Ackah (2015) in Ghana that established that SMEs find it hard to get credit from FIs because of lack of collateral and quality audited financial statements. SMEs also face high lending rate making it almost impossible to get access to loans from banks. Fatoki and Asah (2011) noted that owners of SMEs need to have more tangible assets that they can exploit to generate revenues as well as be used as security against credit facilities obtained from banks. Further, they established a direct relationship between access to credit and quality collateral among SMEs. The study revealed that firms with adequate collaterals were better off compared to those that do not have as regards to accessing credit facilities from financial institutions. There was a direct link between adequacy of collaterals and performance of businesses among SMEs generally.

Table 4.31: Cost of Accessing Finance Among Private Security Firms

Statement	Scale	Frequency	Percent
The cost of accessing finance for small private security firms is higher than bigger firms	strongly disagree	2	2.8
	Disagree	12	16.9
	Neutral	2	2.8
	strongly agree	55	77.5
	Total	**71**	**100.0**

Table 4.31 revealed that 77.5% of the study participants strongly agreed that the cost of accessing finance for private firms is high. An indication of an intentional financial starvation of the sector by the financial institutions. Only 16.9% disagreed that the cost of accessing finance for private security firms is higher than bigger firms. The

findings strongly leaned to the fact that small private securities firms may fail to meet the conditions needed by commercial banks hence seek finances to non-regulated financial lenders whose cost of financing is high. Other studies in line with the above results are Ogolla (2013) that showed that interest expense as an expense of the credit significantly affects an organization's development plans. They not just influence advance instalments, yet they likewise affect an undertaking subsidizing. High interest rates lessen business profit that at last affects the business ability to develop. High interest rates likewise influence a business income in that one needs to put aside more cash to reimburse the borrowed funds.

Table 4.32: Firm Credit Worthiness

Statement	Scale	Frequency	Percent
Your firm has defaulted on credit facility in the past	Disagree	1	1.4
	Neutral	4	5.6
	Agree	11	15.5
	Strongly Agree	55	77.5
	Total	71	100.0

Table 4.32 presented the findings on the responses about the statement that private security firms have defaulted on credit facility in the past. The study established that indeed private security firms in Kenya have high default risk on loans as given by majority (77.5%) of respondents who strongly agreed with the statement and a further 15.5% who just agreed with the statement. The finding implies that most security firms find themselves sometimes failing to pay the borrowed loans on time.

Table 4.33: Status of Financing Regulatory Requirements

Statement	Scale	Frequency	Percent
The financing regulatory requirements are punitive against your firm	Neutral	2	2.8
	Agree	35	49.3
	strongly agree	34	47.9
	Total	71	100.0

Table 4.33 presented the findings on the statement financing regulatory requirements are punitive against the firms. Most (97.2%) of the respondents agreed that the financing regulatory requirements for private security firms is punitive and only 2.8% were neutral. Other studies supporting this include the one according to Airs (2007) who noted that in majority of emerging and developed economies, it is often hard for SMEs to access credit from FIs without collateral and sufficient financial statements. The scholar noted that this has often led to slow growth among SMEs. Financial Institutions view lending to SMEs as vague and risky compared to lending to large organization hence collateral requirement as part of lending is very necessary for them. A study by Kihimbo et al., (2014) asserts that most SMEs are denied and discriminated by finance institutions because they are rated to be of high risk. The study also examined the mean, standard deviation and coefficient of variation regarding statements about Finance access regulations of the private security firms in Kenya. The findings are presented in Tables 4.34.

Table 4.34: Finance Access Regulations

Finance Access Regulations	Mean	SD	CV
Your firm has defaulted on credit facility in the past	4.69	0.64	0.13
Financial institutions are reluctant to lend to your private security firm	4.50	1.19	0.26
The financing regulatory requirements are punitive to your private security firms	4.45	0.55	0.12
The cost of accessing finance for your private security firms is higher	4.32	1.28	0.29
Your firm has sufficient collateral to meet requirement of financiers	3.94	1.31	0.33
Aggregate Mean score	4.38	0.99	0.23

The results presented in Table 4.34, showed the responses on the statements about finance access regulations. They have been ordered in descending order from the most supported to the least supported in terms of mean score. The most supported statement was that the firms has defaulted on credit facility in the past as evidenced by mean score (M=4.690) tending to strong agreement. The coefficient of variation (CV=0.137) revealed that responses of individual firms were distributed about the mean by 13.7%. The finding implies that private security firms have been facing the challenge of defaulting on credit awarded by financial institutions. Results were in accordance with other studies, including a study done by Kihimbo et al (2014) that showed that most SMEs are denied and discriminated by finance institutions because they are rated to be of high risk.

The least supported statement was that firms have sufficient collateral to meet requirement of financiers as evidenced by mean score (M= 3.943) of agreement implying that indeed, lack of collateral is affecting performance of private security firms. The coefficient of variation (CV= 0.334445) showed that individual responses

were spread around the mean by 33.4%. Other studies supporting this include the one according to Madanchian et al. (2015) that noted in majority of emerging and developed economies, it is often hard for SMEs to access credit form FIs without collateral and sufficient financial statements. The scholar noted that this has often led to slow growth among SMEs. Financiers view lending to SMEs as risky compared to lending to large organization hence collateral requirement as part of lending is very necessary for them (Haron, 2013). Further, the study noted that collateral requirements are directed at new and small firms with larger firms getting loans even without collateral.

4.5.5 Private Security Firms Regulations

The fifth (moderating) variable under the study was private security firms' regulations for private security firms in Kenya. The study presented various statements about private security regulations and the respondents were expected to evaluate the statements based on a five-point scale as presented in the succeeding Tables [4.35-4.40].

Table 4.35: Compliance to Regulations and firm Operations

Statement	Scale	Frequency	Percent
Compliance to regulations and procedures of the act is a barrier to firm's operations	strongly disagree	8	11.3
	Disagree	15	21.1
	Neutral	11	15.5
	Agree	21	29.6
	strongly agree	16	22.5
	Total	71	100.0

Table 4.35 presented the findings on the statement that compliance to regulations and procedures of the Act is a barrier to firm operations. On whether Compliance to regulations and procedures affects performance of the firm, 52.1% of the respondents were in agreements that compliance with regulations affects performance. 15.5% were

neutral, 21.1% disagreed while only 11.3% strongly disagreed. This is in line with study done by Okeke and Eme (2014) that revealed that laws enforcement systems, corruption in politics and taxes as well as regulatory requirements are constraints to SMEs growth.

Table 4.36: Private Security Firm Employee Training

Statement	Scale	Frequency	Percent
Your private security firm trains its personnel adequately	strongly disagree	1	1.4
	Disagree	14	19.7
	Agree	26	36.6
	strongly agree	30	42.3
	Total	71	100.0

42.3 % of the respondents strongly agreed that their private security firm trains their personnel adequately. 36.6% agreed, while 19.7% disagreed. This was in line with the study by Shaheen et al. (2017) that examined the causal effect relationship between staff training and performance of organizational. The findings showed a major direct impact of staff training on organization performance. In a study in India, Bakr (2019) evaluated whether job satisfaction was a mediating factor link between public organization performance and motivation in public sector banks in India. The study results revealed that motivation had a direct effect on performance. Further, job satisfaction was a mediator on the relationship between motivation and performance implying that motivated employees get satisfied leading to improved financial performance.

Table 4.37: Cost of Training Employee

Statement	Scale	Frequency	Percent
The cost of training as per required by the regulation is high to your firm	strongly disagree	6	8.5
	Neutral	23	32.4
	Agree	13	18.3
	strongly agree	29	40.8
	Total	71	100.0

Table 4.37 presented the finding on the statement that the cost of training as required by the regulation is high to firms. About 40.8% of the study participants strongly agreed that the cost of training as required by the regulation is high to firms. 18.3 agreed and 32.4% were neutral. This concurs with results released by The Association for Talent Development US (2016) that reported that firms had incurred an average of $1,252 on each staff for training. The figures are too high for small firms.

Table 4.38: Complies with The Minimum Wage and Performance

Statement	Scale	Frequency	Percent
Private firms that complies with the minimum wage requirements performs better than the ones who violates.	strongly disagree	1	1.4
	Neutral	29	40.8
	Agree	25	35.2
	strongly agree	16	22.5
	Total	71	100.0

Table 4.38 presented findings on the statement that those private firms that comply with the minimum wage requirements performs better that the ones who violates. 40.8 % of the respondents were neutral on the issue that private firms that complies with the minimum wage requirements performs better than the ones who violates. 22.5%

strongly agreed with the statement and 35% agree, only 1.4 % strongly disagreed as shown in the table above. This is in line with the study done by Dube at al. (2016) that attributed reduced turnover for restaurant workers in California to the effect of the minimum wage, which reduces wage competition between low-paying enterprises.

Table 4.39: Sustainability of Minimum Wage Requirements

Statement	Scale	Frequency	Percent
Minimum wage requirement is not tenable in private security firms	strongly disagree	2	2.8
	Disagree	22	31.0
	Neutral	1	1.4
	Agree	1	1.4
	strongly agree	45	63.4
	Total	71	100.0

Table 4.39 revealed that 63.4 % of the study participants strongly agree that minimum wage compliant is not tenable, 1.4 % agrees and 31.0 % disagreed with the statement. This is in line with the study by Mitsis (2019) who concluded that minimum wages in Kenya are set at levels that are high in relation to the existent median wage of labourers in the minimum wage level, especially for semi-skilled and more skilled occupations. Consequently, this makes minimum wage compliance a costly affair for the employers in the country.

Table 4.40: Private Security Industry Regulations and Firm's Performance

Statement	Scale	Frequency	Percent
Robust regulations in private security industry can affect firm's performance	Strongly Disagree	1	1.4
	Disagree	19	26.8
	Neutral	5	7.0
	Strongly Agree	46	64.8
	Total	71	100.0

Table 4.40 presented findings on the statement that robust regulations in private security industry can affect firm's performance. Slight majority (64.8%) of the study participants agreed strongly that a robust regulation in private security industry can affect firm's performance. 7.0% were neutral while only 1.4% disagreed with the statement. The study findings agree with Inyang and Abraham, (2016) who explored the function of the commercial security companies in improving security. Their results showed that the commercial security sector has been compromised by unregistered firms who contributes to insecurity in the country. The study also examined the mean, standard deviation and coefficient of variation regarding statements about business regulations of the private security firms in Kenya. The findings were presented in Table 4.41.

Table 4.41: Private Security Firms Regulations

Statements on Private Security Firms Regulations	**Mean**	**SD**	**CV**
Robust regulations in private security industry can affect firm's performance.	4.00	1.39	0.34
Your private security firms comply with minimum wage requirements set in the act.	3.98	1.16	0.29
Complying with minimum wage requirements in your private security firms is a challenge.	3.91	1.47	0.37
The cost of training as per required by the regulation is high to your firm.	3.83	1.21	0.31
Your private security firm trains its personnel adequately	3.77	0.84	0.22
Compliance to regulations and procedures of the act is barrier to your firm operations	3.30	1.33	0.40
Aggregate Mean score	3.80	1.23	0.32

In the findings presented in Table 4.41, the responses on the statements about entrepreneur attributes have been ordered in descending order from the most supported to the least supported in terms of mean score. The most supported statement was that robust regulations in private security industry can affect firm's performance as

evidenced by mean response score (M= 4.0) of agreement. The finding implies that regulations can be an inhibitor to performance of private security firms. The Coefficient of variation (CV = 0.3484) revealed that the individual responses were spread around the mean by 34.84%. A study by Graham, Kaplan and Sibley reported that when regulatory requirements are imposed, there is non-price form of competition that is introduced.

The least supported statement was that compliance to regulations and procedures of the act is a barrier to your firm operations (M= 3.3099) tending to neutral implying that respondents were generally undecided on the effect of compliance to regulations and procedures on performance. The coefficient of variation (CV = 0.4040) implied that individual responses were spread around the mean by about 40% which was a wide variation. This is in line with study done by Okeke and Eme (2014) that showed that law enforcement system, corruption in politics, and taxes were regulatory constraints to growth of SMEs. The overall mean score was 3.8696 tending to agreement showing that business regulations are indeed critical in firm performance among private security firms in Kenya.

4.5.6 Firm Performance

The dependent variable under the research was financial performance. Financial performance was measured using ROE. Return on equity was calculated by dividing net profit before tax with total equity of the firm. The financial performance of the firms is presented in Tables 4.42.

Table 4.42: Descriptive Statistics on Financial Performance

Variable	Descriptive Statistics	2020	2019	2018
Total Equity	Mean	23,632,795	18,476,040	14,210,008
	Standard Deviation	5,908,198.75	5,542,812	2,984,101.68
Net Profit Before Tax	Mean	8,513,072	7,283,518	6,651,537
	Standard Deviation	1,532,352.96	1,092,527.7	1,130,761.29
ROE	Mean	0.36	0.39	0.46
	Standard Deviation	0.05	0.07	0.11

Table 4.42 represents Mean and standard deviation of the total equity, net profit before tax and ROE for 2020, 2019 and 2018. The mean for equity was Ksh. 23,632,795, Ksh. 18,476,040 and Ksh. 14,210,008 for 2020, 2019 and 2018 respectively. The mean shows a rising figure from 2018 to 2020 implying the net worth of the PSCs has been improving over time. The standard deviation for total equity was Ksh.5,908,198.75, Ksh. 5,542,812 and Ksh. 2,984,101.68 in 2020, 2019 and 2018 respectively. The standard deviation was wide depicting the difference between the firms with small and large equity.

The mean for Net profit before tax was Ksh.8,513,072, Ksh.7,283,518 and Ksh.6,651,537 in 2020, 2019 and 2018 respectively. The figure for mean has also been increasing from 2018 to 2020 implying improving profitability of private security industry. The standard deviation for Net profit before tax was Ksh. 1,532,352.96, Ksh. 1,092,527.7 and Ksh. 1,130,761.29 in 2020, 2019 and 2018 respectively. The standard deviation figure reveals the spread of individual private security firm profitability from the mean profitability. Finally, the mean for return on equity (ROE) was 0.360222,

0.394214 and 0.468088 in 2020, 2019 and 2018 respectively. The return on equity has shown falling trend from 2018 to 2020 implying that net profit has been rising at slower rate compared to total equity. The standard deviation for ROE was 0.0540, 0.0709 and 0.1170 in 2020, 2019 and 2018 respectively.

4.6 Diagnostic Tests for Model Assumptions

The study performed diagnostic tests or test of regression assumptions to establish whether the model adopted for parameter estimation was fit for the purpose. A fit model should generate robust findings that can be relied on for decision-making and forecasting purpose. The diagnostic tests ensured that OLS assumptions were not violated. Key assumptions tested were normality; collinearity and homoscedasticity.

4.6.1 Test for Multicollinearity

Multicollinearity is the compromised quality of statistical data where independent variables in a study are highly correlated among themselves. Multicollinearity results to large standard errors of the parameter estimates associated with each variable. According to Mugenda and Mugenda (2012), multi-collinearity can occur in multiple regression models in which some of the independent variables are significantly correlated among themselves. The multicollinearity assumption has a VIF threshold value of 10 maximums (Daoud, 2017). A VIF of greater than 10 is an indication that there is concern of multicollinearity problem (Disatnik & Sivan,2016). Multi-collinearity problem can be eliminated by deleting one of the highly correlated variables and re-computing the regression equation. The model was tested for multi-collinearity. From the table 4.43, all the study variables had VIF values lower than 10 implying the model did not suffer from multicollinearity problem.

Table 4.43: Variance Inflation Factor Test for Multicollinearity

Explanatory Variables	Tolerance	VIF
Financial Aspects	.381	2.624
Entrepreneur Attributes	.220	4.544
Firm Characteristics	.328	3.053
Finance access regulations	.231	4.330
Private Security Firms Regulations	.396	2.528

4.6.2 Normality Test

The assumption of normality holds that a regression model should follow normal distribution. Normally distributed data should have mean equalling to median and should be depicted on normal distribution curve. The current study adopted normal probability plot (PP) of regression-standardised residuals where the data points should be spread along the normal probability plot line. The PP of regression standardised residuals showed that the data points were spread along the normal probability plot line as shown in figure 4.1

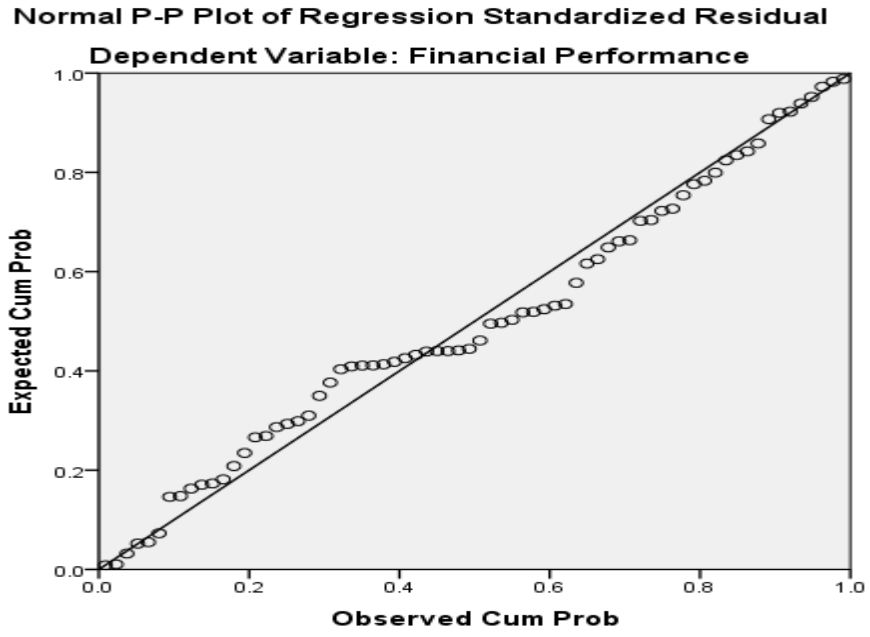

Figure 4.1: Normal P-P Plot of Regression Standardized Residuals

4.6.3 Heteroscedasticity Test

The fitting of OLS model assumes that the stochastic term has constant and finite variance in what is referred to as homoscedasticity. The opposite of homoscedasticity is heteroscedasticity (Daryanto). A condition in statistics where the variance of the error term is not constant and finite is called heteroscedasticity. Heteroscedasticity is problematic in regression analysis as it leads to spurious regression results such that the error terms depict clash in the model and the error terms are larger than they ought to be. The study adopted scatter plot where residuals were plotted against the predicted values. The residuals should be randomly and evenly distributed along the line of best fit. Figure 4.2 showed that individuals values were spread on either side of the line of best fit hence homoscedasticity. The residuals were distributed randomly and did depict a pattern of decrease or increase hence constant finite variance. The line of best fit had zero slope implying residuals were equal to zero.

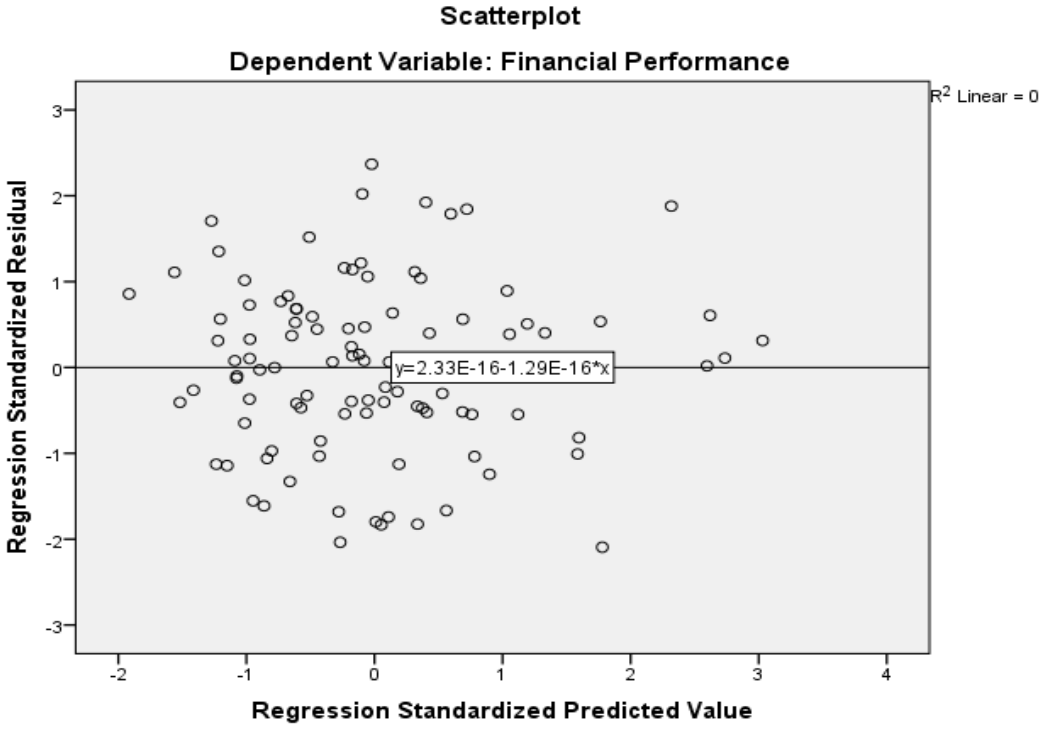

Figure 4.2: Standardized Residual Scatter plot

4.7 Effect of Firm Specific Factors and Business Regulatory Requirements on financial performance

The study adopted simple Ordinal Least Square (OLS) regression analysis to examine the influence of the independent variables on financial performance of private security firms in Kenya. Regression analysis output comprised of model summary, Analysis of Variances (ANOVA) and Regression Coefficients as presented in Tables [4.44 - 4.48].

4.7.1 Firm Financial Aspects and Financial Performance

The study adopted univariate regression model to examine the effect of firm financial aspects on financial performance among private security firms in Kenya as presented in table 4.44.

Table 4.44: Effect of Firm's Financial Aspects on Financial Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
	.746[a]	.556	.550			.24412
ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	5.156	1	5.156	86.514	.000[b]
	Residual	4.112	69	.060		
	Total	9.268	70			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-3.003	.332		-9.050	.000
	Financial Aspects	.717	.077	.746	9.301	.000

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Financial Aspects

Table 4.44, presents a summary of regression model results. The value of R was .746 revealing that there is a direct linear relationship between firm financial aspects and financial performance. The coefficient of determination (R^2) indicates that firm financial aspects explain 55.6% of the total variation on financial performance. Therefore, firm performance is explained by the variation in financial aspects of the firm. The residual variation of 44.4% of the variation in financial performance is explained by other factors. The finding implies that better financial aspects of the firm lead to improved financial performance of private security firm.

Further, Table 4.44 presents the findings of the Analysis of Variance ANOVA on the variable, firm financial aspects and performance. The study establishes that financial aspects of the firm have significant effect on the firm performance. This was evidenced by P value = 0.000 which was less than 5% level of significance (p-value = 0.000< 0.05) and F calculated higher than F-critical (86.514 > 4.00). The significant effect implied model had a good fit for the purpose of estimating the parameter of firm's financial aspects in explaining financial performance.

The research also generated the beta coefficients of firm's financial aspects. Table 4.44 revealed that the coefficient of firm's financial aspect was .717 meaning that firm's financial aspects had a significant positive effect on financial performance of private security firms in Kenya. Further, for every one-unit increase in the measure of firm's financial aspects, financial performance improves by .717 units. Given that the p value of the t statistic of firm's financial aspects was less than 0.05 and t-test was higher than 1.96, it implied that financial aspects had a significant effect on financial performance of private security firms in Kenya.

The findings agree with Nguyen and Nguyen (2020) who evaluated the effect of cash flow statement on lending decisions among commercial banks in Vietnam. The

findings revealed that poorly communicated cash flow statement had a negative effect on profits as well as confidence on credit officers. The study also noted that the statement of cash flow significantly influences banks' lending decisions. Further, Augustine and Jacob (2017) evaluated the role of cash flows on the performance of companies. The findings revealed that cash conversion, cash deposits are positively associated with return on assets (ROA). Further, ROA was negatively related with firm size and cash flow. In another study in Nigeria, Ogbeide and Akanji (2017) examined whether cash flow influenced financial performance of insurance firms. The results showed that indeed cash flow had a major effect on financial performance of the firms studied. The study suggested that improving cash flow was key in enhancing financial performance of insurance firms.

4.7.2 Effect of Entrepreneur attributes on Financial Performance

The study examined the effect of entrepreneur attributes on firm performance. The study adopted univariate regression model to establish the effect of entrepreneur attributes on firm performance among private security firms in Kenya as presented in table 4.45.

Table 4.45: Entrepreneur attributes and Financial Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
	.756[a]	.571	.565			.23999
ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	5.294	1	5.294	91.917	.000[b]
	Residual	3.974	69	.058		
	Total	9.268	70			
Regression Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
	(Constant)	-2.136	.232		-9.207	.000
	Entrepreneur Attributes	.526	.055	.756	9.587	.000
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Entrepreneur Attributes						

Table 4.45, presents a summary of regression model results. The value of R was .756 revealing that there is a direct linear relationship between entrepreneur attributes and financial performances of private security firms. The coefficient of determination (R^2) indicates that entrepreneur attributes explain 57.1% of the total variation on financial performance. Therefore, financial performance is explained by the variation in entrepreneur attributes. The residual variation of 42.9% of the financial performance is explained by other factors. The finding implies that positive and supportive entrepreneur attributes of the firm owners leads to improved financial performance of private security firm.

Further, Table 4.45 presents the findings of the Analysis of Variance ANOVA on the variable entrepreneur attributes and financial performance. The study established that entrepreneur attributes had a significant effect on the financial performance. This was

evidenced by P value = 0.000 which was less than 5% level of significance and F-Calculated higher than F-critical (91.917 > 4.00). The model thus had a good fit for the estimation of variability in financial performance due to effect of entrepreneur attributes. The researcher also generated the beta coefficients of entrepreneur attributes. Table 4.45 revealed that the coefficient of entrepreneur attributes was .526 meaning that entrepreneur attributes had a significant positive effect on financial performance of private security firms in Kenya. Further, for every one- unit increase in the measure of entrepreneur attributes, financial performance improved by .526 units. Given that the p value of the t statistic of entrepreneur attributes was less than 0.05 and t-test was higher than t-critical of 1.96, it implied that entrepreneur attributes had a significant effect on firm performance.

The findings agree with Wekesa et al. (2016) on whether entrepreneur's experience affected firm performance. Results showed that firm performance was directly affected by entrepreneur's experience. The study suggested training of entrepreneurs to enhance long term survival and growth of businesses. Further, Diaka (2018) examined how firm performance was influenced by entrepreneur's experience. The results showed direct impact of entrepreneur's experience on firm performance. Similarly, Chen et al. (2017) evaluated the relationship between venture performance, entrepreneur's human capital, motivation, entrepreneurial leadership, entrepreneurial experience and manpower. The results established that entrepreneurial experience and manpower affected venture performance directly.

4.7.3 Effect of Firm Characteristics on Financial Performance

The study examined the effect of firm characteristics on firm performance. The study adopted univariate regression model to establish the effect of firm characteristics on firm performance among private security firms in Kenya as presented in table 4.46.

Table 4.46: Firm characteristics and Financial Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.753[a]	.567	.561			.24122
ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.253	1	5.253	90.278	.000[b]
	Residual	4.015	69	.058		
	Total	9.268	70			
Regression Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.486	.271		-9.184	.000
	X3	.603	.064	.753	9.501	.000
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Firm characteristics						

Table 4.46, presents a summary of regression model results. The value of R was .753 revealing that there is a direct linear relationship between firm characteristics and financial performances of private security firms in Kenya. The coefficient of determination (R^2) indicated that firm characteristics explains 56.7% of the total variation financial performance. Therefore, financial performance is explained by the variation in firm characteristics. The residual variation of 43.3% of the firm performance is explained by other factors. The finding implies that supportive characteristics of the firm leads to improved financial performance of private security firm.

Further, Table 4.46 presents the findings of the Analysis of Variance (ANOVA) on the variable firm characteristics and performance. The study established that firm characteristics had a significant effect on the financial performance. This was evidenced by P value = 0.000 which was less than 5% level of significance and F-statistic of 90.278 which was higher than f-critical of 4.00. Given the significant effect, the model thus had

a good fit for parameter estimation regarding the effect of firm characteristic on financial performance.

The research also generated the beta coefficients of characteristics with the study revealing that the coefficient of firm characteristics was .603. The finding means that firm characteristics had a significant positive effect on financial performance of private security firms in Kenya. Further, for every one-unit increase in the measure of firm characteristics, financial performance improved by .603 units. Given that the p value ($p = 0.00$) of the t statistic of firm characteristics was less than 0.05 this implied that firm characteristics had a significant effect on firm performance.

The study findings agreed with empirical study by Abbasi and Malik, (2015) that examined how financial performance was influenced by firms' Size. The results revealing that firm size have moderating effects on Firms' growth and Firms' performance. Similarly, Pervan et al (2017) examined whether business performance was impacted by firm asset turn over, size, liquidity and leverage on business performance. The findings showed that profitability was weakly and directly affected by firm size. Further, leverage and assets turnover had a major influence on firms' performance. Liquidity measured by current ratio did not significantly affect profitability. Further, Too and Simiyu (2018) examined the relationship between profitability and size among manufacturing industries. The findings revealed that profitability was significantly affected by firm sizes. Mulwa (2020) evaluated the causal effect link between firm performance and size of the firm among DT-Sacco's. The study established significant effect of firm size on financial performance. Dogan (2017) examined how profitability was influenced by size of the firm. The results indicated direct and significant effect of firm sizes on profitability of the firms.

4. 7.4 Effect of Finance Access Regulations on Financial Performance

The study examined the effect of finance access regulations on financial performance. The study adopted univariate regression model to establish the effect of finance access regulations on financial performance of private security firms in Kenya as presented in table 4.47.

Table 4.47: Finance Access Regulations and Firm performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
	.368[a]	.135	.133			.27407
ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	.212	1	.212	1.452	.190[b]
	Residual	10.010	69	.146		
	Total	10.223	70			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-2.020	.284		-7.117	.000
	Finance Access Regulations	-.501	.280	-.668	-1.7892	.190
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Finance access regulations						

Table 4.47, presents a summary of regression model results. The value of R was .368 revealing that there is a weak relationship between finance access regulations and financial performances. The coefficient of determination (R^2) indicated that finance access regulations explained 13.5% of the total variation in financial performance. Therefore, firm financial performance is explained by the variation in finance access regulations. The residual variation of 86.5% of the financial performance is explained by other factors. The

finding implies that supportive finance access regulations of the firm is a critical factor in determining financial performance of private security firms in Kenya.

Further, Table 4.47 presents the findings of the ANOVA on the variable, finance access regulations and financial performance. The study established that finance access regulations had an insignificant effect on the financial performance. This was evidenced by P value = 0.190 which was greater than 5% level of significance and F-Calculated less that f-critical (1.452< 4.00). The model thus did not have a good fit in estimating the effect of finance access regulation on financial performance.

The research also generated the beta coefficients of finance access regulations with the study revealing that the coefficient of finance access regulations was -.501. The finding means that finance access regulations had a significant negative effect on financial performance among private security firms in Kenya. Further, for every one-unit increase in the measure of finance access regulations, firm performance worsened by .501 units. Given that the p value (p = 0.190) of the t statistic of finance access regulations was greater than 0.05, it implied that finance access regulations did not have a significant effect on financial performance.

The finding has basis in empirical literature that tended to be mixed. Memba (2015) evaluated whether growth of SMEs in Kenya was determined by venture capital. The results showed that growth of SMEs was directly associated with venture capital that financed their operations. The research concluded that businesses that adopted venture capital experienced improved growth. They also evaluated the impact of external financing on the financial performance. The results revealed that financing and investment polices affected financial performance. A study carried out in India by Banerjee and Duflo (2017) evaluated performances of firms both before and after they accessed loans in India. The study showed that additional loan sources led to expansion of firms hence the study

concluded the firms expanded because credit restrictions may have constrained their growth due to the affordability and accessibility of the loans.

4.7.5 Effect of Private Security Industry Regulations on Financial Performance

The study examined the effect of private security industry regulations on financial performance. The study adopted univariate regression model to establish the effect of private security industry regulation on financial performance of private security firms in Kenya as presented in Table 4.48.

Table 4.48: Private Security Industry Regulations and Financial Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
	.885[a]	.784	.781			.17044
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	7.263	1	7.263	250.018	.000[b]
	Residual	2.005	69	.029		
	Total	9.268	70			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	-2.368	.156		-15.218	.000
	Private security industry regulations	.575	.036	.885	15.812	.000
a. Dependent Variable: Financial performance						
b. Predictors: (Constant), Private security industry regulations						

Table 4.48, present summary of regression model results. The value of R was .885 revealing that there is a linear relationship between private security industry regulation and financial performances of private security firms in Kenya. The coefficient of determination (R^2) indicated that private security industry regulations explain 78.4 % of

the total variation in financial performance. The residual variation of 21.6% of the financial performance is explained by other factors. The finding implies that private security industry regulations have a significant effect on financial performance of private security firms.

Further, Table 4.48 presents the ANOVA on the variable private security industry regulations on financial performance. The study established that private security industry regulations had a significant effect on the financial performance. This was evidenced by P value = 0.000 which was less than 5% level of significance and F-statistic of 250.018 which was higher than f-critical of 4.00. The model therefore exhibited a goodness of fit in estimating the parameters regarding effect of private security industry regulations on financial performance. The research also generated the beta coefficients of private security industry regulations with the study revealing that the coefficient of private security industry regulations was .575. The finding means that private security industry regulations had a significant positive effect on financial performance of private security firms in Kenya. Further, for every one-unit increase in the measure of private security industry regulations, financial performance improved by .575 units. Given that the p value (p = 0.00) of the t statistic of private security industry regulations was less than 0.05 and t-test (t= 15.812) was higher than 1.96 critical value, the finding implied that private security industry regulations had a significant effect on financial performance of private security industry regulations.

The study agrees with Mutonyi and Sirera (2018) who examined whether commercial security improved security of Kenyans. The study showed that there is urgent need for regulations to improve efficiency in private security industry. Mutonyi and Sirera (2018) however, failed to establish effect of regulation on financial performance of private security companies. Further, Shaheen et al. (2017) examined the direct

relationship between staff training and performance of organizational. The findings showed a significant direct impact of staff training on organization performance.

4.8 Hypotheses Testing

The study adopted multivariate regression analysis and stepwise Regression in hypotheses testing. The multivariate regression was used in testing hypotheses one, two, three and six [H_{01}, H_{02}, H_{03} and H_{06}], while stepwise regression was used in testing hypothesis four and five [H_{04} and H_{05}]. The findings are presented in succeeding sub sections.

4.8.1 Effect of Firm Specific Factors on Financial Performance

The study adopted multivariate regression in testing the hypotheses one to three. Null hypothesis would be rejected if the p-value associated with the coefficient of the independent variable is found to be less than 0.05 level of significance. The finding is presented in Table 4.49.

Table 4.49: Firm Specific Factors and Financial Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.858[a]	.737	.725			.19087
ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.827	3	2.276	62.462	.000[b]
	Residual	2.441	67	.036		
	Total	9.268	70			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.373	.266		-12.676	.000
	Financial Aspects	.386	.080	.402	4.800	.000
	Entrepreneur Attributes	.261	.068	.375	3.841	.000
	Firm Characteristics	.164	.046	.204	3.565	.000
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Financial Aspects, Entrepreneurial Attributes and Firm Characteristics						

Table 4.49, presents a summary of regression model results. The value of R was .858 revealing that there is a linear relationship between firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) and financial performances. The coefficient of determination (R^2) indicated that financial aspects, entrepreneurial attributes and firm characteristics explained 73.7 % of the total variation in financial performance of private security firms in Kenya. The residual variation of 26.3% of the financial performance is explained by other factors. The finding implies that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) have a major influence on financial performance of private security firms in Kenya.

Further, Table 4.49 presents the ANOVA on firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) and financial performance. The study established that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) had a significant effect on the financial performance. This was evidenced by P value = 0.000 which was less than 5% level of significance and F-calculated higher than F-critical (62.462> 2.75). The model thus exhibited a goodness of fit in estimating the parameters on the relationship between firm's financial aspects and financial performance. The research also generated the beta coefficients of firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics). The study thus estimated model [4.1] as follows:

$$\mathbf{Y = -3.373+.386X1+ .261\ X2+ .164\ X3}$$

Equation 4.1

The intercept term was -3.373 implying that when firm specific factors were held constant at zero, financial performance level coincided with -3.373 units. Negative financial performance when firm specific factors are held constant imply that ROE tends to be negative when the magnitude of firm specific factors are at their lowest.

H_{01}: There is no statistically significant effect of firm's financial aspects on financial performance of private security firms in Kenya

The study revealed that the effect of firm financial aspects on financial performance was positive and significant (β_1= .386, t = 4.800 and p= .000 < 0.05). Coefficient of firm financial aspects was .386 meaning for every one-unit increase in the measure of financial aspects, financial performance improved by .386 units. Given that the p value (p = 0.00) of the t statistic of finance aspects was less than 0.05, it implied that financial aspects had

a significant effect on financial performance. The null hypothesis one (H_{01}) there is no statistically significant effect of firm's financial aspects on financial performance of private security firms in Kenya was thus rejected and the study concluded that indeed financial aspects had a significant effect on financial performance of private security firms in Kenya.

The finding on the effect of firm financial aspects on financial performance has basis in literature. The finding agrees with Afrifa (2016) that evaluated the relationship between firm performance and cash flow. The study revealed that firms with adequate cash inflows should invest the excess liquidity into interest earning financial assets, while those with inadequate cash inflows should invest less in interest earning securities to enhance performance. Further, Chukwunwike et al. (2018) examined how bank profitability was affected by operating cash flow in banking sector in Nigeria. The research established a direct relationship between profitability and operating cash flow. Martinez-Ferrero et al. (2016) study on consequences of financial reporting quality on corporate performance showed positive effect of Quality financial reporting on Financial Performance. The results concluded that companies which report financial statements with better quality information (associated to better earnings quality, accounting conservatism and better accruals quality) enjoy a higher financial performance, measured by market measures which reflect the trust that stakeholders have not only in the company at present, but also in the past and future. Augustine and Jacob (2017) evaluated the role of cash flows on the performance of companies. The findings revealing a direct effect of cash holding and cash conversion cycle on ROA of firms. Further, ROA was negatively related with firm size and cash flow. In another study in Nigeria, Ogbeide and Akanji (2017) examined whether cash flows influenced financial performance of insurance firms. The results showed that indeed cash flow

had a major effect on financial performance of the firms studied. The study suggested that improving cash flow was key in enhancing financial performance of insurance firms.

H_{02}: There is no statistically significant effect of entrepreneur's attributes on financial performance of private security firms in Kenya.

The study revealed that the effect of entrepreneur attributes on financial performance was positive and significant (β_2= .261, t = 3.841 and p= .000 < 0.05). Coefficient of entrepreneur attributes was .261 meaning for every one-unit increase in the measure of entrepreneur attributes, financial performance improved by .261 units. Given that the p value (p = 0.00) of entrepreneur attributes was less than 0.05, it implied that entrepreneur attributes had a significant effect on financial performance of private security firms in Kenya. The null hypothesis two (H_{02}) there is no statistically significant effect of entrepreneur's attributes on financial performance of private security firms in Kenya. was thus rejected and the study concluded that indeed entrepreneur attributes had a significant effect on financial performance of private security firms in Kenya.

The finding on the effect of entrepreneur attributes on financial performance agrees with Van Stel et al. (2021) study that performance of an entrepreneur is affected directly by education level of entrepreneur. The research revealed that education and human capital were critical drivers of the performance of ventures. Further, Page-Noel et.al (2019) evaluated whether venture performance was affected by the networking activity, starting new venture and entrepreneur's knowledge. The results showed that networking and entrepreneur knowledge had a direct impact on the venture performance. Chen et al. (2017) evaluated the relationship between venture performance, entrepreneur's human capital, motivation, entrepreneurial leadership,

entrepreneurial experience and manpower. The results established that entrepreneurial experience and manpower affected venture performance directly. Further, Wekesa et al. (2016) study on whether entrepreneur's experience affected firm performance showed that firm performance was directly affected by entrepreneur's experience. The study suggested the training of entrepreneurs to enhance long term survival and growth of businesses.

H_{03}: There is no statistically significant effect of firm characteristics on financial performance of private security firms in Kenya.

The study revealed that the effect of firm characteristics on financial performance was positive and significant (β_3= .164, t = 3.565 and p= .000 < 0.05). Coefficient of firm characteristics was .164 meaning for every one-unit increase in the measure of firm characteristics, financial performance improved by .164 units. Given that the p value (p = 0.002) of firm characteristics was less than 0.05, it implied that firm characteristics had a significant effect on financial performance. The null hypothesis three (H_{03}) that there is no statistically significant effect of firm characteristics on financial performance of private security firms in Kenya was thus rejected and the study concluded that indeed firm characteristics had a significant effect on financial performance of private security firms in Kenya.

The result on the effect of firm characteristics on financial performance of private security firms has a basis in empirical literature. The finding agrees with Abbasi and Malik, (2015) that examined how financial performance was influenced by firm's Size. The results established a relationship between firm size and firm's growth and firm's performance. Further, a study by Pervan et al. (2017) on whether business performance was impacted by firm asset turn over, size, liquidity and leverage showed

that firm size, leverage and assets turnover directly affected firm performance. Further, Dogan (2017) examined how profitability was influenced by size of the firm. The results indicated direct and significant effect of firm size on profitability of the firms. Mahfoudh (2015) examined whether financial performance was influenced by firm age among agricultural firms at the NSE. The results indicated that firm age had a direct influence on financial performance.

4.8.2 Moderating effect of finance Access Regulations

The study sought to test the null hypothesis (H_{04}) that there is no statistically significant moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya. The study adopted stepwise regression in testing hypothesis four [H_{04}]. The stepwise regression involved three steps regression. The first step involved regressing financial performance against firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics). The second step involved regressing financial performance against firm specific variables and moderating variable finance access regulations. The third step involved regressing financial performance against firm specific variables, moderating variable (finance access regulations) and interaction term (product of finance access regulations and sum of firm specific factors).

For the null hypothesis four (H_{04}) to be rejected, the change in coefficient of determination (R^2) should be significant (p-value associated with f-statistics should be less than 0.05 level of significance) in model 1, model 2 and model 3 representing the three steps of the stepwise regression. This is not a confirmatory test for moderation; however, it shows that there may be moderation. To confirm the existence of moderating effect of finance access regulations on the relationship between firm specific factors and financial performance, first the p-value associated with F test

should be less than 0.05 in the first step regression model. Secondly, the moderator should have significant effect on financial performance in the second step regression. In the third step regression, the moderator and interaction term (product of the sum firm specific factors and finance access regulations) should have a significant effect on financial performance. The findings are presented in succeeding discussion and Tables [4.50 - 4.52].

Table 4. 50: Model Summary (Moderating effect of Finance Access Regulations)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.858[a]	.737	.725	.19183	.737	61.624	3	66	.000
2	.861[b]	.742	.726	.19148	.005	1.242	1	65	.269
3	.862[c]	.743	.723	.19253	.001	.291	1	64	.591
a. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects									
b. Predictors: (Constant), b. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects, Z1= finance access regulations									
c. Predictors: (Constant), Firm characteristics, X2= entrepreneur attributes, X1= financial aspects, Z1= finance access regulations, Z1(X1+X2+X3) = interaction term.									

Table 4.50 presents the model summary for the three step regression models. In the first model where, financial performance was regressed against firm specific factors (Financial aspects, entrepreneur attributes, and firm characteristics) results showed that the R^2 was .737 implying that firm specific factors explained 73.7% of variation in financial performance.

In the second model the total R^2 was .742 implying that the firm specific factors (financial aspects, entrepreneur attributes and firm characteristics) and moderator (finance access regulations) explained 74.2% of the variation in financial performance. The R^2 had increased by 0.5 % and the F statistics had increased by 1.242. The p-value associated with the f-change was .269 hence the change in R^2 was

not significant when the moderator (finance access regulations) was introduced in model 2.

In the third model the total R^2 was .743 implying that the firm specific factors plus the moderator (finance access regulations) plus the interaction term (product of sum of firm specific factors and finance access regulations) explained 74.3% of the variation in financial performance. Further, the R^2 had increased by 0.1% when interaction terms were added into model three. The change in f-statistic associated with R^2 was not significant implying that addition of interaction term to the model did not lead to significant change in R^2. Being that the addition of the moderator and interaction term to model 3 did not lead to significant change in f-statistic associated with R^2 change, it can be inferred that finance access regulations did not have a moderating effect on the relationship between firm specific factors and financial performance in private security firms in Kenya.

Table 4.51: Analysis of Variances (Moderating Effect of Finance Access Regulations)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.827	3	2.276	62.462	.000[b]
	Residual	2.441	67	.036		
	Total	9.268	70			
2	Regression	6.870	4	1.717	47.273	.000[c]
	Residual	2.398	66	.036		
	Total	9.268	70			
3	Regression	6.877	5	1.375	37.389	.000[d]
	Residual	2.391	65	.037		
	Total	9.268	70			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects						
c. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects, Z1= finance access regulations						
d. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects, Z1= finance access regulations, Z1(X1+X2+X3)= interaction term						

Table 4.51 revealed the effect of firm specific factors, moderator and interaction term on financial performance of private security firms in Kenya. Model 1 showed that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) had a significant effect on firm performance given than the p – value associated F-test was less than 0.05. Further, the F-calculated (F-Cal = 62.462) was higher than F-critical (F-crit = 2.76). The first condition for moderation was thus confirmed. Model 1 thus showed a goodness of fit in estimating the effect of firm specific factors on financial performance of private security firms. Model 2 showed that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics) and finance access regulations had a significant effect on financial performance given than the p – value associated with F-test was less than 0.05 and F-calculated was higher than F-critical (47.273> 2.53) hence significant, however the value of f-statistic fell from 62.462 in model 1 to 47.273 in model 2. The second condition for moderation could therefore not be confirmed. The model however

showed a goodness of fit in estimating the parameters on the relationship between firm specific factors, finance access regulations and financial performance.

Model 3 showed that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics), finance access regulations and interaction term had a significant effect on financial performance given than the p – value associated F-test was less than 0.05 and F-calculated was higher than f-critical (37.389> 2.37). However, the F-calculated fell from 47.273 in model 2 to 37.389 in model 3. However, the model showed goodness of fit in estimating the parameters in the relationship between firm specific factors, direct and indirect effect of finance access regulations and financial performance of private security firms in Kenya.

The third condition for moderation could therefore not be confirmed. The study therefore concluded that finance access regulations did not moderate the relationship between firm specific factors and financial performance. The study thus failed to reject the null hypothesis four (H_{04}) that finance access regulations was not a moderator for the effect of firm specific factors on financial performance of private security firms in Kenya.

The findings agree with Mumin (2018) who evaluated the factors affecting ease of getting credit from commercial banks. The study showed that banks need collateral before disbursement of credit and that most SMEs owners were denied loans because they did not have sufficient collateral. The research also revealed that lack of management and finance skills was a barrier in accessing finance. Further, Msomi and Olarewaju (2021) on factors affecting financial sustainability among SMEs in South Africa revealed that budgeting, financial awareness, accounting skills and access to finance directly influenced financial sustainability. The study concluded that

entrepreneur training would improve financial literacy hence enhancing entrepreneurs' ability to use budgeting and accounting skills that meets the conditions of financial institutions.

Table 4.52: Regression Coefficients (Moderating Effect of Finance Access Regulations)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.373	.266		-12.676	.000
	X_1	.386	.080	.402	4.800	.000
	X_2	.261	.068	.375	3.841	.000
	X_3	.164	.080	.204	2.050	.040
2	(Constant)	-3.433	.271		-12.652	.000
	X_1	.380	.080	.396	4.728	.000
	X_2	.218	.078	.313	2.783	.007
	X_3	.147	.087	.183	1.689	.096
	Z_1	-.080	.074	-.107	-1.089	.280
3	(Constant)	-2.884	1.303		-2.213	.030
	X_1	.333	.137	.346	2.434	.018
	X_2	.172	.133	.247	1.292	.201
	X_3	.095	.149	.118	.633	.529
	Z_1	-.083	.387	-.111	-.215	.830
	$Z_1(X_1+X_2+X_3)$	-.014	.033	-.354	-.431	.668

a. Dependent Variable: Financial Performance
b. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects
c. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects, Z1= finance access regulations
d. Predictors: (Constant), X3= Firm characteristics, X2= entrepreneur attributes, X1= financial aspects, Z1= finance access regulations, Z1(X1+X2+X3) = interaction term

Table 4.52 presented the regression coefficients generated in the three step models of moderation. Model 1 presented the first step regression model where financial aspects, entrepreneurial attributes and firm characteristics had a significant effect on financial performance given p values associated with them were less than 0.05 level of significance. Further, the t-calculated values were higher than t critical value of 1.96. The first condition for moderating effect of finance access regulation on the

relationship between firm specific factors and financial performance was thus confirmed. The model was thus fitted in equation [4.2]:

$$\mathbf{Y = -3.373 + .386\ X_1 + .261\ X_2 + .164X_3}$$

Equation 4.2

Model 2 presented the second step regression model where the direct effect of the moderator (finance access regulations) on financial performance was not significant (β_4 = .080, t = 1.089 and p-value = .280 > 0.05). The second condition for moderating effect of finance access regulations on the relationship between firm specific factors and financial performance was thus not confirmed. The model was fitted in equation [4.3]:

$$\mathbf{Y = -3.433 + .380X_1 + .218X_2 + .147X_3 - .080Z_1}$$

Equation 4.3

Model 3 presented the third step regression model where the direct effect of the moderator (Finance access regulations) on financial performance was not significant (β_4 = -.083, t = -.215 and p-value = .830 > 0.05). Further the indirect effect of the moderator (interaction term) on financial performance was too not significant (β_6 = .014, t= .431 and p-value = .668> 0.05). The third condition for moderating effect of finance access regulations on the relationship between firm specific factors and financial performance was thus not confirmed. The model was thus fitted in equation [4.4]:

$$\mathbf{Y = -2.884 + .333X_1 + .172X_2 + .095X_3 - .083Z_1 - .014Z_1(X_1 + X_2 + X_3)}$$

Equation 4.4

The study thus failed to reject the null hypothesis four **(H_{04})** that finance access regulations was not a moderator for the effect of firm specific factors on financial performance of private security firms in Kenya.

The finding is in congruence with Sibanda et al. (2018) that evaluated impact of finance access on performance. The results revealing a direct relationship between performance and access to finance among firms studied. Further, Thuku (2017) on the factors influencing credit access among SMEs showed that Firm characteristics such as size and location influenced access to credit. Further, financial characteristics such as adequate bookkeeping affected access to credit. The study also revealed that entrepreneur characteristics such as networking is important. Ndungu (2016) on factors influencing credit access among SMEs revealed that collateral security, interest charged on loans, and literacy levels significantly influenced credit access.

4.8.3 Moderating effect of Private Security Industry Regulations

The study sought to test the null hypothesis (H_{05}) that there is no statistically significant moderating effect of private security industry regulations on the relationship between firm specific factors and financial performance of private security firms in Kenya. The study adopted stepwise regression in testing hypothesis five [H_{05}]. The stepwise regression involved three steps regression. The first step involved regressing financial performance against firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics). The second step involved regressing financial performance against firm specific factors and moderating variable private security industry regulations. The third step involved regressing financial performance against firm specific factors, moderating variable private security industry regulations and the interaction term (product of sum of firm specific factors and private security industry regulations).

For the hypothesis five (H_{05}) to be rejected, the change in coefficient of determination (R^2) should be significant (p-value associated with f-statistics should be less than 0.05 level of significance) in model 1, model 2 and model 3 representing the three steps of the stepwise regression. This is not a confirmatory test for moderation; however, it shows that there may be moderation. To confirm the existence of moderating effect of private security industry regulations on the relationship between firm specific factors and financial performance, first the p-value associated with F test should be less than 0.05 in the first step regression model. Secondly, the moderator should have significant effect on financial performance in the second step regression. In the third step regression, the moderator and interaction term (product of the sum firm specific factors and private security firm's regulations) should have a significant effect on financial performance. The findings are presented in Tables [4.53 - 4.55].

Table 4.53: Model Summary (Moderating effect of private security industry regulations)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.858[a]	.737	.725	.19087	.737	62.462	3	67	.000
2	.904[b]	.817	.806	.16012	.081	29.207	1	66	.000
3	.914[c]	.835	.823	.15326	.018	7.045	1	65	.010
a. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics									
b. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z_2= Private security industry regulations									
c. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z_2= Private security industry regulations, Z(X1+X2+X3) = Interaction term									

Table 4.53 presents the model summary for the three step regression models. The first model where financial performance was regressed against firm specific factors (financial aspects, entrepreneur attributes and Firm characteristics) showed that the R^2 was .737 implying that firm specific factors explained 73.7% of variation in financial performance. In the second model the total R^2 was .817 implying that the firm specific factors and moderator (private security industry regulations) explained 81.7% of the variation in financial performance. The R^2 had increased by 8.1% and the F statistics had increased by 29.207. The p-value associated with the f-change was less than 0.05 hence the change in R^2 was significant when the moderator (private security industry regulations) was introduced in model 2.

In the third model the total R^2 was .835 implying that firm specific factors plus the moderator (private security industry regulations) plus the interaction term (product of

sum of firm specific factors and private security industry regulations) explained 83.5% of the variation in financial performance. Further, the R^2 had increased by 1.8% when interaction term was added into model three. The change in f-statistic associated with R^2 was significant implying that addition of interaction term to the model led to significant change in R^2. Being that the addition of the moderator to model 2 and interaction term to model 3 led to significant change in f-statistic associated with R^2 change, it can be inferred that private security industry regulations could be a moderator on the effect of firm specific factors on financial performance among private security firms in Kenya. The findings agree with Ojiambo et al (2020) that evaluated the determinants of performance among the concerned firms. The research revealed that the government ought to develop a national policy to regulate the activities of the private security sector. The study showed that better regulated industry would create more opportunities for employment in the industry besides improving security in the country.

Table 4.54: ANOVA (Moderating effect of Private Security Industry Regulations)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.827	3	2.276	62.462	.000[b]
	Residual	2.441	67	.036		
	Total	9.268	70			
2	Regression	7.576	4	1.894	73.870	.000[c]
	Residual	1.692	66	.026		
	Total	9.268	70			
3	Regression	7.741	5	1.548	65.917	.000[d]
	Residual	1.527	65	.023		
	Total	9.268	70			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics

c. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z_2= Private security industry regulations

d. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z2= Private security industry regulations, Z_2(X1+X2+X3) = Interaction term

Table 4.54 revealed the effect of firm specific factors, moderator and interaction terms on financial performance of private security firms in Kenya. Model 1 showed that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) had a significant effect on firm performance given than the p – value associated F-test was less than 0.05 and f-calculated was higher than f-critical (62.462> 2.76). Model 1 showed a good fit in estimating parameters regarding the

effect of firm specific factors on financial performance of private security firms in Kenya. The first condition for moderation was thus confirmed. Model 2 showed that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) and private security industry regulations had a significant effect on financial performance given than the p – value associated F-test was less than 0.05 and F-calculated was higher than f-critical (73.870>2.53). Model 2 showed a goodness of fit in parameter estimation on the effect of firm specific factors, direct effect of private security regulations on financial performance of private security firms in Kenya. The second condition for moderation was thus confirmed.

Model 3 showed that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics), private security industry regulations and interaction term had a significant effect on financial performance given than the p – value associated F-test was less than 0.05 and f-calculated was higher than f-critical (65.917>2.37). Model 3 thus showed a good fit in estimating the coefficients in the relationship between firm's specific factors, direct and indirect effect of private security regulations on financial performance. The third condition for moderation was thus confirmed. The study therefore concluded that private security industry regulations could be moderating the relationship between firm specific factors and financial performance. The study thus rejected the null hypothesis five (H_{05}) that private security regulations do not moderate the effect of firm specific factors on financial performance of private security firms in Kenya. The findings are in congruence with Mumin (2018) who established that firms' barriers to credit access included high collateral requirements demanded by financial institutions.

Table 4.55: Regression Coefficients (Moderating effect of Private Security Industry Regulations)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.373	.266		-12.676	.000
	X1	.386	.080	.402	4.800	.000
	X2	.261	.068	.375	3.841	.000
	X3	.164	.080	.204	2.050	.040
2	(Constant)	-2.959	.236		-12.532	.000
	X1	.143	.081	.148	1.757	.083
	X2	.066	.067	.094	.972	.335
	X3	.126	.072	.157	1.740	.086
	Z2	.380	.070	.585	5.404	.000
3	(Constant)	-4.908	.768		-6.387	.000
	X1	.286	.095	.298	3.023	.004
	X2	.277	.102	.398	2.701	.009
	X3	.349	.109	.435	3.205	.002
	Z2	.959	.228	1.478	4.198	.000
	Z_2(X1+X2 +X3)	.054	.020	1.493	2.654	.010

a. Dependent Variable: Financial Performance
b. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics
c. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z2= Private security industry regulations
d. Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z2= Private security industry regulations, Z_2(X1+X2+X3) = Interaction term

Table 4.55 presented the regression coefficients generated in the three step models of moderation. Model 1 presented the first step regression model where financial aspects, entrepreneurial attributes and firm characteristics had a significant effect on financial performance given p values associated with them were less than 0.05 level of significance and t-calculated values were all greater than t-critical of 1.96. The p - values of firm specific factors (financial aspects, X_2= entrepreneur attributes, X_3= Firm characteristics) were (.000, .000 and .040) respectively. The first condition for moderation effect of private security industry regulations on the relationship between firm specific factors and financial performance was thus confirmed.

The finding agrees with Augustine and Jacob (2017) who evaluated the role of cash flows on the performance of companies. They concluded that there is a direct effect

of cash holding and cash conversion cycle on ROA of firms. Further, ROA was inversely related with firm size and cash flow. Page-Noel et.al (2019) evaluated whether venture performance was affected by the networking activity, years of operation and entrepreneur's knowledge. The results showed that networking and entrepreneur knowledge had a direct impact on the venture performance. Pervan et al. (2017) examined whether business performance was impacted by firm asset turn over, size, liquidity and leverage on business performance. The findings showed that profitability was weakly and directly affected by firm size. Further, leverage and assets turnover had a major influence on firms' performance. Liquidity measured by current ratio did not significantly affect profitability. The model was thus fitted in equation [4.5]:

$$\mathbf{Y = -3.373 + .386\ X_1 + .261\ X_2 + .164\ X_3}$$

Equation 4.5

Model 2 presented the second step regression model where the direct effect of the moderator (private security industry regulations) on financial performance was significant (β_4 = .380, t = 5.404 and p-value = 0.00< 0.05). The second condition for moderating effect of private security industry regulations on the relationship between firm specific factors and financial performance was thus confirmed. The model was thus fitted in equation [4.6]:

$$\mathbf{Y = -2.959 + .143X_1\ .066X_2 + .126X_3 + .380Z_2}$$

Equation 4.6

Model 3 presented the third step regression model where the direct effect of the moderator (private security industry regulations) on financial performance was

significant (β_4 = .959, t = 4.198 and p-value = 0.00< 0.05). Further the indirect effect of the moderator (interaction term) on firm performance was significant (β_5 = -.054, t= -2.654 and p-value = 0.00< 0.01). The third condition for moderating effect of private security industry regulations on the relationship between firm performance and financial performance was thus confirmed. Shaheen et al. (2017) examined the causal effect relationship between staff training and performance of organizational. The findings showed a major direct impact of staff training on organization performance. The model was thus fitted in equation [4.7]:

$$\mathbf{Y = -4.908 + .286X_1 + .277X_2 + .349X_3 + .959\ Z_2\ .054Z_2(X_1 + X_2 + X_3)}$$

Equation 4.7

The study thus rejected the null hypothesis five **(H_{05})** that private security industry regulations was not a moderator of the effect of firm specific factors on financial performance of private security firms in Kenya.

The finding on the moderating effect of private security regulation on financial performance is in line with Mutonyi and Sirera (2018) that examined whether commercial security improved security of Kenyans with results showing that there is urgent need for regulations to improve efficiency in private security industry. Ojiambo et al. (2020) evaluated the determinants of performance among the concerned firms. The research revealed that the government ought to develop a national policy to regulate the activities of the private security sector. The study showed that better regulated industry would create more opportunities for employment in the industry besides improving security in the country.

4.8.4 Joint Effect of Firm Specific Factors and Regulatory Requirements on Financial Performance

The study sought to test the null hypothesis six (H_{06}) that firm specific factors and business regulatory requirements have no joint significant effect on financial performance of private security firms in Kenya. The study adopted multivariate regression model where a p-value lower than 0.05 on the ANOVA table would lead to rejection of null hypothesis. The findings are presented in Table 4.56.

Table 4.56: Firm Specific Factors, Business Regulatory Requirements and Financial Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.912[a]	.832	.819			.15581
ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.678	5	1.536	63.257	.000[b]
	Residual	1.554	65	.024		
	Total	9.232	70			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.032	.232		-13.055	.000
	X1	.117	.058	.122	2.017	.047
	X2	.024	.007	.034	3.428	.000
	X3	.098	.026	.123	3.769	.000
	Z1	-.136	.081	-.182	-1.679	.150
	Z2	.404	.069	.624	5.845	.000

Dependent Variable: Financial Performance

Predictors: (Constant), X1= financial aspects, X2= entrepreneur attributes, X3= Firm characteristics, Z1= Finance Access regulations, Z2= Private security industry regulations.

Table 4.56, presents a summary of regression model results. The value of R was .912 revealing that there is a linear relationship between firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics), finance access regulations,

private security industry regulations and financial performance. The coefficient of determination (R^2) indicated that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics), finance access regulations and private security industry regulations explained 83.2% of the total variation in financial performance of private security firms in Kenya. The residual variation of 16.8% of the financial performance is explained by other factors not considered under the current study.

Further, Table 4.56 presents the ANOVA on firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics), finance access regulations, private security industry regulations and financial performance. The study established that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics), finance access regulation and private security industry regulations had a significant effect on the financial performance of private security firms in Kenya. This was evidenced by P value = 0.000 which was less than 5% level of significance and F-calculated higher than F-critical extracted from F-table (63.257 > 2.37). The model thus had a good fit in estimating the joint effect of firm specific factors and business regulatory requirements on financial performance of private security firms. The study thus rejected the null hypothesis six (H_{06}) that firm specific factors, finance access regulations, private security industry regulations have no joint effect on financial performance of private security firms in Kenya. The study thus concluded that indeed firm specific factors, finance access regulations and private security industry regulations have a major effect on financial performance of private security firms in Kenya. The research also generated the beta coefficients of firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics), finance access regulations and private security industry regulations. The findings are presented in regression model in equation [4.8]:

$$Y = -3.032 + .117X_1 + .024X_2 + .098X_3 - .136Z_1 + .404Z_2$$

Equation 4.8

The study findings on the relationship between firm specific factors, business regulatory requirements and financial performance among private security firms has basis in empirical literature. Martinez-Ferrero et al. (2016) evaluated how corporate performance was influenced by financial reporting quality. The study noted direct influence of quality financial reporting on Performance. Further, the study showed that firms with better-reported financial statements depicted superior financial performance. Diaka (2018) showed direct impact of entrepreneur's experience on firm performance. A study by Wekesa et al. (2016) on whether entrepreneur's experience affected firm performance showed that firm performance was directly affected by entrepreneur's experience. Abiodun (2016) evaluated the influence of financial literacy on SMEs performance. Results established a direct influence of financial literacy on performance of SMEs. Abbasi and Malik, (2015) revealed that firm size was a moderator on the relationship between firms' growth and firms' performance. Mira and Ogollah (2013) examined credit access challenges in women owned businesses. The results showed that information accessibility and collateral had a strong positive correlation with access to finance. Osano and Languitone (2016) evaluated factors of credit access among SMEs. The results indicated that collateral influenced credit access.

4.8.5 Summary of hypotheses Tests

Table 4.57: Summary of hypotheses Tests

objective	hypotheses	coefficient	p-value	Decision
To assess the effect of firm's financial aspects on financial performance of private security firms in Kenya.	H_{01}: There is no statistically significant effect of firm's financial aspects on financial performance of private security firms in Kenya	β_1= . 386	.000	Reject H_{01}
To explore the effect of entrepreneur's attributes on financial performance of private security firms in Kenya.	H_{02}: There is no statistically significant effect of entrepreneur's attributes on financial performance of private security firms in Kenya.	β_2= .261	.000	Reject H_{02}
To investigate the effect of firm's characteristics on financial performance of private security firms in Kenya	H_{03}: There is no statistically significant effect of firm characteristics on financial performance of private security firms in Kenya	β_3 = .164	.000	Reject H_{03}
To probe the moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.	H_{04}: There is no statistically significant moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.	ANOVA β_4= -.080 β_4= -.083 β_5= -.014	.000 .280 .830 .668	Fail to Reject H_{04}
To ascertain the moderating effect of	H_{05}: There is no statistically	ANOVA	.000	Reject H_{05}

private security industry regulations on the effect of firm specific factors on financial performance of private security firms in Kenya.	significant moderating effect of private security industry regulations on the effect of firm specific factors on financial performance of private security firms in Kenya	$\beta_5 = .380$	.000	
		$\beta_5 = .959$ $\beta_6 = .054$	.000 .010	
To establish the joint effect of firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and private security industry regulations on financial performance of private security firms in Kenya	H_{06}: There is no statistically significant joint effect of firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and private security industry regulations on financial performance of private security firms in Kenya	ANOVA	.000	Reject H_{06}

4.9 Correlation Analysis

The study adopted bivariate Pearson correlation coefficient to establish the correlation between study variables. The study examined the relationship between firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics), business regulatory requirements (finance access regulations and private security regulations) and firm performance among private security firms in Kenya. The Pearson correlation coefficient values are between 0 and 1 where 0 imply no correlation and 1 imply perfect correlation. A Pearson correlation coefficient value between 0.1 – 0.3 imply weak correlation. A Pearson correlation coefficient between 0.4- 0.6 imply moderate correlation and a Pearson correlation between 0.7 – 0.9 imply strong correlation. The findings are presented in Table 4.58.

Table 4.58: Bivariate Pearson Correlation

		Firm financial aspects	entrepreneur attributes	firm characte ristics	finance access regulations	Private security firm's regulation	Financial performance
Firm financial aspects	Pearson Correlatio n	1					
	Sig. (1-tailed)						
	N	71					
Entrepreneur attributes	Pearson Correlatio n	.561**	1				
	Sig. (1-tailed)	.000					
	N	71	71				
Firm characteristic	Pearson Correlatio n	.655**	.762**	1			
	Sig. (1-tailed)	.000	.000				
	N	71	71	71			
Finance access regulations	Pearson Correlatio n	.506**	.757**	.671**	1		
	Sig. (1-tailed)	.000	.000	.000			
	N	70	70	70	70		
Private security firms' regulations	Pearson Correlatio n	.756**	.785**	.731**	.591**	1	
	Sig. (1-tailed)	.000	.000	.000	.000		
	N	71	71	71	70	71	
Financial performance	Pearson Correlatio n	.746**	.756**	.753**	-.468**	.885**	1
	Sig. (1-tailed)	.000	.000	.000	.000	.000	
	N	71	71	71	71	71	71
**. Correlation is significant at the 0.01 level (1-tailed).							

Table 4.58 revealed that, the firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and business regulatory requirements were directly and significantly correlated with performance of private security firms in Kenya. The correlation coefficient for firm financial aspects to firm performance was 0.746 with a significance value of 0.000 which is less than 0.05 level of significance. The finding agrees with Afrifa (2016) that evaluated the direction of causation

between firm performance and cash flows revealing that firms with adequate cash inflows should invest the excess liquidity into interest earning financial assets, while those with inadequate cash inflows should invest less in interest earning securities to enhance performance. Chukwunwike et al. (2018) examined how bank profitability was affected by operating cash flows in banking sector in Nigeria. The research established direct causal effect link between profitability and operating cash flows.

The coefficient for the association between entrepreneur attributes and financial performance was 0.756 with a p-value of 0.000 which was less than 0.05. The findings are in congruence with Page-Noel et.al (2019) who established that networking and entrepreneur knowledge had a direct impact on the venture performance. Baum (2017) examined the influence of entrepreneur's attributes on venture growth with results showing that self-efficacy, motivation and communicated vision directly impacted growth of ventures.

From the Table also, the correlation coefficient for the association between firm characteristics and financial performance was 0.753 with a p-value of 0.000 less than 0.05 depicting a significant correlation between the variables. Abbasi and Malik, (2015) examined how financial performance was influenced by firms' Size. The results revealing that firm size was a moderator on the relationship between firms' growth and firms' performance. Pervan et al. (2017) examined whether business performance was impacted by firm asset turn over, size, liquidity and leverage on business performance. The findings showed that profitability was weakly and directly affected by firm size. Velnampy and Niresh (2015) examined the link obtaining between profitability and size among manufacturing industries. The findings revealed that profitability was significantly affected by firm sizes. Dogan (2017) examined how

profitability was influenced by size of the firm. The results indicated direct and major effect of firm sizes on profitability of the firms.

The correlations between finance access regulations and financial performance was -.468 with p value of 0.00 which was lower than 0.05 level of significance. The finding agrees with Memba (2015) who evaluated whether growth of SMEs in Kenya was determined by venture capital. The results showed that growth of SMEs was directly associated with venture capital that financed their operations. The research concluded that businesses that adopted venture capital experienced improved growth. Ondieki et al (2013) evaluated the impact of external financing on the financial performance. The results revealed that financing and investment polices affected financial performance.

Finally, the correlation coefficient for the association between private security industry regulations and financial performance was 0.885 with a p-value of 0.000 which is less than 0.05 indicating a significant relationship. Ojiambo et al., (2020) evaluated the determinants of performance among the concerned firms. The study focused on the G4S (K) Limited. The research revealed that the government ought to develop a national policy to regulate the activities of the private security sector. The study showed that better regulated industry would create more opportunities for employment in the industry besides improving security in the country. Mutonyi and Sirera (2018) examined whether commercial security improved security of Kenyans. The results showed that there is urgent need for regulations to improve efficiency in private security industry. Mutonyi and Sirera (2018) however, failed to establish effect of regulation on financial performance of private security companies.

4.10 Discussion of Research Results

The study had sought to investigate the effect of firm specific factors (financial aspects, entrepreneur attributes, firm characteristics) business regulatory requirements (Finance access regulations and private security industry regulation) on financial performance of private security firms in kunya. The general objective was disaggregated into six specific objective and hypotheses.

4.10.1 Effect of Firm Financial Factors on Financial Performance

The first objective sought to determine the effect of firm's financial aspects on financial performance of private security firms in Kenya. The correlation coefficient for firm financial aspects to firm performance was 0.746 with a significance value of 0.000 which is less than 0.05 level of significance. The regression analysis revealed that the effect of firm financial aspects on firm performance was positive and significant (β_1= .386, t = 4.800 and p= .000 < 0.05). Coefficient of firm financial aspects was .386 meaning for every one-unit increase in the measure of financial aspects, firm performance improved by .386 units. Given that the p-value (p = 0.00) of the t - statistic of finance access regulations was less than 0.05, it implied that financial aspects had a significant effect on financial performance. The null hypothesis one (H_{01}) that firm's financial aspects has no significant effect on financial performance of private security firms in Kenya was thus rejected and the study concluded that indeed financial aspects had a significant effect on financial performance of security firms in Kenya.

The study findings are in congruence with Martinez-Ferrero et al. (2016) who evaluated how corporate performance was influenced by financial reporting quality. The study noted direct influence of financial reporting on quality Performance. Further, the study showed that firms with better reported financial statements depicted superior financial performance. Further, Ouma (2017) investigated the factors

explaining the quality of financial statements among commercial banks and established that the major factors explaining quality of financial reporting included professional development of the accountant, computerized accounting, and internal skills development. Another study with same agreement was Mensah (2021) who evaluated the factors explaining quality of financial reports. The findings showed major influence of board ownership, leverage, shareholder's concentration and independent directorship on quality of financial reporting.

Further, the findings are supported by Miller- Orr Model. The model explains that there is a positive nexus between firm financial aspects (i.e., cash flows) and financial performance (Miller & Orr, 1966). Private security firms with inadequate cash balances and whose cash assets are at or below lower limit should either convert non-cash assets into cash or borrow to seal gaps in cash imbalances. Firms with inadequate cash balances tends to perform poorly given that they run into liquidity problems. Further, such firms do not receive additional income in marketable securities. Additionally, private security firms with adequate cash balances and whose cash assets are at or above the upper limit should purchase markable securities with excess cash. Private security Firms holding adequate cash and that have invested excess cash balances in marketable securities realises improved financial performance from being able to settle obligations on time and earning interest on marketable securities.

4.10.2 Effect of Entrepreneur Attributes on Financial Performance

The second objective sought to establish the effect of entrepreneurs' attributes on performance of private security firms in Kenya. The Pearson coefficient for the association between entrepreneur attributes and financial performance was 0.756 with a p-value of 0.000 which was less than 0.05. The regression analysis of the study revealed that the effect of entrepreneur attributes on firm performance was positive and significant

(β_2= .261, t = 3.841 and p= .000 < 0.05). Coefficient of entrepreneur attributes was .261 meaning for every one-unit increase in the measure of entrepreneur attributes, financial performance improved by .261 units. Given that the p value (p = 0.000) of entrepreneur attributes was less than 0.05, it implied that entrepreneur attributes had a significant effect on firm performance. The null hypothesis two (H_{02}) that entrepreneur attributes have no significant effect on performance of private security firms in Kenya was thus rejected and the study concluded that indeed entrepreneur attributes had a significant effect on financial performance of private security firms in Kenya.

The findings have a basis in empirical literature by Page-Noel et.al (2019) that showed that that networking and entrepreneur knowledge had a direct impact on the venture performance. Similarly, Chen et al. (2017) on the direction of causation between venture performance, entrepreneur's human capital, motivation, entrepreneurial leadership, entrepreneurial experience and manpower established that entrepreneurial experience and manpower affected venture performance directly. Additionally, Wekesa et al. (2016) examined whether entrepreneur's experience affected firm performance with finding showing that firm performance was directly affected by entrepreneur's experience. The study suggested the training of entrepreneurs to enhance long-term survival and growth of businesses.

The study findings are also in agreement with social network theory. The theory explains that entrepreneur attributes (i.e., entrepreneur social networks) contribute to financial performance of private security firms in Kenya (Barnes & Milgram, 1967). The theory explains how entrepreneurs' networks (political and business) are critical to the financial performance. The entrepreneur can easily get referrals from other entrepreneurs, customers regarding its products leading to more sales that drive profitability upwards. The theory is helpful in establishing how relationships and

connections among owners of private security firms in Kenya develops a social structure that can explain the financial performance of the firms.

4.10.3 Effect of Firm Characteristics on Financial Performance

The third objective sought to determine the effect of firm's characteristics on performance of private security firms in Kenya. The correlation coefficient for the association between firm characteristics and financial performance was 0.753 with a p-value of 0.000 less than 0.05 depicting a significant correlation between the variables. The regression analysis revealed that the effect of firm characteristics on firm performance was positive and significant (β_3= .164, t = 3.565 and p= .000 < 0.05). Coefficient of firm characteristics was .164 meaning for every one-unit increase in the measure of firm characteristics, firm performance improved by .164 units. Given that the p value (p = 0.000) of firm characteristics was less than 0.05, it implied that firm characteristics had a significant effect on financial performance. The null hypothesis three (H_{03}) that firm characteristics have no significant effect on financial performance of private security firms in Kenya was thus rejected and the study concluded that indeed firm characteristics had a significant effect on financial performance of private security firms in Kenya.

The finding agrees with Abbasi and Malik, (2015) that examined how financial performance was influenced by firms' size revealing that firm size was a moderator on the relationship between firm's growth and firm's performance. However, Velnampy and Niresh (2015) on the link between profitability and size among manufacturing industries revealed that profitability was insignificantly affected by firm sizes. The same sentiments were as per the study done by Dogan (2017) who examined how profitability was influenced by size of the firm in Turkey. The results indicated direct and significant effect of firm sizes on profitability of the firms.

Osunsan et al. (2015) evaluated the causal effect link between performance and age, it was revealed that firm age significantly affects level of performance among small business enterprises in Kampala. Pervan et al. (2017) sought to establish how firm performance was affected by age in Croatian Food Industry with results indicating that firm performance was negatively influenced by age. Mahfoudh (2015) examined whether financial performance was influenced by firm age among agricultural firms at the NSE. The results indicated that firm age had a direct influence on financial performance.

The findings are in line with Scale efficiency theory. Theory informs the variable firm characteristics (i.e. firm size) and how it influences financial performance of private security firms in Kenya (Koopmans, 1951). It is critical that private security firms need to maximize output through their product offering and minimize their operating costs such as training cost, minimum wage levels among other costs to achieve operational efficiency. Private security firm should efficiently use their economies of scale resulting from size and age so as to maximise their returns to equity. Private security firms able to use economies of scale derived from size are able to generate more profits through reduction in average cost of operations.

4.10.4 Moderating Effect of Finance Access Regulations on the effect of Firm Specific Factors on Financial Performance

The fourth objective sought to establish the moderating effect of finance access regulations on the relationship between firm specific factors and financial performance of private security firms in Kenya. The correlations between finance access regulations and financial performance was -.468 with p value of 0.00 which was lower than 0.05 level of significance. In the first step regression model, financial aspects, entrepreneurial attributes and firm characteristics had a significant effect on

financial performance given p values associated with them were less than 0.05 level of significance. The first condition for moderation effect of finance access regulations on the relationship between firm specific factors and financial performance was thus confirmed.

The second step regression showed that the direct effect of the moderator (finance access regulations) on financial performance was not statistically significant (β_4 = .080, t = 1.089 and p-value = .280 > 0.05). The second condition for moderating effect of finance access regulations on the relationship between firm specific factors and financial performance was thus not confirmed. The third step regression model showed that the direct effect of the moderator (finance access regulation) on financial performance was not statistically significant (β_4 = -.083, t = -.215 and p-value = .830 > 0.05). Further the indirect effect of the moderator (interaction term) on financial performance was not statistically significant (β_6 = .014, t= .431 and p-value = .668> 0.05). The third condition for moderating effect of finance access regulations on the relationship between firm specific factors and financial performance was thus not confirmed. The study thus failed to reject the null hypothesis four **(H_{04})** that finance access regulations was not a moderator for the relationship between firm specific factors and financial performance of private security firms in Kenya.

The study findings agree with Memba (2015) who evaluated whether growth of SMEs in Kenya was determined by venture capital with results showing that growth of SMEs was directly associated with venture capital that financed their operations. The research concluded that businesses that adopted venture capital experienced improved growth. Ondieki et al (2013) evaluated the impact of external financing on the financial performance revealing that financing and investment polices affected financial performance.

Further, the study findings agree with credit access theory. The theory establishes a positive effect of finance access regulation (i.e., interest rate and collaterals) on financial performance (Olawale, 2011). Credit access theory supports the study findings regarding how increased finance access regulation such as interest rate and collateral introduces inefficiencies and barriers in the financial system hence inverse relationship between finance access regulation and financial performance. Finance access regulation lowers the ease of movement of financial resources from financial institutions to private security firms that need such finances to exploit opportunities and create wealth in the form of profits. Reduced credit access due to finance access regulation leads to declining profitability.

4.10.5 Moderating Effect of Private Security Industry Regulations on the Effect of Firm Specific Factors on Financial Performance

The fifth objective sought to establish the effect of private security industry regulations on the relationship between firm specific factors and financial performance of private security firms in Kenya. The correlation coefficient for the association between private security industry regulations and financial performance was 0.885 with a p-value of 0.000 which is less than 0.05 indicating a significant relationship. In the first step regression model, financial aspects, entrepreneurial attributes and firm characteristics had a significant effect on financial performance given p values associated with them were less than 0.05 level of significance. The first condition for moderation effect of private security industry regulations on the relationship between firm specific factors and financial performance was thus confirmed.

The second step regression showed that the direct effect of the moderator (private security industry regulations) on financial performance was significant ($\beta_4 = .380$, $t = 5.404$ and p-value = $0.00 < 0.05$). The second condition for moderating effect of private

security industry regulations on the relationship between firm specific factors and financial performance was thus confirmed. The third step regression model showed that the direct effect of the moderator (private security industry regulations) on financial performance was significant (β_4 = .959, t = 4.198 and p-value = 0.00< 0.05). Further the direct effect of the moderator (interaction term) on financial performance was significant (β_5 = -.054, t= 2.654 and p-value = 0.00< 0.01). The third condition for moderating effect of private security industry regulations on the relationship between firm specific factors and financial performance was thus confirmed. The study thus rejected the null hypothesis five **(H_{05})** that there is no statistically significant moderating effect of private security industry regulations on the relationship between firm specific factors and financial performance of private security firms in Kenya.

The findings are in consistence with Ojiambo et al. (2020) who evaluated the determinants of performance among the concerned firms. The study showed that better regulated industry would create more opportunities for employment in the industry besides improving security in the country. Mutonyi and Sirera (2018) on their study about how commercial security improved security of Kenyans, revealed that there is urgent need for regulations to improve efficiency in private security industry. Shaheen et al. (2017) examined the direct relationship between staff training and performance of organizational with findings showing a major direct impact of staff training on organization performance.

The study findings on the moderating effect of private security industry regulation on the relationship between firm specific factors and financial performance was in line with public interest theory (Francis, 1958). The theory informs the enactment of Private Security Regulatory Act of 2016 in an effort to regulate the sector. The regulation was critical to protect the interest of the public as far as operation of the

private security firms was concerned. The security services are a public good that should be provided by state and any private security firm allowed to offer security services ought to be regulated by government. The increased regulation in terms of minimum salary and training adds up to operation costs of the private security firms hence cutting down on their profitability level. The regulations would therefore lead to reduced financial performance as established in the research findings.

4.10.6 Joint Effect of Firm Specific Factors and Business Regulatory Requirements on Financial Performance

Finally, the research sought to establish the joint effect of firm specific factors and business regulatory requirements on financial performance of private security firms in Kenya. The overall Pearson correlation coefficient between independent variables and financial performance was .912. The research also adopted multivariate regression analysis where the research revealed that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics), finance access regulation and private security industry regulations had a significant effect on the financial performance of private security firms in Kenya. This was evidenced by P value = 0.000 which was less than 5% level of significance and F-calculated higher than F-critical (63.257 > 2.37). The research thus rejected the null hypothesis six (H_{06}) that firm specific factors, finance access regulations, private security industry regulations have no joint effect on financial performance of private security firms in Kenya. The research thus concluded that indeed firm specific factors, finance access regulations and private security industry regulations have a major effect on financial performance of private security firms in Kenya.

4.11 Optimal Model

The test of hypotheses revealed that all the hypotheses with the exception of hypothesis four were rejected. The models were thus revised after the variable

finance access regulations was eliminated from the model. The optimal models after elimination of finance access regulations are presented in Tables [4.59 – 4.63].

4.11.1 Effect of Firm Specific factors on Financial Performance

The research adopted multivariate regression in examining the effect of firm specific factors on financial performance of private security firms in Kenya. The findings are presented in Table 4.59.

Table 4.59: Firm Specific Factors and Financial Performance (Optimal Model)

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.858[a]	.737	.725			.19087
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.827	3	2.276	62.462	.000[b]
	Residual	2.441	67	.036		
	Total	9.268	70			
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.373	.266		-12.676	.000
	Financial Aspects	.386	.080	.402	4.800	.000
	Entrepreneur Attributes	.261	.068	.375	3.841	.000
	Firm Characteristics	.164	.046	.204	3.565	.000
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Financial Aspects, Entrepreneurial Attributes and Firm Characteristics						

Table 4.59, presents a summary of regression model results. The coefficient of determination (R^2) indicated that financial aspects, entrepreneurial attributes and firm characteristics explained 73.7 % of the total variation in financial performance of private

security firms in Kenya. The residual variation of 26.3% of the financial performance is explained by other factors. The finding implies that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) have a major influence on financial performance of private security firms in Kenya.

The ANOVA revealed that firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics) had a significant effect on the financial performance. This was evidenced by P value = 0.000 which was less than 5% level of significance and F-calculated higher than F-critical (62.462> 2.75). The research also generated the beta coefficients of firm specific factors (Financial Aspects, Entrepreneurial Attributes and Firm Characteristics). The research revealed that the effect of firm financial aspects, entrepreneur attributes and firm characteristic had a statistically significant and positive effect on financial performance as given by p-values lower than 0.05. The research thus fitted the first regression model in equation [4.9] as follows:

$$\mathbf{Y = -3.373 + .386X_1 + .261\ X_2 + .164\ X_3}$$

Equation 4.9

4.11.2 Moderating effect of Private Security Industry Regulations on the Effect of firm Specific Factors on Financial Performance

The research adopted stepwise regression model to examine the moderating effect of private security industry regulations on the relationship between firm specific factors and financial Performance of private security firms in Kenya. The findings are presented in Table 4.60.

Table 4.60: Optimal Model Summary (Moderation)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.858[a]	.737	.725	.19087	.737	62.462	3	67	.000
2	.904[b]	.817	.806	.16012	.081	29.207	1	66	.000
3	.914[c]	.835	.823	.15326	.018	7.045	1	65	.010
a. Predictors: (Constant), a. Predictors: (Constant), Firm financial aspects, entrepreneur attributes and firm characteristics									
b. Predictors: (Constant), Predictors: (Constant), Firm financial aspects, entrepreneur attributes, firm characteristics and private security industry regulations									
c. Predictors: (Constant), Firm financial aspects, entrepreneur attributes, firm characteristics, private security industry regulations and interaction term.									

As shown in Table 4.60, for model 1, R^2 was .737 implying that firm financial aspects, entrepreneur attributes and firm characteristics explained 73.7% of the variation in financial performance. In the model 2, R^2 was .817 implying that firm financial aspects, entrepreneur attributes, firm characteristics and private security industry regulations explained 81.7% of the variation in financial performance of private security firms in Kenya. Finally, in model 3, R^2 was .835 implying that firm financial aspects, entrepreneur attributes, firm characteristics, private security industry regulations and interaction term explained 83.5% of the variation in financial performance. The regression models were thus a good fit.

Table 4.61: Optimal ANOVA (Moderation)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.827	3	2.276	62.462	.000[b]
	Residual	2.441	67	.036		
	Total	9.268	70			
2	Regression	7.576	4	1.894	73.870	.000[c]
	Residual	1.692	66	.026		
	Total	9.268	70			
3	Regression	7.741	5	1.548	65.917	.000[d]
	Residual	1.527	65	.023		
	Total	9.268	70			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Firm financial aspects, entrepreneur attributes and firm characteristics						
c. Predictors: (Constant), Firm financial aspects, entrepreneur attributes, firm characteristics and private security industry regulations						
d. Predictors: (Constant), Firm financial aspects, entrepreneur attributes, firm characteristics, private security industry regulations and interaction term.						

As revealed in the ANOVA Table 4.61, in model 1, the P value of the F statistic was 0.000 which was less than 5%. This showed that model 1 (firm financial aspects, entrepreneur attributes and firm characteristics) has a significant effect on financial performance among private security firms in Kenya. In model 2, the P value of the F statistic was 0.000 which is less than 5%. This showed that model (firm financial aspects, entrepreneur attributes, firm characteristics and private security industry regulations) had a significant effect on financial performance among private security firms in Kenya. In model 3, the P value of the F statistic was 0.000 which was less than 5%. This showed that model 3 (firm financial aspects, entrepreneur attributes, firm characteristics, private security regulations and interaction term) had a significant effect on financial performance among private security firms in Kenya. Thus, the

independent variables (firm financial aspects, entrepreneur attributes, firm characteristics) merged with the moderating variable (private security regulations) statistically significantly predict the dependent variable financial performance.

Table 4.62: Optimal Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.373	.266		-12.676	.000
	X1	.386	.080	.402	4.800	.000
	X2	.261	.068	.375	3.841	.000
	X3	.164	.046	.204	3.565	.000
2	(Constant)	-2.959	.236		-12.532	.000
	X1	.143	.081	.148	1.757	.083
	X2	.066	.067	.094	.972	.335
	X3	.126	.072	.157	1.740	.086
	Z	.380	.070	.585	5.404	.000
3	(Constant)	-4.908	.768		-6.387	.000
	X1	.286	.095	.298	3.023	.004
	X2	.277	.102	.398	2.701	.009
	X3	.349	.109	.435	3.205	.002
	Z	.959	.228	1.478	4.198	.000
	$Z(X_1+X_2+X_3)$	.054	.020	1.493	2.654	.010
b. Predictors: (Constant), X1= Financial Aspects, X2= Entrepreneurial Attributes, X3= Firm Characteristics, Z= private security industry regulations, Z(Sum of $X_1X_2X_3$) interaction term						

The result of the analysis shown in Table 4.62 were used to fit the models. In model 1, the effect of firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics) on firm performance was positive and statistically significant. The second model showed that firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics) and moderator (private security industry regulations) had a significant effect on financial performance of private security firms in Kenya. The third model showed that firm specific factors (firm financial aspects, entrepreneur attributes and firm characteristics), moderator (private security industry regulations) and interaction term had a significant effect on financial

performance of private security firms in Kenya. The models were thus estimated as shown in equations [4.10 – 4.12]:

$$\mathbf{Y = -3.373 + .386\ X_1 + .261X_2 + .164X_3}$$

Equation 4.10

$$\mathbf{Y = -2.959 + .143\ X_1 + .066\ X_2 + .126X_3 + .380Z}$$

Equation 4.11

$$\mathbf{Y = -4.908 + .286X_1 + .277X_2 + .349X_3 + .959Z + .054\ Z(X_1+X_2+X_3)}$$

Equation 4.12

4.11.3 Firm specific factors, Private Security Industry Regulations and Financial Performance

The research also examined the joint effect of firm specific factors (firm's financial aspects, entrepreneur attributes and firm characteristics) and Private security industry regulations on financial performance. The findings are presented in Table 4.63.

Table 4.63: Firm specific factors, Private security industry regulations and financial performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.904[a]	.817	.806			.16012

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.576	4	1.894	73.870	.000[b]
	Residual	1.692	66	.026		
	Total	9.268	70			

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.959	.236		-12.53	.000
	X1	.143	.061	.148	2.344	.023
	X2	.066	.017	.094	3.882	.000
	X3	.126	.052	.157	2.423	.016
	Z	.380	.070	.585	5.404	.000

Dependent Variable: Financial Performance

Predictors: (Constant), X1= Financial Aspects, X2= Entrepreneurial Attributes, X3= Firm Characteristics, Z= private security industry regulations.

Table 4.63, presents a summary of regression model results. The coefficient of determination (R^2) indicated that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics) and private security industry regulations explained 81.7% of the total variation in financial performance of private security firms in Kenya. The residual variation of 16.8% of the financial performance is explained by other factors not considered under the current research.

The ANOVA showed that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics) and private security industry regulations had a significant effect on the financial performance of private security firms in Kenya. This

was evidenced by P value = 0.000 which was less than 5% level of significance. The research thus concluded that indeed firm specific factors, private security industry regulations have a significant effect on financial performance of private security firms in Kenya. The research also generated the beta coefficients of firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics) and private security industry regulations. The findings are presented in regression model in equation [4.13] as follows:

$$\mathbf{Y} = -2.959 + .143\,\mathbf{X_1} + .066\mathbf{X_2} + .126\mathbf{X_3} + .380\mathbf{Z}$$

Equation 4.13

4.12 Optimal Conceptual Framework

The optimal conceptual model is presented in Figure 4.3 where the independent variables are firm financial aspects, entrepreneur attributes and firm characteristics. The dependent variable is firm performance and moderating variable is private security industry regulations. The variable finance access regulation was dropped from the conceptual framework after it was established that it did not moderate the relationship between firm specific factors and financial performance of private security firms in Kenya.

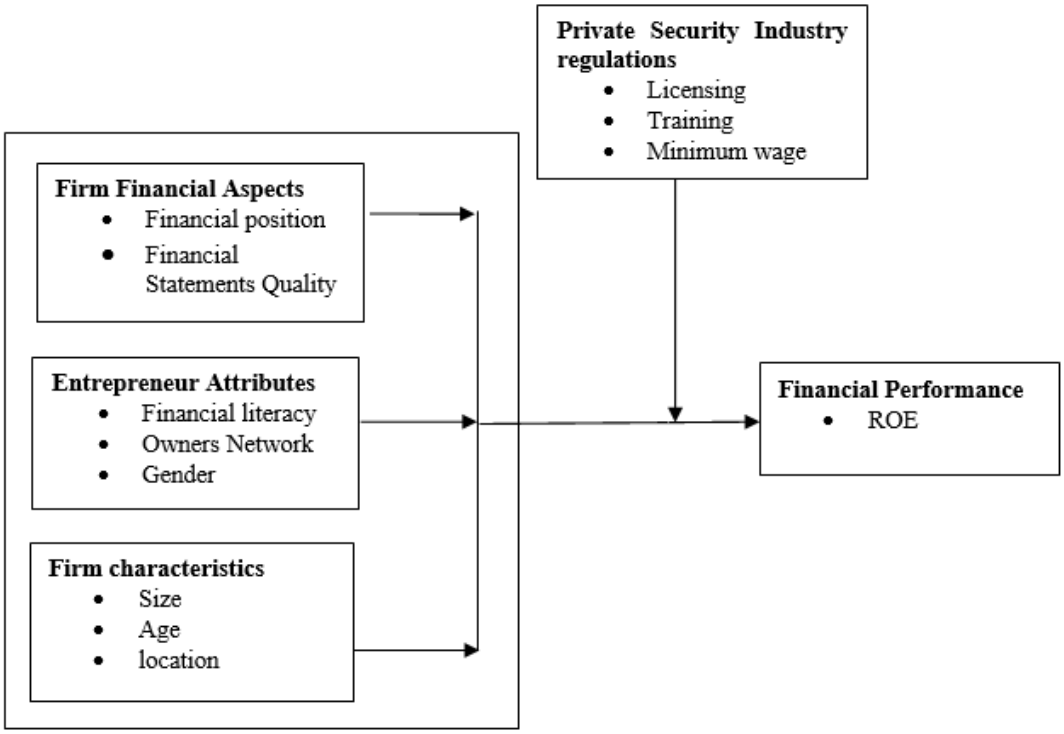

Figure 4.3: Optimal Conceptual Framework

4.13 Chapter summary

Chapter four presents a statistical summary results and discussion of the findings of the study. The data is analysed using the descriptive and inferential analysis. The descriptive findings have been discussed where each variable was measured using Likert type of questions and mean scores, standard deviation and co variation. As for the closed-ended questions, frequencies and percentages were obtained. The hypotheses were tested using correlation and regression analysis. Based on the results hypotheses one, two, three, five and six were confirmed, while hypotheses four was not confirmed. The interpretations have been made using statistical knowledge and the existing body of theoretical and empirical literature.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The section presents the findings of the research in a summary. The findings include descriptive and inferential analysis. The findings have been presented based on research explanatory variables including firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and private security industry regulations.

5.1.1 Firm Financial Aspects

The findings based on descriptive analysis showed that majority of the firms in the industry do keep proper financial statements. Moreover, most of the firm managers also admitted to have competent accountants who oversee the accounts department. Many players in the sector strongly agreed to have their financial statements audited by an external auditor. It was also found that most of the firms can currently meet their financial obligations without much difficulties. Majority of the research participants noted that there is return on investment of company finances. Financial inclusion was a critical element of development. Finance access improves the capability of individuals to participate in wealth creation. It is therefore critical that increasing access and usage of financial resources results to improved financial performance of businesses within the country. The regression analysis revealed that firm financial aspects had a direct influence on performance of private security firms in Kenya.

5.1.2 Entrepreneur Attributes

The descriptive analysis revealed that most of the managers were found to be knowledgeable about finances and strategic plan for the firms. The academic qualifications of most respondents were found to be able to propel the respective firms into the future. Moreover, most owners of the firms were found to have great networks that enable the business to thrive. Majority of the managers made a noteworthy point that they support career development of their employees. The gender of the owner did not affect performance of the industry. The regression analysis revealed that entrepreneur attributes had a major and direct effect on performance of private security firms. Supportive aspects, entrepreneur attributes resulted to increased performance among private security firms. Each entrepreneurial characteristic and security firm performance indicator signals that some of the indicators are more responsive to the causal relationship, which suggests possible direct linkage between them. The research revealed that entrepreneurial attributes such as financial literacy, networking and business knowledge were critical ingredients in unlocking the potentials for profit making and growth.

5.1.3 Firm Characteristics

Descriptive analysis showed that firm characteristics is a critical element of the firm financial performance. Majority of the responses agreed strongly that bigger firms have greater financial prowess compared to small ones. Small firms in the industry do struggle to meet their financial obligations. There was also a consensus that organization that have operated for at least three years have more potential to growth as compared to younger firms that have been in existence for less than three years. Firms in urban centres were also found to do better than those in rural or remote areas. This may due to high disposable income in urban areas as compared to rural areas.

Further, the regression analysis showed that firm characteristics had major direct effect on performance of private security firms in Kenya. Firm characteristics such as size, age, geographical area of operation was directly related to firm performance. Bigger, older and urban based private security firms performed better than small, younger and rural based firm's counterparts.

5.1.4 Finance Access Regulations

Descriptive analysis revealed that finance access regulation is also a key factor affecting PSCs performance. The research showed that nonexistence of collateral denies the firms opportunity to access enough capital, thereby affecting their performance. Most financial institutions were found to be reluctant to lend to private security firms. For those who could access the funds, they complained of high cost of getting the finances. Further, the regression analysis revealed that finance access regulations had a positive effect on performance. The effect was however not significant hence aspects such as collateral requirements and cost of finance may not necessarily translate to low performance. The research therefore concluded that finance access regulations did not moderate the relationship between firm specific factors and financial performance of private security firms.

5.1.5 Private Security Industry Regulations

Finally, descriptive analysis revealed that private security industry regulations is also an important factor affecting the PSCs financial performance. Majority of the firms accepted strongly to be training their personnel to have a better prospect of growth. Majority of the respondents raised a concern that complying with the minimum wage requirement is not tenable and it acts as a punitive to small firms. Furthermore, they opined that offering training as required by regulation might cripple firm performance. The research further revealed that the minimum wages as prescribed in the private

security industry act of 2016 has not been implemented by majority of small firms. The smaller security firms were also lagging behind in provision of training to their employees especially the security guards. Further, regression analysis showed that private security industry regulations moderated the relationship between firm specific factors and financial performance of private security firms.

5.2 Conclusion

The first objective was to determine the effect of firm's financial aspects on performance of private security firms in Kenya. The research established that firms' financial aspects had a positive and significant effect on financial performance of PSCs in Kenya. The research thus concluded that those financial aspects such as better liquidity through strong cash flow, having financial statements audited among Kenyan security firms have a strong contribution to financial performance. Firms that have employed qualified accountant have high quality financial statements making it possible to correctly measure financial performance. Additionally, firms with better cash flows were in a better condition to settle maturing obligation as the fell due hence improved relationship with suppliers. Firms with better books of accounts can also easily access external funding for the business hence improved financial performance.

The second objective was to establish the effect of entrepreneur's attributes on performance of private security firms in Kenya. The research concluded that entrepreneurship attributes made a major contribution to the performance of PSCs operating in Kenya. Therefore, entrepreneur attributes such as networking prowess, financial literacy and leadership were critical for successful business operation and financial performance. Entrepreneur attributes needs to be highly upheld in order to have a well-functioning and a promising enterprise. Entrepreneurship is critical for innovation within a country and entrepreneurs must cultivate useful skills and

attributes needed for current challenges and an uncertain future in the competitive business environment.

The third objective was to determine the effect of firm's characteristics on performance of private security firms in Kenya. The research established that firm characteristics had a major direct effect on financial performance of PSCs operating in Kenya. The research thus concluded that firm characteristics such as age, size and location were very critical for improving financial performance of PSCs. Larger PSCs tended to perform better compared to their smaller counterparts. Big firms are able to rip the benefits of economies of scale through reduced average cost of operation and improved financial performance. Further, private security firms that had been in operation for longer period beyond three years tended to perform better given their experience. Moreover, PSCs that operated in urban areas tended to perform better than their counterparts in rural areas due to more opportunities for business in urban areas.

The fourth objective was to establish the moderating effect of finance access regulations on the effect of firm specific factors on financial performance of private security firms in Kenya. The research revealed that financial access regulations did not moderate the nexus between firm specific factors and financial performance. The research thus concluded that finance access regulations were negatively related with financial performance. The effect was not significant given that most private security firms tended to rely more on equity funding. Most private security firms that did not have adequate collateral found it a challenge to access finances from financial institutions. Further, the interest rate on loans was another hindrance to financial performance. It was further concluded that small firms in the industry find it hard to access funds from the money lending institutions. The research thus concluded that

finance access regulations negatively influenced the financial performance of PSCs in Kenya.

The fifth objective was to establish the moderating effect of private security industry regulations on the effect of firm specific factors on financial performance among private security firms in Kenya. The research revealed that private security industry regulations moderated the nexus between firm specific factors and financial performance of private security firms in Kenya. The research therefore concludes that existence of comprehensive and detailed regulatory system at the national level is critical in intruding the discipline in the sector. There is need for detailed codes of practice for private security companies operating in Kenya to enhance security situation for the public and improve the performance of the industry as a whole. Better-regulated industry should be able to create additional employment and create wealth for nation in terms of economic growth.

The final objective sought to examine the joint effect of firm financial aspects, entrepreneur attributes, firm characteristics, finance access regulations and private security industry regulations on financial performance of private security firms in Kenya. The research showed that firm specific factors (financial aspects, entrepreneurial attributes and firm characteristics) and private security industry regulations had a major significant effect on the financial performance of PSCs operating in Kenya. The research thus concluded that firm specific factors (financial aspects, entrepreneur attributes and firm characteristics) and business regulatory requirements explained financial performance for private security firms.

5.3 Recommendations

The findings have implication for theory, policy and practice. Regarding theory, the research extends the application of various theories in the examination of the nexus between firm specific factors, business regulatory requirements and financial performance. The research has expanded the application public interest regulation in understanding how private security industry regulation explains financial performance. Where more regulations tend to inhibit financial performance through increased cost of operation. The research findings also inform how scale efficiency theory explains financial performance of private security firms such that firms harnessing their size advantage are able to enjoy lower operational cost and improved financial performance. Further, the research findings inform credit access theory that shows that access to collateral influences ability of private security firms to get access to capital needed for growth and performance. The research findings also have implication regarding application of social network theory. The research findings inform the direct nexus between entrepreneur social networks and improved financial performance of private security firms.

The research makes various recommendations aimed at practice. The research suggests to top management of PSCs in the country to keep proper financial statements and employee competent accountants to help track progress of the enterprise. The firms should also have their books of accounts audited by competent external auditor. These would improve the quality of internal systems and encourage believability in the financial records among financiers. The management of PSCs also ought to achieve high return on investment. Improving quality, access and usage of financial products can enhance financial stability among private security firms. Supportive financial aspects such competent accountant, audited financial statements, meeting

financial obligations would eventually lead to increased performance of private security firms in Kenya.

Secondly, the research suggests to the owners/mangers of private security firms should have the required professional attributes that can enable their businesses thrive. They should employee managers with the required academic qualifications. Entrepreneur's attributes such as financial literacy and networking are critical for performance of PSCs operating in Kenya. Owners of PSCs operating in Kenya ought to build their networks. The networks can be built with other PSCs, suppliers, customers among other groups. The network avails resources such as information needed to reach new market segment. The owners of PSCs in Kenya should also enhance their financial literacy. This can be done through attending trainings on various aspects of financial literacy such as investment evaluation, cash management, cash budgeting, and book keeping among other areas.

It is also recommended that the currently existing small firms should strive to go big, as there are a lot of advantages that come with big size. They will be able to increase profits and as well access finances easily from money lending institutions. Bigger firms with adequate tangible assets can easily access credit finance source easily. The business can use the finance generated to expand and improve future growth. The business can also utilise the economies of scale created through expansion of operations. Larger firms have advantage of reducing average cost as operation increases. Further, the research recommends to PSCs in Kenya to continue accumulating experience and knowledge. Older firms with adequate wealth of experience can easily manage economic hardships. The research also suggests to management of PSCs to identify strategic locations for their operations. Strategic location ensures that the business has enough flow of prospective and current

customers. It is recommended that the government should create a conducive environment where private security firms in the industry are able to access loans and grow their businesses.

The research also suggests to PSCs management to enhance their booking keeping systems and accumulate tangible non-current assets to enable them easily access credit from financial institution. The firms should employ qualified accountant to help with preparation of financial statements. The also ought to have in place computerised accounting software that can improve the work of accountant by minimising errors and omissions when preparing books of accounts. The management of PSCs should also ensure their financial statements are audited by trained and licensed auditors. This will ensure that statements reflect true and fair of the financial status of the business. The audited financial statements become handy when seeking for credit finance from financial institutions. PSCs management ought to also build their collateral by purchasing and accumulating tangible fixed assets with high value such as land that can be used as collateral against loans taken from financial institutions.

Finally, it was recommended that firms in the industry should all adhere to the regulations and procedures set by the authority in order to avoid a lot of problems that may make them lose even the little money they have. The PSCs in Kenya should be training their security guards and other staff. The training can be on job or off job. Training should cover modern ways of dealing with insecurity and crime. The training should also include handling of weapons. Better-trained staff should be able to perform better on the job hence improved collective performance of the employees and the firm. Further, the PSCs should strive to pay a least the minimum wage set by the government. Well-remunerated staff should be able to have high commitment to the firm and avoid other motivation to abate crime. Poorly paid employees may

collude with criminals to plunder resources of the clients they are securing. Adherence to the security sector regulation also ensures that firms can collectively contribute to increasing security within the country as part of their social responsibility.

5.4 Suggestion for Further Studies

Studies on performance of private security firms have been sparsely done. Given that current reach focused on the entire nation with a few respondents picked per firm, the research recommends that future researchers can consider case search research. The case research would allow in-depth analysis of the effect of business regulatory requirements and firm specific factors on financial performance of private security firms. The current research was limited to three firm specific factors (financial aspects, entrepreneur attributes and firm characteristics) and business regulatory requirements (finance access regulations and private security industry regulations). There are other explanatory variables affecting financial performance of private security firms that were not within the scope of the current reach.

The research recommends that future studies can examine other drivers of financial performance that are critical to performance of private security firm. The examination of other factors would expand the breadth of the application of research results. Finally, the current research focused on private security firms. The research findings have limited ready application for decision making in private security firms in Kenya. Thus, further research ought to be undertaken in non-private security institutions to assess whether the findings are consistent. Finally, the research adopted primary data to measure explanatory variables of the research. There are aspects of the explanatory variables that may not be adequately measured by primary data compared to, if secondary data was adopted. The research recommends that future studies should be

undertaken using a variety of instruments including interview schedule, questionnaires, case narratives, focus group discussion among other instruments.

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APPENDICES

APPENDIX 1:

LETTER OF INTRODUCTION

Dear Respondent,

REF: DATA COLLECTION

I am a PhD student at the Department of Commerce, School of Business & Economics at Murang'a University of Technology. I am carrying out a study on Moderating effect of business regulatory requirements on the effect of firm specific factors on financial performance of private security firms in Kenya. The purpose of the questionnaire is to source information related to my study topic. You have been requested to answer the questionnaire items as honestly as possible. The information sourced from you will be treated as confidentially as it is possible and will not be distributed to any other party without your express permission. Your participation will be voluntary.

Thank you

Yours sincerely,

Sign…….

Paul Kuria

APPENDIX 2:

QUESTIONNAIRE

This research seeks to study the study on business regulatory requirements and firm specific factors on financial performance of private security firms in Kenya. To attain the research objective, applicable questions have been provided to collect data for analysis. Kindly reserve you moment to provide the requested information as precisely as possible. Any information given will be not be disclosed to unintended users and will only be used for academic purposes.

SECTION A: ENTERPRISE INFORMATION

1. Name of the Enterprise (Optional)

……

……

……

…...

2. Number of years the enterprise has been in existence

……

……

3. Gender:

Male ☐

Female ☐

4. State your age?

20 -30 years	
31 - 40 years	
Above 40 years	

5. What is your position in the organization?

……

……

6. What is your level of education?

Certificate ☐

Diploma ☐

Degree ☐

Masters ☐

PhD ☐

7. Total Assets (Excluding Land and Building)

……

8. Annual turnover

……

9. Number of employees (Please choose one)

1-50	
51 -100	
101-150	
151-200	
Over 200	

SECTION B: Firm's financial aspects

Kindly respond to the following statement by ticking the appropriate box

	Strongly agree	**agree**	**neutral**	**disagree**	**Strongly disagree**
The firm keeps Proper financial statements					
The firm has a competent accountant who oversees the accounts department.					
The financial statements are audited by an external auditor.					
The firm can comfortably meets it current financial obligation					
The cash flow are well projected for the firms activities					
There is return on investment of company finances.					

SECTION C: Entrepreneur's attributes

Kindly respond to the following statement by ticking the appropriate box

	Strongly agree	**Partly agree**	**neutral**	**Partly disagree**	**Strongly disagree**
The owner is knowledgeable about finances and strategic plan for the firm					
The owner is academically qualified to propel the firm to the next level.					
The firm supports career development on its employees					
The owner have great network that helps business to grow					
The owner have political ties and connections that have an impact in business growth					
The gender of the owner affects business operations					
Women are more preferred for financing than men					

SECTION D: Firm Characteristics

Kindly respond to the following statement by ticking the appropriate box

	Strongly agree	**Partly agree**	**neutral**	**Partly disagree**	**Strongly disagree**
Your firm is a bigger firm in the private security industry compared to its competitors					
Your firm size is a hindrance to its operation					
Financing boost private security firms performance					
Your firms has operated for more than three years					
Your firm's branches in the urban areas performs better than those in rural areas.					

SECTION E: Finance Access Regulations

Kindly respond to the following statement by ticking the appropriate box

	Strongly agree	**Partly agree**	**neutral**	**Partly disagree**	**Strongly disagree**
Your firm has sufficient collateral to meet requirement of financiers					
Financial institutions are reluctant to lend to your firm.					
The cost of accessing finance for your private security firm is higher					
Your firm has defaulted on credit facility in the past					
The financing regulatory requirements are punitive against your firm					

SECTION F: Private Security Regulatory requirements

Kindly respond to the following statement by ticking the appropriate box

	Strongly agree	Partly agree	neutral	Partly disagree	Strongly disagree
Compliance to regulations and procedures of the act is barriers to your firm operations					
Your private security firm trains its personnel adequately					
The cost of training as per required by the regulation is high to your firm					
Your private security firms complies with minimum wage requirements set in the act.					
Complying with minimum wage requirements in your private security firms is a challenge					
Robust regulations in private security industry can cripple a firms operation					

SECTION G: Firm Performance

Kindly provide me with the following information from your financial statements

Year	Total Equity (Ksh.)	Profit before Tax (Ksh.)
2018		
2019		
2020		

APPENDIX 3.

LIST OF PRIVATE SECURITY FIRMS

1	Anchor Security Services Ltd.
2	Babs Security Services Ltd
3	Basein Security Services Ltd
4	Bed Rock Holdings Ltd
5	Boeramain Security Ltd.
6	Papaton Security Services Limited
7	Casa Security Ltd.
8	Catch security links ltd
9	saladinkenya ltd
10	Kruggers security services ltd
11	Kong Security Ltd
12	Delta Guards Ltd
13	Kisii Security Guards
14	Eagle Watch Company Ltd
15	Ekosowan Security Express Services Ltd.
16	Flashcom Security Ltd
17	Glosec Services Ltd.
18	GratomBabz Services Ltd
19	Wecan Security Risk Management Solutions
20	Gyto Security Ltd.
21	Hatari Security Services Ltd
22	Ideal Security Services Ltd
23	Intercity Secure Home Ltd.
24	Intersecurity Services Ltd
25	Ivory security services ltd.
26	Jeff Hamilton Services
27	Kenwatch Security Services Ltd.
28	Bridge Security Services Ltd
29	Sarman security services
30	Kleen homes security services ltd
31	Two Four Seven Guards Ltd.
32	Gillys Security &Investigations Services Ltd
33	Beemark holdings ltd
34	Gateamour Security Services Ltd
35	Frontiers Security Consultants Ltd
36	Kemirwa Global Security Services Ltd
37	Bonarys security Services
38	Arion (K) Ltd
39	Marco Security Ltd.
40	Masterpiece Security Services Ltd.

41	Metropol security services ltd
42	Mocam Security Ltd.
43	Newnham Security Ltd.
44	Pachaz Kenya ltd
45	Pada Private Investigators Ltd.
46	Lavington Security Guards Ltd
47	Pelt security services Ltd
48	Perimeter protection ltd.
49	Pride kings services ltd
50	Private Security Training Academy Ltd.
51	Best Africa Security Experts Ltd (BASE)
52	Protective Custody Ltd
53	Race Guards Security Ltd
54	Vickers security Services Ltd
55	Rapid security ltd.
56	Robinson Security Guards Ltd
57	Samo Security Services
58	Saos Security Ltd.
59	Vazguards protection services ltd
60	Securitas (K) Ltd.
61	Senaca E.A Security Ltd.
62	Snipper Security Ltd.
63	Solvit Security Solutions
64	VIigilmax Security Services Ltd
65	Straight Security Ltd
66	Gallant Security Services Ltd
67	Tick Security Services Ltd.
68	Tofada Security Services Ltd..
69	Top Flight Security Ltd
70	Kenya School of Security Management Ltd
71	Benro Security
72	Lakers Pride (LP) Security Services ltd
73	Davkos Security Services Ltd
74	Idar Groups Security Services Ltd
75	Superior Security Ltd

APPENDIX 4:

SUMMARY OF EMPIRICAL LITERATURE AND STUDY GAPS

Researcher	Study focus	Methodology	Research Findings	Research gaps	Addressing gaps
Baum (2017).	Effects of entrepreneur's on venture growth	The study sourced data from 229 entrepreneur's	The results showed that self-efficacy, motivation and communicated vision directly impacted growth of ventures	Baum (2017) focused on communicated vision, motivation and self-efficacy	The current study focusses on aspects of entrepreneur attributes such as networking and financial literacy.
Banerjee and Duflo (2017)	Financial performances of firms both before and after they accessed loans in India.	The study was a survey of 296 organizations in India.	The research revealed that firms began to expand their sales proportionately to the additional loan sources accessed.	The research was limited to India with different operating environment hence limited application in Kenyan setting.	The current study was based in Kenya among private security firms.
Diaka (2018)	Effects of an entrepreneur's experience on firm performance.	The study adopted descriptive research design and analysis was based on inferential statistics.	The findings of the study showed that entrepreneur's experience improves firm performance.	The research focused on firm performance in general.	The current study examined the effect of entrepreneur attributes on financial performance.
Gaynor et al (2016)	Determinants of quality of financial reporting in US, UK and Dutch	The study was based on 21 research instruments with data being collected between 2005 to 2007.	The study revealed that annual financial statements were reliable and timely.	The study focused on quality of financial reports based on qualitative data	The current study examined the effect of financial aspects on financial performance based on quantitative data collected via structured questionnaires.

Page, Noel et.al (2009)	Impact of the entrepreneur's knowledge and networking activity on the venture performance	The research was a survey of 177 entrepreneurs. The study adopted multivariate regression model for data analysis.	The study revealed that knowledge of the business and networking have a positive impact on performance.	The study focused on performance of ventures in general.	The current study examined the effect of entrepreneur attributes that also involved gender on financial performance.
Pervan et al (2017)	Influence of firm size, assets turn over, liquidity and leverage on business performance.	The study adopted panel data model from 2002 to 2010 for data analysis.	The study revealed that size of the firm had a weak positive influence on its profitability.	The study was based on secondary data only that may not adequately measure aspects such as firm size and assets turn over.	The current study evaluated the effect of firm characteristics on financial performance based on primary data.
Buyinza and Bbaale (2013)	Effect of credit constraint influences on performance of EAC firms	The research adopted Simple OLS and probit models in data analysis and hypotheses testing.	The study revealed that access to credit enhanced financial performance of firms in EAC region.	The study focused on export-based firms operating in EAC countries.	The current study was based in Kenya among private security firms.
Memba (2015)	Impact of venture capital on growth of SMEs in Kenya.	The research adopted multivariate regression analysis for data analysis.	The results revealed that venture capital had a positive impact on growth of SME they finance.	The study focused on effect of venture capital on growth.	The current study evaluated the effect of finance access regulation including interest rate and collateral on financial performance.
Dogan (2017)	Effect of firm's size on its profitability.	The study collected data of two hundred companies which were active in International	The study revealed a positive relationship between the firm sizes and firms' profitability.	The study focused on firm size only. Besides, the study adopted ROA as	The current study evaluated the effect of other aspects of firm characteristics in addition to firm size on

		Security Exchange (ISE) between 2008 to 2011.		measure of financial performance.	financial performance measured by ROE.
Chen et al. (2017)	Relationship between entrepreneur's human capital and venture performance on Taiwan firms	The study was a Survey of 155 tech-firms in Taiwan. Simulation was used for analysis.	The paper established that entrepreneurial experience and manpower impacted venture performance positively.	The study focused on entrepreneurial experience and manpower and how they influenced performance.	The current study focused on attributes of entrepreneur including networking, financial literacy and gender.
Ondieki et al (2013)	Effect of external financing on the financial performance of Sacco's in Kisii Central District.	The study collected data from a sample of 100 respondents. Data was analysed based on regression equation.	The study showed that financial performance was influenced by investment policies and portfolio quality.	The research was limited to Sacco's that have a different operating environment hence limited findings application.	The current study was in private security firms on effect of finance access regulations including collateral and interest rate on financial performance.
Haron, Said, Jayaraman, and Ismail, (2013)	Impact of the factors of access to credit among SMEs.	The study adopted descriptive and inferential analysis for the data collected.	The findings of the study revealed that collateral was a leading factor influencing SMEs in obtaining Loan facility among SMEs.	The study was limited to factors affecting access to credit among SMEs but did not follow up with examining effect of the factors on financial performance.	The current study examined the effect of finance access factors including collateral and interest rate on financial performance.

Shaheen, Naqvi and Khan (2013)	Effect of employees training on organizational performance.	The study adopted both quantitative and qualitative methods in data collection and analysis. Further, it applied over 220 sample size	The study revealed a significant and positive relationship between training and organization performance.	The study focused on employee training alone as an aspect of private security regulation.	The current study is on effect of aspects of private security industry regulations including minimum wage and training on financial performance.
Kaguru and Ombui (2014)	Factors affecting performance of private security companies in Nairobi.	The research adopted descriptive research design	The study revealed that Kenya should develop a PSC regulatory framework since this affects the performance of PSCs.	The study was carried out before the private security industry act of 2016 was enacted in Kenya.	The current study evaluated the effect of firm specific factors, finance access regulations and private security regulations on financial performance of private security firms. The study has been carried after enactment of private security industry act of 2016.
Martinez-Ferrero et al. (2016)	Consequences of financial reporting quality on corporate performance of firms in China.	Secondary data was sourced from 2002 to 2010. The study used simultaneous equations for panel data, via the GMM estimator	The study revealed that firms which report financial statements with better quality information enjoy a higher financial performance.	The simultaneous equation adopted often suffer from problem of lack of unique solutions.	The current study used multivariate OLS and stepwise OLS in data analysis on the effect of financial aspects on financial performance.
Van Stel et al. (2021).	Effect of education on	The research was based on eight years'	The study revealed that education was a strong driver of the	The study focused on effect of level of education on	The current study evaluated the effect of entrepreneur attributes such as networks,

	performance of an entrepreneur	panel data of 15 EU countries.	venture performance.	entrepreneur performance.	gender and finance literacy on performance
Inyang ad Abraham, (2016).	Role of commercial security firms in control of insecurity in the Akwa Ibom State of Nigeria.	The study adopted qualitative design and data collected based on interview schedule.	The findings of the study showed that commercial security sector in Nigeria has been compromised by unregistered firms constituting insecurity risk in the country.	The study focused on role of commercial security firms on crime control in Nigeria.	The current study evaluated the effect of private security regulations on financial performance among private security firms in Kenya.
Ouma (2017).	Determinants of quality of financial statements among listed commercial banks in Nakuru.	Descriptive research design was adopted to collect data from	The study revealed a significant relationship between computerized accounting and quality of financial reporting.	The study was carried out in banking industry with a different operating environment.	The current study examined the effect of firm financial aspects on performance of private security firms. The study used census to gather data.
Velnampy and Niresh (2015)	Relationship between size and profitability of listed manufacturing industries in Sri Lanka.	The study collected data from 15 firms from 2008 to 2012.	The study revealed that the relationship between firm size and profitability was not significant.	The study was carried out in manufacturing sector in Sri Lanka with different operating environment.	The current study examined effect of firm characteristics on financial performance of private security firms in Kenya.
Chukwunwike et al. (2018)	Impact of operating cash flows on the banks'	The study adopted secondary data from 2009 to 2013. Multivariate	The study established positive association between	The study was based on banking industry with	The current sought to examine effect of financial aspects on financial

	profitability in Nigeria.	regression model was used in data analysis.	operating cash flow and the profitability.	limited application in other industries.	performance in the private security sector in Kenya.
Abbasi and Malik, (2015)	Effect of firms' Size on financial performance of growing firms listed in Karachi	The study was based on cross-sectional design. Further, data was analysed based on regression equation.	The findings of the study revealed that firm sizes have moderating effects on firms' growth and performance.	The study focused on moderating effect of firm size on financial performance.	The current study examined the direct effect of firm characteristic including size, age and location on financial performance.
Mahfoudh (2015)	Relationship between firm age and financial performance of firms listed in the agricultural sector of NSE	The research adopted correlational research design and data was collected from 2007 to 2012.	The study revealed that firm age influences financial performance of firms directly.	The research was limited to effect of firm size on financial performance.	The current study evaluated the effect of firm characteristics aspects including age, size and location on financial performance.
Edward and Newton (2015)	The conditions that effect agriculture credit supply to small-scale farmers in Kiambu County, Kenya	The study adopted OLS regression model for data analysis and hypothesis testing.	The research revealed a positive correlation between collateral and accesses to finance among small scale farmers.	The research was focused on agricultural based firms hence limited applications in other contexts outside agriculture.	The current study was on effect of finance access regulations on financial performance among private security firms.
Afrifa (2016)	Association between cash flows and firm performance in UK	Study adopted unbalanced panel regression model. A sample of 6,926 non-financial SMEs was used in the study.	The study established that firms with sufficient cash flows should invest in working capital.	The study was based in UK firms with different operating environment as Kenyan ones.	The current study was based in private security industry in Kenya on effect of financial aspects such as cash flow and financial statement quality.

		Data collected from 2004 to 2013.			
Wekesa, Maalu, Gathungu, and Wainaina (2016)	Impact of an entrepreneur's experience on firm performance.	The study employed regression model for analysis.	The findings showed that entrepreneur experience has a direct impact on venture performance.	The study examined performance of the firm in general.	The current study examined the effect of entrepreneur attributes on financial performance.
Abiodun (2016)	Effect of financial literacy on Performance of SMEs in Nigeria	The research adopted descriptive design and simple random sampling. Further, Multivariate regression model was used for data analysis.	The findings revealed that financial literacy has a major impact on performance.	The study focused to financial literacy aspect of entrepreneur attribute only.	The current study examined the effect of entrepreneur attributes including networking, financial literacy and gender on financial performance.
Ndungu (2016)	Factors affecting access to credit among SME's in Murang'a County.	The study targeted 1020 SMEs with sampling being based on stratified random sampling to pick 102 SMEs. The study adopted factor and regression analysis for hypotheses testing.	The finding revealed that collateral security, interest charged on loans, and literacy levels influenced access to credit in a major way.	The research was localized in Murang'a county of Kenya hence limited application in other contexts.	The current study was among private security firms in Kenya.
Olanrewaju, Ansary, and	Challenges facing SMEs in accessing credit	The study adopted regression equations to establish the	The study revealed that lack of collateral was a major	The study focused on challenges in accessing credit	The current study evaluated the effect of finance access factors including collateral

Agumba (2016)	from financial institutions in Nigeria.	causal effect relationship among study variables.	challenge in accessing credit from financial institutions.	among SMEs in Nigeria but did not consider how the factors affect performance.	and interest rate on financial performance.
Augustine and Jacob (2017)	Impact of cash flow on the performance of Nigerian companies.	The study adopted Ex post facto research design. Pooled Ordinal Least Square (OLS) model.	The study revealed a direct causal effect link between cash conversion cycle, Cash holding and ROA of firms.	The research was carried out in Nigeria that has different regulatory environment from Kenya.	The current study evaluated the effect of firm financial aspects on financial performance in Kenya.
Ogbeide and Akanji (2017)	Effect of Cash Flow Operating activities on Nigerian insurance companies' financial performance.	The study used OLS regression model in data analysis.	The paper revealed that cash flow has major effect on financial performance.	The Study was in insurance sector that has different operating environment. Besides the study was based on secondary data alone.	The current study examined the effect of financial aspects on financial performance in private security firms in Kenya. It incorporates both primary and secondary data.
Thuku (2017)	Determinants of access to credit among SMEs in Nyeri County.	The research adopted a sample size of 26 SMEs from a target population of 200 SMEs in agriculture. Further, the study adopted regression analysis for hypotheses testing.	The study revealed that the firm characteristics such as size and location influenced access to credit among the SMEs studied.	The study focused on impact of size, and location on finance access among the SMEs that participated in the study.	The current study evaluated the effect of finances access factors including cost of credit and collateral on financial performance.

Akinyi (2018)	Effect of firm size on financial performance of sugar firms in West Kenya	The study adopted correlational research design. Further, panel data from 2007 to 2016 was collected and analysed based on panel regression models.	The findings showed that firm size had a direct effect on financial performance.	The study was limited to sugar processing in Kenya with different operating environment.	The current study based on private security firms in Kenya examined effect of firm's characteristics on financial performance.
Charles, Ahmed, Joshua (2018)	Influence of firm characteristics on profitability among listed Nigerian firms.	The study targeted 22 firms with secondary data sourced from 2011 to 2016. Panel data regression models were adopted for data analysis.	The study revealed that firm size, sales growth and leverage had major effect on profitability. Further, effect of liquidity and firm age on profitability were not significant.	The study was based on secondary data exclusively.	The current study examined effect of firm characteristics on financial performance based on primary data.
Mumin (2018)	Factors affecting access to finance from commercial banks in Kenya.	The research adopted descriptive research design where Pearson correlation coefficient and ANOVA were adopted.	The research revealed that banks need collateral before disbursement of credit to businesses.	The research focused on factors of credit access among commercial banks in Kenya.	The current study evaluated the effect of finance access regulations including interest rate and collateral on financial performance.
Sibanda, Hove-Sibanda and Shava (2018)	Influence of access to finance on performance of export-oriented	The study was based on cross-sectional study design. Further, the research	The research noted direct relationship between access to finance and	The study was limited to Zimbabwe that has different operating	The current study in Kenya was on effect of finance access regulations on financial performance.

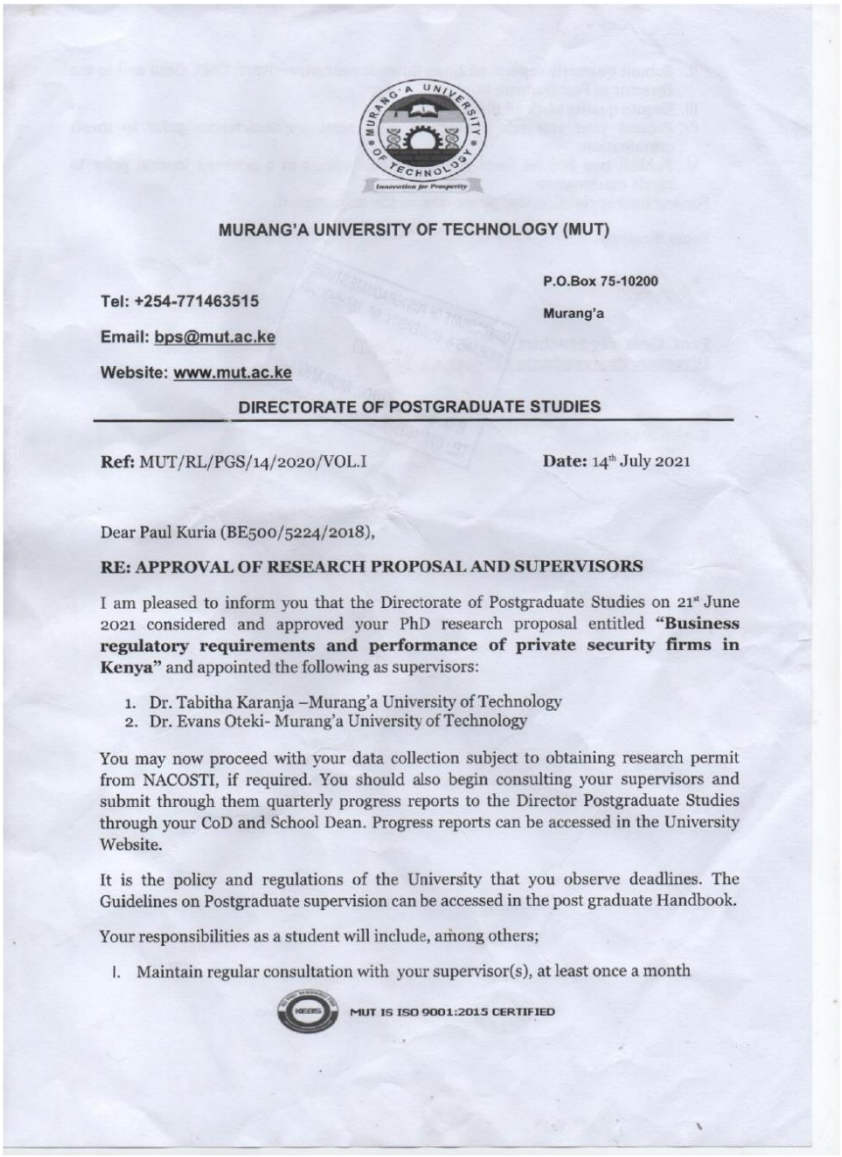
	SMEs in Zimbabwe.	data was analysed based on SEM-PLS model.	performance of SMEs studied.	environment hence limited application in other contexts.	
Mutonyi and Sirera (2018)	Effect commercial security on security in Kenya	The research adopted cross sectional survey design. Further, purposively sampled qualitative data was analysed thematically.	The finding revealed a positive effect of commercial security on the security in Kenya.	The study focused on how commercial security affects security in Kenya.	The current study went a step further in examining the effect of private security regulations on financial performance in Kenya.
Abbas, Raza, Nurunnabi, Minai (2019)	Relationship between entrepreneurial business networks and performance of SMEs.	The study adopted multivariate regression model.	The study established that business network had a direct effect on firm performance.	The study was limited to entrepreneur networks on performance.	The current study evaluated the effect of other entrepreneur attributes like financial literacy and gender on financial performance.
Bakr (2019)	Relationship between motivation and performance of firms in India	The study adopted SEM- PLS model for data analysis and hypotheses testing.	The finding revealed that motivation aspects like training and wages has a direct effect on firm performance.	The study was carried out in India with a different operating environment hence limited application in other settings.	The current study was based in Kenya on effect of private security regulations on financial performance among private security firms.
Nguyen and Nguyen (2020)	Effect of cash flow statements on commercial banks' lending decisions in	The research sourced data from 160 credit officers in Vietnamese banks.	The study revealed that statement of cash flow plays a significant role in the	The research was carried out in banking institutions with unique operating	The current study is on private security sector on effect of financial aspects such as cash flows on financial performance

	Vietnamese banks.	Student T-tests was adopted for analysis.	lending decisions of banks.	environment hence limited application.	
Mulwa (2020)	Effect of firm size on financial performance of deposit taking microfinance institutions in Kenya.	The study adopted panel data stretching from 2011 to 2018. Fixed effects and random effects models were adopted.	The study revealed that there is a major effect of firm size on financial performance.	The study was based on secondary data alone that may not capture all aspects of firm size.	The current study evaluated the effect of firm characteristics on financial performance based on primary data.
Nguyen, Kim, Quoc and Trung (2021)	The effect of firm specific variables and macroeconomic variables on SMEs performance in Ho Chi Minh City Stock Exchange.	The study adopted generalised moment model adopted.	The findings showed that macroeconomic and firm-specific variables explained financial performance of SMEs.	The study focused on firm size as an aspect of firm characteristic.	The current study evaluated the effect of firm characteristic aspects like size, age and location on financial performance.
Msomi and Olarewaju (2021)	Factors affecting financial sustainability among SMEs in South Africa.	The research adopted purposive sampling to collect data from 310 respondents. Further, the study analysed data based on multivariate regression analysis.	The study revealed that budgeting, financial awareness, accounting skills and access to finance had a direct major effect on financial sustainability among the SMEs studied.	The study was limited to SMEs in South Africa with different operating environment. Besides the study ignored financial access factors	The current study was on effect of finance access regulations on financial performance among private security firms in Kenya.

				including collateral and interest rate.	
Ashywel, Olasojumi and Opone (2021)	Influence of staff training on firm performance of microfinance banks.	The research adopted OLS regression for data analysis.	The finding revealed that training has a direct effect on productivity of the organizations studied.	The study was limited to training on microfinance sector.	The current study evaluated the effect of private security industry regulation aspects including minimum wage and training on financial performance.

APPENDIX 5:

RESEARCH AUTHORIZATION (MUT)



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DIRECTORATE OF POSTGRADUATE STUDIES

Ref: MUT/RL/PGS/14/2020/VOL.I **Date:** 14th July 2021

Dear Paul Kuria (BE500/5224/2018),

RE: APPROVAL OF RESEARCH PROPOSAL AND SUPERVISORS

I am pleased to inform you that the Directorate of Postgraduate Studies on 21st June 2021 considered and approved your PhD research proposal entitled **"Business regulatory requirements and performance of private security firms in Kenya"** and appointed the following as supervisors:

1. Dr. Tabitha Karanja –Murang'a University of Technology
2. Dr. Evans Oteki- Murang'a University of Technology

You may now proceed with your data collection subject to obtaining research permit from NACOSTI, if required. You should also begin consulting your supervisors and submit through them quarterly progress reports to the Director Postgraduate Studies through your CoD and School Dean. Progress reports can be accessed in the University Website.

It is the policy and regulations of the University that you observe deadlines. The Guidelines on Postgraduate supervision can be accessed in the post graduate Handbook.

Your responsibilities as a student will include, among others;

I. Maintain regular consultation with your supervisor(s), at least once a month

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II. Submit quarterly reports on time, through your supervisors, CoD, Dean and to the Director of Postgraduate Studies;
III. Ensure quality work all through;
IV. Present your research findings at 2- 3 seminars/conferences prior to thesis examination.
V. Publish two articles from your research findings in a refereed journal prior to thesis examination

For any further clarification, please contact the undersigned.

Yours Sincerely,

Prof. Geoffrey Muchiri
Director, Postgraduate Studies

DIRECTORATE OF POSTGRADUATE STUDIES
MURANG'A UNIVERSITY OF TECHNOLOGY
14 JUL 2021
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TEL: 0771463515, Email: info@mut.ac.ke

Cc
Registrar (ASA)

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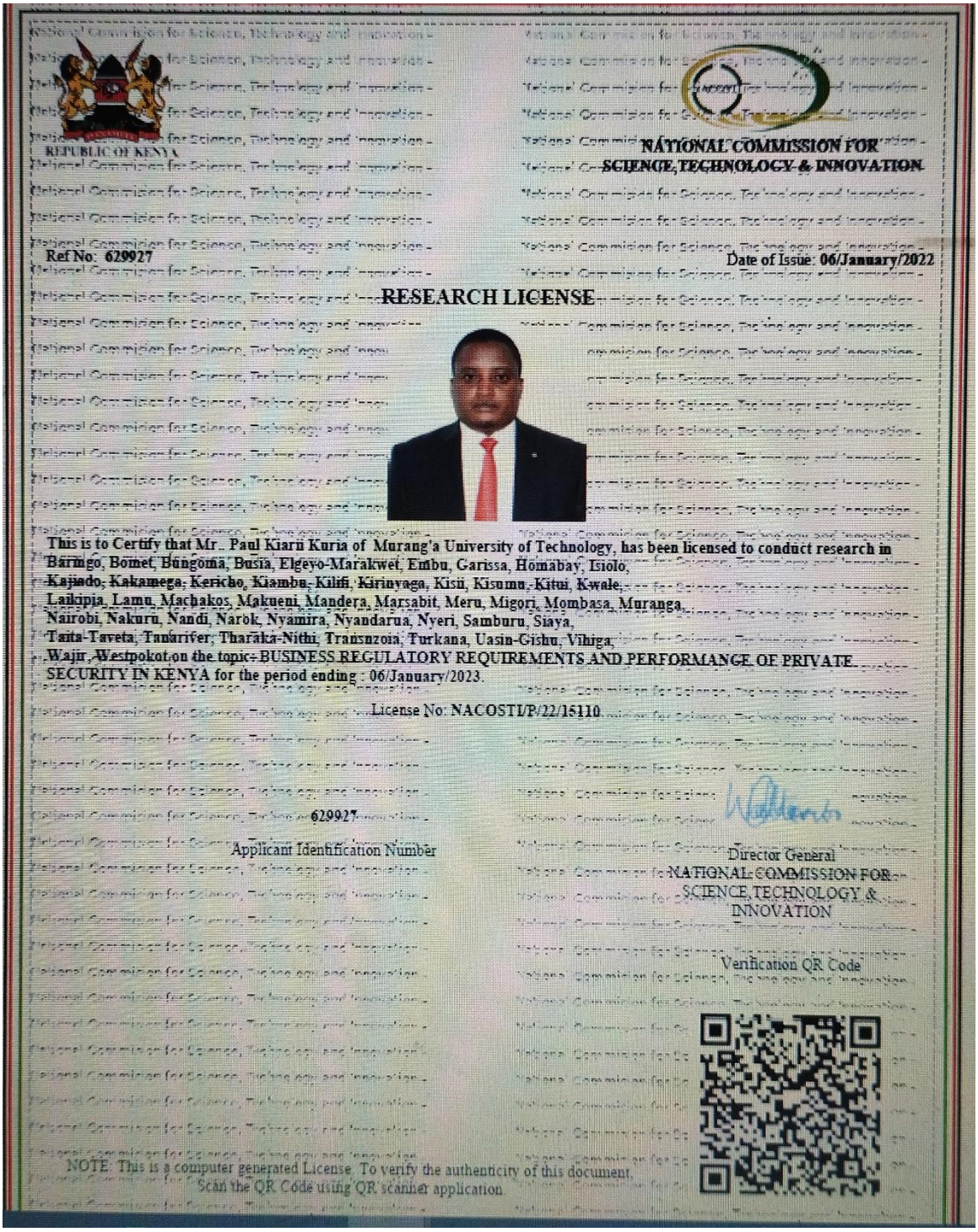
APPENDIX 6:

RESEARCH AUTHORIZATION (NACOSTI)



REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 629927

Date of Issue: 06/January/2022

RESEARCH LICENSE

This is to Certify that Mr.. Paul Kiarii Kuria of Murang'a University of Technology, has been licensed to conduct research in Baringo, Bomet, Bungoma, Busia, Elgeyo-Marakwet, Embu, Garissa, Homabay, Isiolo, Kajiado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Marsabit, Meru, Migori, Mombasa, Muranga, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-Taveta, Tanariver, Tharaka-Nithi, Transnzoia, Turkana, Uasin-Gishu, Vihiga, Wajir, Westpokot on the topic: BUSINESS REGULATORY REQUIREMENTS AND PERFORMANCE OF PRIVATE SECURITY IN KENYA for the period ending : 06/January/2023.

License No: NACOSTI/P/22/15110

629927

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code

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APPENDIX 7:

PUBLICATIONS

The following papers have been published from the results of this thesis.

Kuria, P., Oteki, E. B., Karanja, T. W., & Gathogo, G. M. (2022). Effect of Entrepreneur's Attributes on Financial Performance of Private Security Firms in Kenya: *International Journal of Business Management and Technology*

Kuria, P., Oteki, E. B., Karanja, T. W., & Gathogo, G. M. (2022). Relationship Between Firm's Financial Aspects and Financial Performance: A Case of Private Security Firms in Kenya: *International Journal of Management and Commerce Innovation*