

**FIRM LEVEL FACTORS AND INTERNATIONAL
PERFORMANCE OF COMPANIES LISTED ON THE NAIROBI
SECURITIES EXCHANGE**

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DECLARATION


I declare that this thesis is my original work and it has not been submitted for examination to this or any other university.

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DEDICATION

To my dear family, husband Patrick and our children Patrick II, Patrick III and Sarah.

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ABBREVIATIONS AND ACRONYMS

AC	Adaptive Capability
AIMS:	Alternative Investment Market Segment
CFA:	Confirmatory Factor Analysis
COMESA:	Common Market for East and Southern Africa
d.f.:	Degree of Freedom
DOI:	Degree of Internationalisation
EAC:	East Africa Community
EFA:	Exploratory Factor Analysis
EIC	External Institutional Capital
FA:	Firm Age
FC:	Firm Capabilities
FS:	Firm Size
FSMS:	Fixed Income Securities Market Segment
GATT:	General Agreement on Tariffs and Trade
GDP:	Gross Domestic Product
GoK:	Government of Kenya
IC	Institutional Capital
ICT:	Information and Communication Technology
IE:	International Entrepreneurship
IIC	Individual Institutional Capital
IO:	Internationalisation Orientation
IOIC:	Intra-Organisational Institutional Capital
IP:	International Performance
KC:	Knowledge Capability
LV:	Latent Variables
MA	Management Attitudes
MC:	Management Characteristics
MDGs:	Millennium Development Goals
MIMS:	Main Investment Market Segment
MNC:	Multinational Corporation
MT:	Management ties
ns:	Not significant

NSE:	Nairobi Securities Exchange
OII:	Organisation Innovation Intensity
OLI:	Ownership Location and Internationalisation
PCA:	Principal Component Analysis
PLS	Partial Least Squares
RBV:	Resource Based View
R&D:	Research and Development
SE	Standard Error
SEM:	Structural Equation Modelling
SME:	Small and Medium sized Enterprises
SPSS:	Statistical Package for Social Sciences
USA:	United States of America
VAF	Variance Accounted For
WTO:	World Trade Organisation

ABSTRACT

The determinants of international success have always been an issue of importance in international business research. Firm level analysis enhances the understanding of how firms compete in the international market place and what factors influence their relative success. Given the liability of foreignness and the risks and costs associated with doing business in foreign countries, researchers and practitioners have sought to establish how best to successfully utilise and deploy resources and capabilities, thereby contributing to success in international markets and enhancing firm international performance. Building on existing theoretical frameworks and literature, this research offers a firm level analysis of international performance antecedents for developing economy firms. This study draws on a multidisciplinary integrated Kenyan firm international performance framework that extends internationalisation theory, the resource based view and institutional theory and aspects of their relevant extensions in order to investigate the effect of firm level factors on international performance. Specifically, the research focused on the effect of institutional capital, management characteristics, organisational demographics, firm capabilities, internationalisation orientation and degree of internationalisation on firm international performance. The firm capabilities studied were organisational innovation intensity, knowledge capability and adaptive capability. This research adopted a quantitative approach based on a cross-sectional study of publicly quoted companies in Kenya. A semi structured questionnaire was administered for data collection. Structural equation modelling - Partial Least Squares analysis was used to analyse the survey responses and to test the hypotheses. The structural model showed good fit and possessed good reliability and convergent and discriminant validity and the results supported to a great extent the developed and predicted model. The analysis revealed that institutional capital, management characteristics, firm size, organisational innovation intensity and internationalisation orientation were significant predictors of firm international performance. The results indicated that institutional capital and management characteristics have a positive and significant effect on firm capabilities. Additionally, it was also found that the level of firm capabilities influences the effect of institutional capital on international performance. The level of international expansion, measured as the degree of internationalisation was found to influence the effect of firm capabilities on the international performance of a firm as relates to organisational innovation intensity but not for knowledge and adaptive capability. The results also indicate that the internationalisation orientation of a firm moderates the effect of organisation innovation intensity on international performance and the effect of knowledge capability on degree of internationalisation of a firm. These research findings provide information to developing market firms operating in the international market place, and offers insights to management and policy makers by answering the question, "What are the relative effects of firm level factors on the international performance of publicly quoted companies in Kenya?" The outcomes of the study contributes new perspectives to the existing body of developing economy international business literature and suggests directions for future research, while offering implications for academia, management and policy makers.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

World economic activity has been characterised by regional integration, global production and international distribution. Greater global cooperation and increased competition has pushed organisations to adopt an international perspective in order to be competitive and to secure their long-term survival and growth. Changes in economic and regulatory environments, international trade and investment patterns have extended the focus in international business research over the past decade (Johanson and Vahlne, 2009; Cheng, Guo & Skousen, 2011).

International business literature comprises of conceptual and empirical work on a number of issues pertaining to the international performance of firms. Initially, international business studies focused on Multinational Corporations (MNCs) from western based economies such as United States of America (US), Europe and Japan (Bartlett & Ghoshal, 1989, 2002). These firms were primarily viewed as providers of capital for the firms from developing economies who were mostly viewed as the recipients of the capital. Over the past decade, emerging and developing economy organisations adopted a global perspective as they sought new opportunities for growth and success in foreign markets.

Internationalisation of firms has generated interest because of its benefits to firm growth, survival, competitive position, and its positive influence on a nation's economic growth and development. Internationalisation can be a source of growth for

firms. However, it can also be a risky venture that can generate losses which may adversely affect the long term survival of a firm. Success in domestic markets does not guarantee success in international markets (Zeng, Xie, Tam & Wan, 2009). Internationalisation is considered a risky venture because it requires higher resource commitments to buffer cost incurred as a results of international expansion. Additionally, in instances when firms may experience resource constraints, risks may be incurred due to the liability of foreignness and greater managerial complexity experienced when operating in foreign markets (Tseng, Tansuhaj, Hallagan & McCullough 2007; Bianchi & Ostale, 2006).

A review of international business literature reveals conceptual and empirical studies on the determinants of international performance (Sousa, Martinez-Lopez & Coelho, 2008; Nazar & Saleem, 2009). One of the primary objectives of studying the determinants of the international performance is to determine the relative effects of particular factors on variations in performance and consequently their effect on competitive advantage, international expansion, economic growth and firm survival (Zhou, Barnes & Lu, 2010; Lu, Zhou, Bruton & Weiwen, 2010).

Most of the previous studies have been within the context of MNCs from developed economies and some emerging economies (Luo and Tung, 2007). Some scholars have noted that there is no definitive agreement on the nature, direction and significance of the relationships studied within the previous studies (Zeng, et al., 2009; Lu et al., 2010; Nazar & Saleem, 2009). Lou and Tung (2007) have highlighted that a rise in transnational companies from emerging and developing economies has necessitated the need for international business scholars to understand the

internationalisation of these firms. Gradually, how firms from developing economies, like Kenya, can acquire, leverage and apply resources and capabilities to support internationalisation and achieve improved international performance is an area of interest for research. It is important to understand the relative effects of firm level factors on the international performance of firms operating in developing economies because of the strategic importance international expansion plays in firm growth and survival so as to provide mechanisms that may enable improved performance of these firms (Dhanaraj and Beamish, 2003).

1.1.1 Firm International Performance

Firm international performance has been defined as the outcomes of a firm's activities in the international market place (Zou & Stan, 1998). Firm international performance has been expressed in generally three forms, financial, strategic and perceptual measures (Zou & Stan, 1998). Measures of international performance that have been studied in business literature include export intensity, international sales, Return on Assets (ROA) (Lu & Beamish, 2001; Zahra & Garvis, 2000; Zeng et al., 2009); profitability and growth in multinationality (Tseng et al., 2007; Hult et al., 2008). Other measures include satisfaction with export performance (Tseng et al., 2007), export profits, achieved strategic goals and management perceived success of the international venture (Cavusgil & Zou, 1994).

The international performance framework in the current research was studied within the context of a number of thematic areas. The key theories were internationalisation theory, resource based view and institutional theory. Internationalisation theory suggests that factors internal to the firm influence internationalisation behaviour and

performance (Beamish & Lupton, 2009; Yamakawa, Peng, & Deeds, 2008; Ruzzier, Hisrich & Antoncic, 2006; Johanson & Vahlne, 1977; Williamson, 1979). According to the Resource Based View (RBV), sustainable superior performance and competitive advantage of any firm is the “outcome of discretionary rational managerial choices, selective resource accumulation and deployment, strategic industry factors and factor market imperfections” (Oliver, 1997, p.699) RBV highlights the effect of firm heterogeneity rather than the external environment on a firm’s performance both in the local and international market place (Tseng et al., 2007; Barney, 1996; Dhanaraj & Beamish, 2003).

Institutional theory suggests that over time, organisational processes and structures become institutionalised and views firms as operating within a social framework of values, assumptions and norms that constitute acceptable economic behaviour, which eventually influences firm performance and competitive advantage (Oliver, 1997). Other theoretical perspectives and extensions of the underlying thematic bases applicable within the area of research on firm level determinants of international performance are the knowledge based view (Drucker, 1995; Spender & Grant, 1996), the dynamic capabilities perspective (Lou, 2000) and international entrepreneurship (Oviatt & McDougall, 2005).

Previous international business research has focused on building knowledge about the determinants of firm international performance (Hult et al., 2008). Zeng et al. (2009) and Lu & Beamish (2006) have acknowledged that it is difficult to select suitable indicators to measure international performance. Other researchers have suggested that multiple indicators of performance should be used as they offer a more

comprehensive picture of a firm's performance in the international market place (Hult et al., 2007; Sousa, 2004). According to Hult et al. (2008), a key precursor to assessing the determinants of the relative success of firms in the international marketplace is the appropriate operationalization of performance. However, Ha-Brookshire (2009) argues that the outcome of firm operations is extremely difficult to define and measure. Previous research has also argued that it is necessary to consider both financial measures and operational outcomes when assessing the performance of organisations (Kaplan & Norton, 1992, 2004; O'Cass & Weerawardena, 2009).

Hult et al. (2008) further argue that "to advance knowledge of how performance is generated in the international" context "and to generate normative conclusions for practitioner use, research should be based on clearly specified measures of performance to minimize misleading results" (p. 1072) Consequently, it is clear that performance measures should be sensitive to industries and research contexts and should focus on multiple indicators and multiple data sources (Sousa et al., 2008; Hult et al., 2008). Some researchers have used multivariate statistical techniques to consider the impact of a limited number of explanatory factors jointly (Hult et al., 2008; Tseng et al., 2007; Zeng et al., 2009).

1.1.2 Firm Level Factors

Firm level factors are the controllable internal effects of the firm that provide it with advantages for engaging in their respective activities with the aim of achieving particular goals and objectives (Zou & Stan, 1998). The determinants of international performance have been classified differently by various scholars. Calatone, Deakwan & Schmidt (2002) classified them as macro and micro level factors, Zou, Fang &

Zhao (2003) used internal and external factors as categorisation criteria and Nazar & Saleem (2009) have categorised them as controllable and uncontrollable factors. Uncontrollable determinants are external environmental factors beyond the control of the firm and include macro level factors and controllable determinants are internal firm level or micro factors. Macro level factors refer to the industry characteristics, country and international business environment in which the firm operates. Examples of macro factors are market characteristics, tariffs, exchange rates, government assistance, legal frameworks and competition among others. Micro level factors comprise of the internal factors of the firm and examples include firm management, strategy, structure, organisational demographics and product characteristics (Calatone et al., 2002). This research focussed on studying the micro level or firm level determinants to international performance. Firm level factors were the focus of this study because of a number of reasons.

Previous studies have tested the differences between external/industry factors and internal/firm factors on firm performance expressed in terms of return on equity, return on assets, internationalisation intensity and growth in multinationality among others (Hawawini, Subramanain & Verdin., 2003; McGahan & Porter, 1997). The results of the industry effect on performance variance ranged from 4% to 18%, whereas the results of firm effect on performance ranged from 27% to 47%. The empirical research implied that firm effects are higher than the industry effects on performance variance. The empirical results imply that studying firm level factors may help firms to better understand what factors lead to performance variances.

Secondly, management is able to control firm level factors and hence understanding the relative effect of these factors on performance can help them make better decisions that may improve firm international performance. A review of international business literature reveals that success in international markets is determined by firm characteristics, strategy, structure, export market conditions, resources, capabilities and orientations (Aaby & Slater, 1989; Calof, 1993; Sousa et al., 2008; Tseng et al., 2007; Lu, Zhou, Bruton & Weiwen, 2010; Moghaddam, Hamid & Alikbar, 2011). The current studies assessed the effect of firm resources, firm capabilities, internationalisation orientation and the degree of internationalisation on the international performance of publicly quoted companies in Kenya.

1.1.2.1 Firm Resources

Firm resources are defined as stocks of tangible or intangible assets of a firm (Makadok, 2001), which are tied semi-permanently to the organisation (Wernerfelt, 1984). According to Barney (1991) and Miller & Shamise (1996), resources are said to confer enduring performance and competitive advantages to a firm to the extent that they are valuable, rare, hard to imitate, have no direct substitutes and enable firms to pursue opportunities or avoid threats (VRIO). Miller & Shamise (1996) suggest that it is important to highlight the unique advantages of different resources in order to enable researchers to effectively establish their ability to generate superior economic returns. This is expected to help avoid ambiguous inferences that ascribe value to a firm's resources simply because it has performed well (Miller & Shamise, 1996; Tseng et al., 2007). Various studies have attempted to derive resources categorisation schemes (Sousa et al., 2008; Zeng et al., 2009; Barney, 1991; Miller & Shamise, 1996; Tseng et al., 2007; Lu et al., 2010).

The current study focussed on the firm resources of institutional capital, management characteristics and organisation demographics. Institutional capital is the resources intrinsic to the institutional environment of a firm (Lu et al., 2010; Oliver, 1997; Bresser & Millonig, 2003). Institutional capital has been found to be important in developing economies where resource allocation and market mechanisms are absent, underdeveloped or managed by governmental regulatory institutional frameworks (Lu et al., 2009; Peng, Sun, Brian & Chen, 2009; Shinkle Aldas & Kriauciunas, 2010). Oliver (1997) proposed the concept of institutional capital as the firm's unique resources intrinsic to its institutional environment and is categorised into three types, namely individual, intra-organisational and external institutional capital.

Management is considered a key resource that influences the performance of firms (Peng & Luo, 2000). Management characteristics focused on in this study were management ties, attitudes, international orientation and international entrepreneurship. Management ties refer to the business linkages and social network relationships of the firm both in the local and foreign market (Peng & Luo, 2000; Lu et al., 2010; Zhou, Wu & Lou, 2007).

Management attitudes relate to management's perception towards the firm's readiness to compete effectively in the international market place while international orientation is the level of international experience and exposure of the manager and the firm (Hutchinson et al., 2006; White, Griffith & Ryans., 1998). International entrepreneurship is defined as the "innovative, proactive and risk-seeking behaviour that crosses national borders and is intended to create value in organisations" (McDougall & Oviatt, 2000, p. 903). Literature has indicated that management

decisions, actions and behaviour are inherent to the firm and influence the performance of firm (Moghaddam, Hamid & Alikbar, 2011; Peng & Luo, 2000). Organisational demographics refer to the firms characteristics of size and age (White et al., 1998; Lu et al., 2010). Firm size is the resources based within an organisation and can be viewed as the value of turnover, size of workforce and level of capital investment (Zeng et al., 2009). Firm age refers to the age of an organisation since it started operations and has been suggested in the industrial organisation and international business literature to have a positive effect on firm growth and profitability (Shinkle, Aldas & Kriauciunas, 2010).

1.1.2.2 Firm Capabilities

Firm capabilities are defined as a “special type of resource, specifically an organisationally embedded and non-transferable firm specific resource, whose purpose is to improve the productivity of the other resources possessed by the firm” (Makadok, 2001, p. 389). The resource based view and its extensions; knowledge based view and the dynamic capabilities perspective provide the theoretical underpinnings that highlight the importance of firm capabilities on the performance of firms

Some international business scholars have argued that capabilities translate the resources possessed by a firm into competitive advantage which leads to superior performance (Grant, 2002; Ethiraj, Kale, Krishan & Singh, 2005; Lu et al., 2010; Sirmon, Hitt & Ireland, 2007). The firm capabilities studied in this current research are those that existing international business literature has highlighted as having an effect on improving the resource productivity. These are knowledge capability,

adaptive capability and organisational innovation intensity (Zeng, et al., 2009; Tseng et al., 2007; Lu et al., 2010; Dhanaraj & Beamish, 2003). Firm capabilities are expected to enhance the international expansion and international performance of firms (O’Cass & Weerawardena, 2009; Lu et al., 2010).

1.1.2.3 Degree of Internationalisation

Internationalisation is defined as the process through which a firm moves from operating solely in the domestic marketplace to international markets (Anderson, 2000; Buckley & Casson, 1998). Another definition is the process of increasing involvement in international operations (Welch & Luostarinen, 1988) or adapting its resources to international environments (Calof & Beamish, 1995). The internationalisation processes of firms have been studied in essentially two contexts, developed and developing (emerging and less developed) economies (Yaprak, 2010; Lou, 2000; Panond, 2007; Bartlett and Ghoshal, 2002; Li, 2007; Buckley, Clegg & Cross, 2008). Whereas multinational corporations from developed economies have a considerable experience of involvement in global markets, the majority of their developing market counterparts have only recently adopted an international perspective in their strategies (Li, 2007).

Researchers have examined the link between performance and international expansion. The main aim has been to test empirically the theoretical argument that international expansion represents an antecedent to superior performance. Two key internationalization theoretical perspectives explain the determinants of internationalization performance; these are the theories of Foreign Direct Investment (FDI) and theories of the multinational firm (Chen, 2005; Andersen, 1993; Calof &

Beamish, 1995). FDI theories are economic driven, focus on external factors and the reasons for the existence of multinational corporations. Internationalising firms are expected to benefit from market imperfections in the international financial, product and factor markets. MNC theories adopt a managerial perspective, focusing on internal factors. Whereas firms under the MNC theories are seen to benefit from internationalisation through proactive use of intra-firm comparative advantages, firms under the FDI theories are expected to benefit through reactively exploiting external opportunities (Tansuhaj, 2005; Capar & Kotabe, 2003).

The current study adopts the MNC theoretical perspective of international business by focusing on the effect of internal factors on firm international performance. Combined with the resource-based view of the firm (Barney, 1991, Wernerfelt, 1984), it suggests that international resources promote capability development and deployment which will enhance international expansion and thereby have an effect on the international success of firms. Whereas most of the research has been based on MNCs from developed economies, there is limited research that tests empirically the internationalisation and performance relationship and the effect of international expansion on the relationship between firm capabilities and international performance within the developing economy firms' context and especially within the Kenyan context.

1.1.2.4 Internationalisation Orientation

Internationalisation literature recognises two widely used types of foreign market internationalisation orientation, outward and inward. Outward orientation consists of seeking foreign markets and developing alliances with foreign partners and

businesses. Outward orientation modes include exporting, joint ventures, licensing agreements, franchising, contract manufacturing and foreign direct investment. Exporting has generally been the initial mode of entry into international markets. Inward internationalisation is defined as the movement of foreign consumers to the domestic market where the firm is located (Bjorkman & Kock, 1997; Bianchi, 2011) or the use of foreign management, technology and practices and investment (Zhou, Wu & Lou, 2007). Inward orientation modes include serving foreign clients locally, importing, licensing, knowhow agreements, contract manufacturing, joint ventures and inward foreign direct investment.

Inward orientation of internationalisation is mostly associated with services, which are produced and consumed in the home market due to local resources or impossibility of moving the service abroad. Examples of such services include tourism, education, health and entertainment. Bianchi (2011) notes that although companies may open a foreign office or provide their services in foreign markets, their internationalisation is focused on serving foreign customers in the domestic market during the initial internationalisation stages.

In recent years, firms have internationalised their operations seeking new markets, reduced competition, new sources of factors of production and to secure an international presence in the global market place (Li, 2007). The internationalisation of firms has been subject to widespread research, with the emphasis being on outward international operations, which is the penetration of foreign markets through various means (Johanson & Vahlne, 1990; Andersen, 1993; Lu & Beamish, 2006). The establishment of the emerging market multinationals from Asia, Latin America and

Eastern Europe is a recent phenomenon that has developed in the past two decades (Luo & Tung, 2007). The success of emerging market firms in various parts of the world, for example, China and other parts of Asia has motivated firms from other developing and emerging markets to move from inward oriented import substitution programmes to outward oriented export led growth (Eren-Erdogmus, Cobanoglu & Yalcin, 2010).

Research has found that firms can and do engage in both forms of internationalisation orientation as they utilise multiple forms of foreign market entry modes. A firm for example that exports its services, may also be involved in foreign direct investment, joint ventures, importing and the use of advanced skills and technologies from foreign countries (Zhou et al., 2007). The level of internationalisation orientation is expected to influence the extent of international expansion and performance. It is also expected to affect the decision on how resources and capabilities are acquired and deployed within the international operation of the firm.

Although there is research on the relationship between internationalisation orientation and international performance, the results are conflicting (Zhou et al., 2007; Lu & Beamish, 2004; Autio, Sapienza & Almeida, 2000). Zhou et al. (2007) have suggested that the lack of conclusive findings may be because of the existence of other factors that influence this relationship.

Additionally, there is a gap in literature on the available studies that assess the combined effect of the level of inward and outward internationalisation orientation on international performance within the context of developing economy firms. A further

review of existing literature reveals a gap relating to the moderating effect of internationalisation orientation on the effect of capability deployment on internationalization and international performance. This study contributed to the empirical studies in this particular area within the Kenyan context.

1.1.3 Publicly Quoted Companies in Kenya

Publicly quoted companies in Kenya are companies whose shares are traded in the Nairobi Securities Exchange (NSE) and operate as public companies incorporated and registered under the Companies Act Cap 486, Laws of Kenya. The NSE is Africa's fifth largest securities exchange in terms of market capitalization as a percentage of Gross Domestic Product (GDP); which stood at 25.4% as at 2009 and 30.35% in 2012; and fourth largest in terms of trading volumes (World Bank, 2012).

The NSE assists the Kenyan economy by facilitating the transfer of savings to investment in productive enterprises, assisting in the rational and efficient allocation of capital, which is a scarce resource and improves the access to finance by different types of users by providing the flexibility for customisation. The publicly quoted companies in Kenya operate in various sectors of the economy.

The NSE groups these firms under three market segments namely: Main investment Market Segment (MIMS), Alternative Investment Market Segment (AIMS) and the Fixed Income Security Market Segment (FISM). At the time of this study, there were fifty eight companies listed on the MIMS and AIMS which has grown from forty seven in 2005. Companies listed on the MIMS are categorised into 4 segments namely agriculture, commercial and services, finance and investment; and industrial and allied. A list of publicly quoted companies in Kenya is provided in Appendix IV.

Kenya is strategically located within the East African region and plays a major role in regional and international trade and development. Kenya's membership in the East Africa Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA) has opened up opportunities for businesses operating in Kenya to participate in international business and benefit from performance gains from economic integration of trade and investment. The government of Kenya has reiterated the need for more involvement in international trade and investment by Kenyan companies. The liberalization of the Kenyan economy in the 1980s and 1990s resulted in changes in Kenya's trade policy from import substitution to outward export promotion programs (Gertz, 2009).

According to the World Bank (2012) and as indicated in the Table 1.1, exports of goods and services declined by 7% in 2009 from a growth of 7.5% in 2008. The value of total exports grew by 18.8% from KShs.344.9 billion in 2009 to KShs. 409.8 billion in 2010. The value of total exports grew by 24.7% in 2011 to KShs. 511 billion. The value of imports grew by 20.2% to KShs. 947.4 from a marginal growth of 2.3% in 2009. Import growth in 2011 was 38.9% Kenyan direct FDI abroad grew significantly by 23.8% from 2008 to 2009 signifying an increase in internationalisation activity by FDI and less by exporting. Kenya's balance of trade declined by 21.3% in 2010 compared to a 4.1% decline in 2009 and by 49.7% in 2011. Kenya's International trade statistics are provided in Table 1.1.

Table1.1: Kenya Trade Statistics

Economic Indicators	2011	2010	2009	2008
Balance of payment	Deficit US\$9.35billion	Deficit US\$6.24billion	Deficit US\$5.15billion	Deficit of US\$4.95billi on
Growth in trade	34.59%	27.5%	1.6%	27.4%
Exports as a percentage of GDP	16.8%	16.07%	25.2%	27.6%
Growth in exports of goods and services	24.7%	19.78%	1.5%	26.94%
Domestic export growth	25.29%	19.12%	0.3%	23.3%
Re-exports growth	15.36%	13.91%	-4.1%	71.8%
Kenyan direct FDI abroad	-	US\$184million	US\$ 42million	US\$ 12.4 million

Sources: Economic Survey, Kenya National Bureau of Statistics (2010, 2012), World Bank (2012)

Despite success in various industries such as horticulture and apparel, Kenya's trade liberalization did not achieve sustained growth. The government of Kenya is now pushing for development strategies and trade policies that produce a balance between global and regional trade integration (Gertz, 2009). The involvement of Kenyan firms operating in Kenya in the regional and international market place is expected to enhance development and growth and improve Kenya's international trade position.

Listed companies contribute to international trade in Kenya and they represent firms that have sought growth opportunities locally through established capital markets and internationally through international trade. While national international performance is an area of interest at a macro-level, firm level analysis forms the basis of micro level analysis and provides better understanding of what the determinants of international success and failure for companies. The international success of firms has been argued to contribute to the national economic growth and development of countries (Rutashobya & Jaensson, 2004). International business activities provide an opportunity for companies to maximize shareholder value through the diversification

of business risks, reallocation and reinvestment of resources, improved customer service through improving service and quality standards, enhanced efficiency through improving technological capabilities, utilization of idle capability and enhanced productivity (Leonidou, 2004).

Firms globally are finding it increasingly important to have a global orientation in order to improve performance locally and abroad. Publicly quoted companies operating in Kenya have recently taken an international perspective to operating their businesses by implementing regional expansions and also export led growth. Companies like Kenya Commercial Bank, Equity Bank, Safaricom and Uchumi Supermarkets, among others have ventured into foreign markets. These firms have also contributed to the development of trade and industry in Kenya. It would be of interest to determine what factors have contributed to relative international performance effects of these publicly quoted companies.

This study focused on NSE listed firms because these companies have well-established formal systems and publicly available information containing data on financial and operational performance. These reports are regulated by the Capital Markets Authority (CMA) and have been audited by reputable audit firms. This provides objective and reliable economic and financial performance data for analysis. The consistency in the reporting requirements also provides an opportunity for the investigation of an international performance framework through a cross-sectional study while controlling for industry effects.

1.2 Research Problem

Scholars have described firm level factors as critical to firm success while others have directly or indirectly supported the view of firm level antecedents to performance. Overall, firm level factors are viewed as an antecedent to international performance success. A number of studies have indicated that a positive relationship exists between particular firm level factors and international performance (Lu et al., 2010; Dhanaraj & Beamish, 2003; Kuivalainen, Puumalainen, Sintonen & Kylaheiko, 2010; Tseng et al., 2007; Mittelstaedt, Harben & Ward, 2003; White et al., 1998; Calof, 1993). Others have demonstrated that a negative relationship exists between particular firm level factors and international performance (Cubbin & Leech, 1986; Kilantaridis & Levanti, 2000; Poof & Heriot, 2005). Still other studies found evidence that U relationships existed (Tseng et al., 2007) and other research has proposed that no relationship exists between specific firm level factors and performance (Amato & Wilder, 1985). A review of the available literature indicates that the relationships between the components of firm level factors and their role in determining and accounting for variations in firm international performance have conflicting results.

It has been increasingly recognised that the internationalisation and performance of firms operating in developing economies has not been as impressive as that of large multinationals from developed economies (Zeng et al., 2009). Firms operating in developing economies have been perceived to have inadequate resources and capabilities, weak institutional frameworks, lack of market based skills and shallow home or location advantage which negatively impact their success in the international market place, compared to their developed economy counterparts which are perceived to be mature, structured, stable and competitive (Brouthers, O'Donnell & Hadjimarsu,

2005). Factors which have been viewed in empirical literature to be relevant to firms, in achieving international success may differ for firms from developing economies (Kropp, Lindsey & Shoham, 2006).

The opportunities presented by regionalisation and globalisation have resulted in an increased internationalisation activity by Kenyan firms. Publicly quoted companies represent large and medium sized firms that have sought additional growth opportunities by participating in international business in varying forms (inward and outward internationalisation) in the global market place. These are also firms that are perceived to possess adequate levels of resources and capabilities that has contributed to their success in the local and international market place. An area of growing interest is how to improve the international performance of Kenyan firms so as to promote national economic growth and development.

Existing research does not converge on a definitive singular pattern regarding the relationship between firm level factors and international performance and how these factors account for variations in firm international performance. Nazar & Saleem (2009) have argued that there is a need for factors to be condensed into a wide ranging base of their conceptualized similarities into synthesized models. In order to clarify the nature of the relationships between firm level factors and international performance it is necessary to examine them at the individual or component level.

The fact that some firms are superior in the market place can be ascribed to their possession of unique attributes. Establishing the relationship between the firm level factors and their components is expected to enhance the understanding of these factors

and how they are related and what are their relative effects on the international performance for publicly quoted companies in Kenya. Despite the documented relationship between particular firm level factors and international performance, little is known about the relative effect of firm specific factors such as institutional capital, firm capabilities, management characteristics, organisational demographics, degree of internationalisation and internationalisation orientation on the international performance of companies operating in developing economies, especially Kenya. As indicated above, the specific link of firm effects and international performance has been studied mostly in the context of multinationals from advanced economies such as USA, Europe and Japan.

Another area of interest is the effect of resources and capabilities on international performance (Zeng et al., 2009; Lu et al., 2010). Existing international business literature also presents conflicting findings on the international performance implications of the firm capabilities of organizational innovation intensity, knowledge and adaptive capabilities. In addition to the above, there is limited empirical evidence on the mediating effect of firm capabilities on the relationship between other firm resources and international performance within the context of developing economy firms. This study researched and contributed empirically to this gap in literature.

Previous research has also looked at the outward internationalisation orientation of firms with limited consideration of the combined effect of outward and inward orientation as a factor influencing internationalisation and firm international performance (Zhou et al., 2007). An assessment of how internationalization orientation influences the international performance of developing economy firms is

an area of interest. There is also a gap in knowledge on the moderating effect of internationalisation orientation on the relationship between firm capabilities and degree of internationalisation and the relationship between firm capabilities and international performance. This research contributed empirically to these areas by researching these knowledge gaps within the Kenyan context.

Previous international business research has also suggested that more empirical research required on the multi dimensionality of international performance. Previous empirical studies on the economics of commercial activities focused on trends in the industry level, perhaps due to greater availability of data rather than the individual firm level where confidentiality of firm identity tends to foreclose use of most externally available data sources and this may have contributed to the understudied role of firm level factors effect on international performance of firms in Kenya.

Based on this foundation, the purpose of this research was to contribute to the international business field in addressing gaps identified and investigate the direct and indirect effects of firm level factors on international performance by examining the relationship between specific firm level factors and international performance, and identifying if these firm level factors vary in their influence on firm international performance.

While theoretical links of interests in this study are not confined to the Kenyan context, the unique resource base, capabilities and firm institutional characteristics and orientation of the international business and network relationships of Kenyan firms provide an appropriate platform to test the hypotheses. Therefore, based on the

above, the research question asked in this study was “to what extent do firm specific factors influence and account for variations in firm international performance of publicly quoted companies in Kenya?”

1.3 Research Objectives

The general objective was to determine the relative effect of firm level factors on the international performance of publicly quoted companies in Kenya by assessing how firm level factors account for and explain variations in firm international performance. Specific objectives for this study were to:

- i. Establish the effect of firm level factors on the international performance of publicly quoted companies listed on the Nairobi Securities Exchange.
- ii. Assess the effect of institutional capital, management characteristics and organisational demographics on firm capabilities?
- iii. Determine the effect of firm capabilities on the relationship between the following factors and firm international performance:
 - a. institutional capital;
 - b. management characteristics; and
 - c. Organisation Demographics
- iv. Establish the effect of degree of internationalisation on the relationship between firm capabilities and firm international performance.
- v. Assess the moderating effect of internationalisation orientation on the relationship between firm capabilities and the degree of internationalisation.
- vi. Determine the moderating effect of internationalisation orientation has on the relationship between firm capabilities and firm international performance.

1.4 Value of the Study

The central purpose of this study was to contribute to a more holistic understanding of the relative effect of firm level factors on the internationalisation and international performance of publicly quoted companies in Kenya. This study also aimed at establishing why some publicly quoted companies operating in Kenya had experienced better firm international performance than others based on particular firm level factors. This contributed empirically to the existing body of knowledge in international business research and will assist Kenyan firms be more successful in the international market place as they attempt to take on the gains and opportunities arising from globalisation.

This study has made several contributions academically, empirically, to management practice and to policy. This study has enhanced understanding on the relative effect of firm level determinants on international performance of publicly quoted companies operating in Kenya. The current study has extended empirical findings on firm level factors that influence the international performance of publicly quoted companies in Kenya. Specifically, the effect of institutional capital, firm capabilities, management characteristics, internationalisation orientation, degree of internationalisation and organisational demographics on the international performance of firms operating in Kenya has been established within the context of Kenya. This research has made a contribution to the existing theory and empirical knowledge base in management and international business research. The performance of firms that embrace internationalisation is affected by different factors and it is important for these factors to be identified in order to assist in the successful internationalisation and international performance of Kenyan firms. This research has created value to

researchers and practitioners because it has contributed to the existing body of empirical studies on the firm level factors that influence success in international performance within the context of developing economy firms. The study also made an empirical contribution to the existing body of knowledge on internationalisation and international performance of firms operating in Kenya especially on the role of institutional capital, management characteristics, organisational demographics, firm capabilities, degree of internationalisation and internationalisation orientation on international performance.

Additionally, the current study has provided insights and understanding to management and the business community to better assist them to make strategic decision relating to resources and capabilities when operating in the international market place or deciding to internationalise. The study revealed that firm resources and capabilities do have an effect of the international performance of firms. Management should therefore make strategic decisions on how they acquire, consolidate and deploy their resources and capabilities so as to enhance their performance. The global market place presents opportunities for Kenyan firms to grow and develop. The management of organisations may be able to better understand what factors influence a firm's international performance, and this information may assist in the improvement of performance in firms geared toward internationalisation success.

Finally, this study sought to make a contribution to policy makers. The government and regulatory bodies in various sectors and industries will be able to institute frameworks and policies that promote the internationalisation and international

performance of local organisations and enhance opportunities for international trade and development. There is a growing need by governments and policy makers to invest in skills development and technology in order to assist Kenyan firms be more competitive in the international market place. The study also revealed that the level of network relationships with government agencies, industrial bureaus and regulatory agencies needs to be enhanced so as to provide more assistance to Kenyan firms. This is of great interest to all those assisting local businesses operating outside Kenyan borders. This is also expected to assist in the development of policy on the expansion of trade both regionally and globally.

1.5 Outline of the Thesis

This thesis comprises six chapters. Chapter one presents the background on the study, research problem, research objectives and value of the study. Chapter two provides the literature review pertaining to firm level factors and international performance including theories of the firm, internationalisation theory, and resource based theory and institutional theory. It also discusses empirical research relevant to firm level factors and international performance, outlines the research's conceptual model and the research hypotheses.

Chapter three presents the research methodology, including the research philosophy, population, data collection instrument, and data analysis techniques. Chapter four presents the research findings, results and analysis, firm demographics, measurement model and structural model analysis results and testing for research hypotheses. Chapter five presents a discussion of the findings. Finally, chapter six offers a summary of the findings, research conclusions, contributions and implications, study limitations, and recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews both theoretical and empirical literature guiding the study. The chapter provides a review of the relevant theories and literature on the factors and relationships studied. The main purpose of the literature review was to review the conceptual and empirical research on the antecedents of international performance at a firm level. The review also examined theoretical and empirical past studies and literature on the relationships among the study variables. This chapter also presents the conceptual model and hypotheses of the study.

2.2 Theoretical Foundation

The theoretical themes that have investigated internationalisation in the past are based on macroeconomic and microeconomic perspectives. Macroeconomic perspectives explain international trade and the factors that determine the competitiveness of nations or sectors as a whole. Microeconomic theories in international business attempt to explain the internationalisation effect of organisational and structural characteristics. The theoretical perspectives, which have also been categorised as economic and behavioural, analyse international performance determinants at different levels (Nazar & Saleem, 2009). The determinants highlighted in literature include industrial, environmental, institutional, home country, competitive capabilities, structural and organisational characteristics (Porter, 1990; Aaby & Slater, 1989; Zou & Stan, 1998; Dhanaraj & Beamish, 2003; Nazar & Saleem, 2009).

This thesis assessed the international performance framework of publicly quoted companies in Kenya, based on the effect of particular organisational and structural aspects on international performance. The aim was to establish which factors explain variability in and account for superior international performance of organisations.

While previous research may have focused on singular theoretical perspectives, this research applied internationalisation theory, integrated with views and extensions of the resource based view (RBV) and institutional theory, both of which consider firm specific analysis. The study investigated some under-researched factors that support the international performance of publicly quoted firms within the context of developing economies by incorporating extensions of the resource based view such as the knowledge-based view of the firm and dynamic capabilities perspective. Elements of the international entrepreneurship view were also applied. The central thematic basis of this research is discussed hereafter.

2.2.1 Internationalisation Theory

The internationalisation of firms has been subject to extensive research and empirical investigation (Andersen, 1993; Johanson and Vahlne, 1977, 2009). A number of perspectives have contributed to the understanding of firm internationalisation. The theoretical perspectives are categorised as economic or behavioural approaches. Behavioural perspectives comprise of stage models, network perspectives and business strategy approaches. They include the Product Life Cycle model (Vernon, 1966), the Uppsala Model (Johanson & Vahlne, 1977, 2009) and Porter Paradigm (Porter, 1990). Economic perspectives are based on the foreign direct investment theory and include the internalisation approach based on transaction cost analysis

(Williamson, 1979) and the Eclectic Paradigm (Dunning, 1981). The stage models in internationalisation theory describe the international expansion activities of firms in terms of developmental stages and comprise of two main schools of thought, the Uppsala Model or U-model and the Establishment chain model or I model (innovation related models). The Uppsala model was developed by Johanson & Wiedersheim-Paul (1975) and later developed by Johanson & Vahlne (1977). This school of thought suggests that the process of internationalisation is founded on sequential and evolutionary build-up of foreign commitments over time (Morgan and Katsikeas, 1997). The Uppsala model argues that firm internationalisation is a gradual learning process in which the rate, sequence, and direction of firms' foreign expansion are a function of their evolution, capability and experience (Luo, Zhao & Du, 2005). Key factors for firms to internationalise include gradual acquisition, integration, and utilisation of knowledge gained about foreign markets and operations. In order to gain experiential knowledge, firms will typically take a gradual approach to entering foreign markets, indicating enhanced resource commitment and greater experience accumulation (Luo et al., 2005; Johanson & Vahlne, 1977).

The innovation related approach views the internationalisation process as a learning sequence that occurs within an innovation adoption process (Cavusgil, 1980, Reid, 1981). This approach suggests that internationalisation depends on internal factors such as manager attitudes and commitments and external factors such as unsolicited inquiries and orders. According to Morgan and Katsikeas (1997), between each set of stages in both the U-Models and I-Models is the notion that stable periods exist in which firms accumulate and consolidate resources which they use to respond to the changes in the global environment, and subsequently pushes the firm to the next

internationalisation stage. The taxonomies under Uppsala School and the innovation related model (Cavusgil, 1980; Reid, 1981; Czinkota & Johnston, 1983) are characterised by a common theme in which they classify export behaviour and group firms into heterogeneous profiles that reflect differences in international performance (Morgan and Katsikeas, 1997). This implies that factors such as knowledge, experience, resource base, innovation activities and firm processes impact the international performance of firms and subsequently, their international performance.

The social network perspective of internationalisation recognises that firm internationalisation depends on both firm related advantages and networking activities and alliances (Johanson & Mattsson, 1988). The firm's direct and indirect relationships provide a portfolio of networks which a firm can exploit to achieve its internationalisation goals. The networks may comprise of relationships with individuals, businesses, government agencies and other organisations. Firms can exploit the capabilities, competencies and networks of these relationships to access resources which will assist them expand internationally (Johanson and Vahlne, 2009). This implies that the internationalisation and performance of firms is influenced by network relationships.

The business strategy framework in internationalisation theory is pragmatic and suggests that firms review a varied number of factors when assessing the benefits and costs associated with various internationalisation strategies (Porter, 1990; Reid, 1983). Research in this framework highlights internal and external factors relevant to internationalisation. Internal factors comprise of firm specific factors of firm resources and product characteristics. External factors consist of host country

conditions, market characteristics and industry factors. These factors are expected to have an effect on the internationalisation and performance of firms and are considered to be more flexible in that the theory considers both internal and environmental aspect when determining international development of the firm.

An economic perspective in international business research is the transaction cost theory. The transaction cost theory approach views firm internationalisation from the context of transaction cost economics (Williamson, 1979). This theory looks at the “how” and “why” decision of internationalisation. Under this theory, multinationals are said to be created when transactions are internalised beyond national borders thereby the costs in the organisation are lower than the costs in the market (Galán, Galende & González-Benito, 1999). Under the transaction cost theory, intangible assets such as technology and knowhow have an effect on the decision to internationalise and performance (Buckley & Casson, 1976). Previous empirical studies have supported the view that a positive relationship exists between intangible assets and the international performance of firms (Buckley & Casson, 1976; Dunning, 1980; O’Cass & Weerawardena, 2009) and the integration of innovation activities (Arias-Aranda, Minguela-Rata & RodrõÁguez-Duarte, 2001).

The Eclectic Paradigm (Dunning, 1981) is also known as the Ownership, Location and Internationalisation (OLI) paradigm and is grounded on international trade theory. It provides the theoretical perspective that explains the different forms of international production and economic activity. It also seeks to explain the country selection of a country for foreign direct investment. The internationalisation process is determined by the realization of advantages of OLI. The ownership advantage relates to a

specific organisation and it includes aspects such as the level of product innovation, intangible assets and technological capabilities. Location advantages relate to the production and institutional factors that are resident in a particular geographical location and location advantages of host and home countries. The internationalisation advantage stems from a firm's ability to create value through management and coordination of internal activities through foreign direct investment. The internationalisation of OLI advantages is expected to assist a firm to reduce transaction costs, overcome market imperfections and maximize returns (Buckley & Casson, 1981). The ownership advantage, which is firm-specific, was the area of focus of this study. Ownership advantages from resource and capability development, acquisition and deployment are expected to improve international performance as a firm internationalizes.

Axinn and Matthyssens (2002) challenge the different internationalisation models arguing that "each theory was developed within a specific environmental context to explain a fairly specific set of observed firm behaviours" (Axinn & Matthyssens, 2002, p. 442). Additionally, they argue that internationalisation is insufficient to explain the currently observed behaviours of firms in the international business marketplace. Scholars highlight that the impact of the knowledge, technology, service, value and network economies on the changing landscape of international business should be considered (Cheng, Guo & Skousen, 2011; Axinn & Matthyssens, 2002).

Other limitations to traditional theories are highlighted in terms of explaining the motivations of moving to different stages of internationalisation, limits of psychic distance in a knowledge economy, speed of internationalization as witnessed by born

global firms, the level of entry modes and the unit of analysis utilised. (Johanson and Vahlne, 2009; Oviatt and McDougal, 2005; Cheng et al., 2011). International business research is being integrated to other theories and taking a multidisciplinary approach; providing linkages in strategic, marketing and entrepreneurship literature. In general, firms' internationalisation is essentially a dynamic process, which requires the adaptation of resources, strategy, structure, and organizational characteristics to new international environments (Maitland, Rose & Nicholas, 2005). In order to meet the challenges of competition, firms need to acquire multiple bundles of resources and transform them by utilizing capabilities to create firm specific advantages (Grant, 2002). Based on the above, elements of the RBV of firm resource heterogeneity and implications on performance are applicable to internationalisation theory and have been applied in this research and is discussed in the next section.

2.2.2 Resource Based View

The Resource Based View (RBV) regards a firm as a bundle of resources, skills and capabilities and presupposes that the utilisation and consolidation of the rare, inimitable, valuable, and unbundable resources will determine the performance of the firm (Barney, 1996; Yaprak & Karademir, 2010). The RBV originated from research by Penrose (1959) on the growth of the firm and was developed further by Demsetez (1973), Barney (1996) and Grant (2002). These researchers all acknowledge the important role that firm specific resources play to the economic success of firms.

The RBV challenges the market-based view of economics by regarding resources and competitive advantage as factors specific to a firm rather than general to an industrial environment (Tseng et al., 2007). It presumes firm heterogeneity regarding the

valuable resources that they control over time irrespective of whether they operate in the same industry. This is based on the assumption that resources are not perfectly mobile across firms. It has therefore been asserted that firm behaviour is based on firm specific characteristics instead of market conditions, structures and external environmental conditions. Firms are therefore assumed to develop and engage strategies that will acquire, consolidate and protect its unique resources, assets and skills (Dhanaraj & Beamish, 2003; Tseng et al., 2007; Barney, 1996).

Within the international context, the RBV tenets of firm heterogeneity and resource immobility are considered to be applicable in firm internationalisation and performance (Knight & Cavusgil, 2004; Tan & Mahoney, 2005). Firms in the same industry are expected to exhibit different levels of international performance due to the differences in the resources that they own. Additionally, the process of resource generation, acquisition and consolidation is considered to be a reflection of innovative and entrepreneurial activities.

It is argued that profits can only emerge from those activities where the cost of resource accumulation is lower than the rents generated by the possession and utilisation of those resources (Peteraf, 1993). Tseng et al. (2007) argues that the resources that may be transferable across nations within the boundary of the firm, are not perfectly mobile across firms. This implies that the level of resources will limit the range of a firm's expansion strategies internationally. The dynamic capabilities view, which is an extension of the resources based view, suggests that capabilities are a complex bundle of skills and accumulated knowledge, exercised through organisational processes that enable firms to utilise their assets and functions as key

success factors, cost effectively delivering customer value and deploying resources advantageously (Day, 1994). It has also been suggested that capabilities enable firms to compete in the long term and may account for competitive advantage and superior performance (Grant, 2002; Lu et al., 2010).

Another extension of the RBV, the Knowledge Based View (KBV) of the firm suggests that knowledge is one of the most strategic resources of the firm, and intangible assets are highly valued (Grant, 1991; Balogun & Jenkins, 2003; Grant, 2002; Mathews, 2003). KBV suggests that performance differences between firms are a consequence of knowledge asymmetries as a capability (DeNisi, Hitt & Jackson, 2003). This is because organisational capabilities emerge overtime through a process of organisational learning (Zahra, 2000) and are considered to be specific to each organisation, valuable to clients, non-substitutable and hard to imitate (Rugman & Verbeke, 2002). Theory supporting implementation of firm resources through distinctive capabilities exists, however little empirical evidence exists linking these capabilities to firm international performance within the developing economy firm context (Lu et al., 2010).

Scholars have suggested that the RBV has not looked beyond the properties of resources and resource markets to explain firm heterogeneity and has not examined the social context within which resource selection decisions are embedded such as network ties, firm traditions and regulatory pressures (Oliver, 1997). Additionally, there is a need for the approach to highlight how these contexts might affect sustainable firm differences in the international market place (Lu et al., 2010).

Accordingly, the social context of resource selection has been incorporated by combining the RBV with institutional theory which examines the role of institutional capital within the organisational context. Institutional capital represents social influence and pressures for social conformity as a type of firm resource in shaping organisational actions both in the local and international market place. This research incorporated elements of institutional theory as outlined in the following section.

2.2.3 Institutional Theory

Institutional theory states that firms operate within a social framework of norms, values and assumptions that constitute acceptable economic behaviour (Oliver, 1997). It examines the role of social influences and pressures for social conformity in shaping an organisation's actions. Institutional theory suggests that institutionalised activities are a result of interrelated processes at the individual, intra-organisational and inter-organisational levels of analysis and these are viewed as resources of the firm (Oliver, 1997).

According to Oliver (1997) and Dhanaraj & Beamish (2009) the individual level comprises of managers norms, habits and unconscious conformity accounting for institutionalised activities. The intra-organisational level includes shared belief systems, corporate culture and political processes supporting set ways of managing institutionalised structures and behaviours while the inter-organisational or external level includes government pressures, industry alliances and societal expectations such as rules and standards regarding environment, product quality and occupational safety among other issues.

Social pressures common to all firms in the same sector cause firms to exhibit similar structures and activities (Dhanaraj and Beamish, 2009; DiMaggio & Powell, 1983). According to institutional theory, economic choices are constrained not only by technological, informational and income limits but also by socially constructed limits. Resource and institutional frameworks are said to have a significant effect on the resource selection strategies of firms and can be impacted by the level of capabilities in a firm influencing firm international performance (Lu et al., 2010).

Previous international business studies have been largely based on MNCs from developed western-based economies, examining export behaviour and foreign direct investment (Bartlett & Ghoshal, 1989, 2002). Later studies have begun to focus on third world multinationals (Tseng et al., 2007; Zeng et al., 2009). Lall (1998) however has suggested that care must be taken when examining the international performance of firms from countries at different stages of development. A growing area of research interest is what factors contribute to the success and failure of developing economy firms (Ahmed, 2008). Based on internationalisation theory, RBV and institutional theory, an international performance framework for Kenyan firms was studied. Theoretical and empirical literature pertinent to the factors studied is discussed in the next section.

2.3 Firm Level Factors and International Performance

Firm international performance refers to the outcomes of operations within the international market place (Zeng et al., 2009). Building knowledge about the determinants of organisational performance has been an area of interest in international business research (Sousa et al., 2008; Dhanaraj and Beamish, 2003;

Aaby and Slater, 1989). Hult et al. (2008) argue that “to advance knowledge of how performance is generated in international contexts, and to generate normative conclusions for practitioner use, research should be based on clearly specified measures of type of performance to minimize misleading results” (p.1075). The use of multiple measurements approach in this study aimed at achieving two results: firstly to integrate quantitative aspects of performance measurement and secondly, to provide a more comprehensive approach to measuring the international performance of firms being studied. Financial measures tell the results of actions already taken (lagging measures). Operational measures are drivers of future performance (leading measures). Various studies have applied both financial and operational measures in assessing firm performance (Kaplan & Norton, 1992, 2004; Yeniyurt, 2003; O’Cass & Weerawardena, 2009).

A review of the theoretical literature relevant to firm level factors and international performance identified several factors for further investigation. The current study focused on the firm level factors of firm resources (institutional capital, management characteristics and organisation demographics), firm capabilities (organisational innovation intensity, knowledge capability and adaptive capability), internationalisation orientation and the degree of internationalisation; their effect on international performance and interrelationships.

2.3.1 Firm Resources and International Performance

Resources have been defined as “stocks of tangible or intangible assets, such as fixed assets, information, brand, technology and human capital” (Grant, 1991) which a firm utilises to manufacture goods and provides services through production processes.

Resources are also viewed as an organisations assets, processes, capabilities, information and knowledge (Barney, 2001; Lu et al., 2010). Scholars have argued that resources and capabilities are unique to one another (Makadok, 2001; Lu et al., 2010; Grant, 1991). Synthesising prior notions (Amit & Schoemaker, 1993; Oliver, 1997; Lu et al., 2010) the resources studied were viewed as being distinct from firm capabilities. Additionally, they are those considered to be valuable, rare, inimitable and not easy to substitute. The current study adopted a typology that studied resources in the form of institutional capital, management characteristics and organisational demographics (Oliver, 1997; Peng and Luo, 2000; Lu et al., 2010) and their international performance effect.

2.3.1.1 Institutional Capital and International Performance

Institutional capital is viewed as the resources that are intrinsic to a firm's institutional environment (Lu et al. 2010; Oliver, 1997; Bresser & Millonig, 2003). Institutional capital consists of three aspects, namely, individual, intra-organisational and external institutional capital. Individual level institutional capital refers to the manager's habits, norms and unconscious conformity to traditions that account for institutionalised activities. The intra-organisational level refers to a firm's corporate culture, shared belief systems, and political processes for supporting perpetuate institutionalised structures and behaviours. The external or inter-organisational level refers to pressures from and relationships with government, industry alliances and societal expectations that define socially acceptable firm conduct (Oliver, 1997).

Research has suggested that institutional capital has an effect on the performance of the firm (Oliver, 1997; Shinkle et al., 2010; Lu et al., 2010). Lu et al. (2010) suggests

that firms operating in developing economies tend to experience greater uncertainty when confronted with external environmental changes than their developed economy counterparts due to their relative lack of resources and limited capabilities. This implies that they have to be more innovative and flexible in order to gain performance improvements (O’Cass & Weerawardena, 2009). Institutional capital has been found to be important in developing economies where market mechanisms for resource allocation are underdeveloped or managed by governmental or regulatory institutional frameworks (Peng, Sun, Brian & Chen, 2009; Shinkle et al., 2010). External institutional capital was found to have a positive and significant effect on international performance for Chinese entrepreneurial firm (Lu et al., 2010). External institutional capital comprises of both business and government relationships and support. Government support and export promotion programmes has also influenced the internationalisation of firms operating in developing markets and has assisted them to gain the advantages of internationalisation (Ahmad, 2008; Dunning & Narula, 1996). The success of firms in the international market place is necessary for their survival and growth and enhancing a nation’s economic development (Rutashobya & Jaensson, 2004).

The governments of developing economies play a direct and important role in promoting the internationalisation and international performance of their national firms (Sim & Pandian, 2003). This is normally through the use of financial support such as subsidies, tax abatement, training supports, infrastructure support, government loans and loan guarantees to support firms' foreign expansion and accommodating regulatory policies and conditions to attract foreign research and development (R&D) operations to foster the rapid development of local firms (Rutashobya & Jaensson,

2004; Sim & Pandian, 2003). Hence, the financial and institutional support from the governments of developing economies is viewed as a key resource that assists firms in their internationalisation activities. This is less likely to happen in developed economies where the roles of the government are indirect and mild (Sim & Pandian, 2003) Firms operating in emerging and developing economies have been found to overcome their resource-based constraints to internationalise by using alternative governance structures, networks, institutional frameworks and innovative, adaptive and knowledge capabilities (Rutashobya & Jaenson, 2004; Shinkle et al., 2010; Zeng et al., 2009, Eren-Erdogmus, Cobanoglu & Yalcin, 2010; Lin, 2006). These are expected to assist the firm improve their performance. This implies that institutional capital has a positive effect on international performance which may be enhanced through capability deployment.

Despite the results on the effect of external institutional capital on international performance, there is limited research on the effect of institutional capital as a whole (individual, intra-organisational and external) within the developing economy context. Most research has focused on the external institutional capital and institutional arrangements effects on performance. The research studied the effect of all three aspects of institutional capital on international performance within the Kenyan context so as to contribute empirically to the existing body of knowledge.

2.3.1.2 Management Characteristics and International Performance

The management of an organisation has been considered to be a key determinant of an organisation's propensity to engage in and be successful in international business (Hutchinson et al, 2006). Chandler & Hanks, (1994) and Hutchinson et al. (2006)

argue that international performance is not only a function of resource availability but managerial competence and network relationships. Previous research highlights that management is the key driver of international expansion and success due to their involvement in and responsibility for the decisions on firm operations (Zou & Stan, 1998; Zeng et al., 2009). Decisions on internationalisation orientation, direction and rate with which a firm internationalises are normally made by the firm's top management based on information they have acquired through market scanning (Leonidou, Katsikeas & Peircy, 1998). Previous development models have considered management as a key determinant of international expansion activities, especially when factors such as foreign market knowledge and commitment are involved (Reid, 1981; Cavusgil, 1980; Anderson, 2000).

Management characteristics have been considered to be antecedents of a firm's propensity to engage in and be successful in international business (Hutchinson et al., 2006). While understanding of the importance of management decisions upon the international performance of firms is at a relatively developed stage, Halikias & Panayotopoulou (2003) point out that one of the less theoretically and empirically studied aspects of internationalisation is the effect of management of developing economy firms. Additionally, previous studies do not include all the elements of management characteristics, and have not reached a consensus on what factors constitute management characteristics (Leonidou et al., 1998; Moghaddam, Hamid & Alikbar, 2011). Based on a review of existing literature, the decision maker characteristics assessed were management ties, international orientation, management attitudes and international entrepreneurship.

Management ties have been defined as the manager's social relations, contacts and networks across organisations (Peng & Luo, 2000). Network relationships have been recognised in international business as a key driver of international growth (Zhou, Wu & Lou, 2007; Rutashobya & Jaensson, 2004; Lu & Beamish, 2001). Network ties refer to the social network relationships or business linkages that firms have with other firms. Social networks have been identified as a key means of new opportunity identification, gaining access to foreign markets, development of competitive advantages through knowledge accumulation and technology transfer (Zhou et al., 2007). The particular focus of this study was the management ties comprising of both business and social networks.

Business ties studied comprised of the extent to which management has established relationships with foreign customers, suppliers and competitors (Peng & Luo, 2000). Social network relationships comprised of network ties relating to local social networks, government agencies and local communities (Zhou et al., 2007). Literature has highlighted the impact of networks and ties on international performance. Previous studies have indicated a positive relationship between management ties and international performance (Zhou et al., 2007; Peng & Luo, 2000, Lu et al., 2010).

Sim and Pandian (2003) highlight the importance of understanding firms' internal and external networks as resources and sources of competitive advantage with the consideration of their institutional and cultural embeddedness and their effect on international performance. It has been suggested that what distinguishes firms of developing economies from traditional western based economy MNCs is that their advantages are cultivated from social and cultural assets, which have been nurtured

over decades and are strongly embedded in specific locations (Rutashobya & Jaenson, 2004). This implies that business, social networks and ties are considered to be a key resource and play an important role in international business and may impact international performance. International orientation of the manager relates to the level of international experience and exposure of the manager (White et al., 1998). It has been argued in literature that managers with greater international experience and exposure are more open to internationalisation opportunities and less hesitant to operate globally (Hutchinson et al., 2006). Research has reiterated the importance of managers having an international orientation in order to be successful in the international market place (Nazar & Saleem, 2009; Zou & Stan, 1998). An international perspective enables firms to seek out opportunities and prevent threats that may occur in the international market place (Moghaddam et al., 2011). International orientation brought about by international work and training experience is expected to have a positive effect on international performance (Sousa, Martinez-Lopez, Coelho, 2008; Zou & Stan, 1998; White et al., 1998).

Brouthers and Nakos (2005) however, state that management experience effect on performance can be either positive or negative. Alternatively, it has been noted that managers with minimal international work experience or orientation can rely on business and social networks in order to gain knowledge about foreign markets. This is expected to have a positive effect on international performance (Contractor, Hsu and Kundu, 2005). The international orientation of the managers is considered to have a similar effect on performance as management attitudes.

Management attitudes relates to the management perception towards internationalisation and international performance (White et al., 1998). Research has highlighted the positive relationship between international trade performance and management attitudes (White et al., 1998; Hutchinson et al., 2006). Perlmutter (1969) initially highlighted the key role that top management attitudes play in shaping the international activities of firms. Cavusgil and Nevin (1981) highlighted two internal determinants that drive firms to internationalise; management's firm growth expectations through internationalisation and manager's high degree of commitment to internationalisation. These determine management's perception of the risks, costs and benefits associated with internationalisation. These attitudes and perceptions are also shaped by management's past experience. (Moghaddam et al., 2011; White et al., 1998; Welch & Luostarinen, 1988).

Subsequent studies have reiterated the important effect that management attitudes have on the level of international expansion, performance and success of a firm (White et al., 1998; Nazar & Saleem, 2009). Managerial perception about the opportunities and barriers to international expansion, the firm's ability to compete in the international market place, its ability to confront environmental conditions and satisfy customer requirements, are some of the attitudes that may impact international performance (Calof & Beamish, 1995; Hutchinson et al., 2006).

McDougall and Oviatt (2000) define international entrepreneurship is "a combination of innovative, proactive and risk-seeking behaviour that crosses national borders and is intended to create value in organisations" (p. 903). This study adopted this definition, which is rooted in the firm-behaviour approach to entrepreneurship

(O’Cass & Weerawardena, 2009; Covin & Slevin, 1991; Oviatt and McDougall, 2005) in the conceptualisation and measurement of entrepreneurial orientation as it relates to international entrepreneurship. International entrepreneurship has garnered considerable interest in international business research especially due to the accelerated internationalisation of born global firms (Zahra, 2005; Knight & Cavusgil, 2004; Oviatt & McDougall, 2005). International entrepreneurship is the combination of international business theory and entrepreneurship theory (McDougall & Oviatt, 2000; Keupp & Gassman, 2009; Autio, 2005). Authors differ in the label that they use for the concept of entrepreneurship - Corporate entrepreneurship (Zahra 1991, 2001): entrepreneurship (Miller, 1983), intrapreneurship (Kuratko, 1993, 2004), entrepreneurial posture (Covin & Slevin, 1991), and entrepreneurial orientation (Lumkin & Dess, 1996) and international entrepreneurship (McDougall & Oviatt, 2000).

The resource-based perspective supports the view that entrepreneurial orientation drives the acquisition, conversion and leveraging of resources, which through capability deployment, assists the firm to renew and redefine its markets and industries (Yang, Li-Hua & Wang, 2007). As a firm-level phenomenon, entrepreneurship has evolved from the strategic change, innovation and management literature (McDougall & Oviatt, 2000). This study adopted Oviatt and McDougall (2000) definition, which is rooted in the firm-behaviour approach to entrepreneurship (O’Cass & Weerawardena, 2009; Covin & Slevin, 1991) in the conceptualisation and measurement of entrepreneurial orientation as it relates to international entrepreneurship.

There are a number of international entrepreneurship models that have been discussed in international business literature. Zahra and George (2002) model dealt with the effect of organizational, strategic and environmental factors on the scope, extent and speed of international entrepreneurship and how this affects the competitive advantage outcome of firms expressed in financial and non-financial terms. Zucchella & Scabini (2007) model was based on the resource based view and applied the dynamic capability framework to international entrepreneurship. Other studies have assessed the effect of entrepreneurial orientation or international entrepreneurship alongside other strategic, organisational and environmental factors on internationalisation and international performance of firms (O’Cass & Weerawardena, 2009; Kropp et al., 2006; Hansen, Deitz, Tokman, Marino and Weaver, 2011).

Empirical studies have supported the premise that management characteristics impact decisions on internationalisation which in turn affects the international performance of firms (Lu et al., 2010; Peng & Luo, 2000; Perks & Hughes, 2008; White et al., 1998). Lu et al. (2010) highlights that most studies have been done within the context of developed economies, and there is a need for additional research to investigate the effect of firm resources and characteristics on international performance through capability development

Oviatt and McDougall (2005) suggest that in the absence of sufficient resources to control many assets through ownership, firms tend to use alternative transaction governance structures which may include resource conserving structures like networks. It has been argued that with greater international entrepreneurship, firms can overcome their resource constraints and pursue rapid internationalisation and may

account for variations in firm international performance (O’Cass & Weerawardena, 2009). The current study combined the four aspects of management characteristics discussed in order to assess their direct effect on international performance within a developing country context and to assess the indirect effect through capability deployment. As evidenced above, management characteristics have been found to have an effect on international performance. The results have not reached a singular definitive agreement. Additionally, there is a need to study the performance implications of management characteristics within the context of developing economy firms.

2.3.1.3 Organisational Demographics and International Performance

Organisational demographics refer to the organisational characteristics of a firm. Relevant literature has decomposed organisational demographics to include firm size and firm age (Zeng et al., 2009; Lu et al., 2010). Firm size has been defined as the value of resource base available in a firm and most previous research has conceptualized firm size in terms of number of employees, value of turnover or revenue or capital over a specific time period (Kalantaridis & Levanti, 2000; Wincent, 2005; Zeng et al., 2009).

There is no universal definition of firm size. Different countries use varying categories to differentiate between firms of different sizes. Organisation for Economic Cooperation and Development (OECD) defined firm size to differentiate SMEs from large firms in the European Union. An enterprise is regarded as small or medium sized if it has less than 250 employees and less than 50 Million Euro (KShs. 5.15 billion) turnover respectively; a balance sheet total of less than 43 Million Euro (circa

KShs. 4.429 billion) and if not more than 25% of the shares of such an enterprise are in the ownership of another enterprise (OECD, 2003). In Kenya, the criteria used to define and differentiate large, medium, small and micro firms are: number of people/employees (small firms have 10 to 50 employees; medium firms have 50 to 100 employees and large have more than 100 employees) and the company's annual turnover (medium sized firms earn a turnover of between KShs.5 million to KShs.800 million and large sized firms generate an annual turnover of above KShs.800 million). Manufacturing firms have an additional categorisation based on level of investment in capital equipment (GoK, 2005).

Firm age relates to the number of years a firm has been in operation (Shinkle, Aldas & Kriauciunas, 2010). Several empirical studies have reported results that suggest an organisation's demographics of size and age are key determinants of its propensity to engage in and be successful in international business (Demsetz, 1973; Wincent, 2005; Ha-Brookshire, 2009; Lu et al., 2010). That is, the larger and older the firm, the bigger the differential size and experience advantage over other firms; and this is expected to have a positive effect on internationalisation and international performance.

An organisation's size is considered to be a key determinant of its propensity to engage in and be successful in international business (Demsetz, 1973; Wincent, 2005; Ha-Brookshire, 2009). This can be explained by the perception that larger organisations possess greater "slack" in managerial and financial resources and capacity, facilitating more internationalisation than smaller firms. Previous research on international business has started with the premise that developing economy firms

when compared to developed economy firms may suffer from size and age disadvantages that prevent or limit their ability to internationalise and compete internationally (Mittelstaedt et al., 2003; Levitt, 1983). Additionally, empirical research has highlighted that firms in particular industries may experience different paths to internationalisation and varied international performance (White et al., 1998; Zeng et al., 2009).

Available empirical evidence indicates that the beneficial effects of opening-up international markets are not equally accessible to larger, medium and smaller firms from developed and developing countries alike (Pla-Barber & Escriba, 2006; Oviatt & McDougall, 2005). More specifically, available literature suggests that developing economy firms are confronted with greater difficulties in accessing international markets than their larger scale developed country counterparts (Pla-Barber & Escriba, 2006). Given the conflicting results on the size and age effect on international performance it would be beneficial for additional empirical studies within different contexts in order to establish the relative effect of organisational demographics on international performance.

Whereas multinational corporations from developed economies have a considerable experience of involvement in global markets, the majority of developing market firms' have recently adopted an international perspective in their strategies (Luo & Tung, 2007). Various empirical studies have found that firms from developed economies benefit in internationalisation from ownership advantages due to their size and technological superiority (Pla-Barber & Escriba, 2006; Oviatt & McDougall, 2005). Firms operating in developing countries have been perceived to have a shallow

home or location advantage, political instability, weak institutional frameworks and lack of market based skills and inadequate resources capabilities compared to their developed nations counterparts which are perceived to be mature, structured, stable and competitive (Brouthers et al., 2005; Auklah, Kotabe & Sahay, 1996). The effect of firm size on performance has been reviewed and studied within various contexts (Calof, 1993, 1994; Wincent, 2005). There has been contradicting results on the effect of firm size on performance. A number of studies have indicated a positive relationship between firm size and performance (Ha-Brookshire, 2009; Wincent, 2005; Demsetz, 1973), some found a negative relationship (Reid, 1993, 1995; Dobson & Gerrard, 1989; Cubbin & Leech, 1986); and other studies found no relationship exists (Amato & Wilder, 1985). It is evident that differences in study methodology and construct operationalization to some extent may make direct comparison of results difficult.

As our understanding of international business has grown, researchers have viewed firm size and age as predictors to international performance (Lu et al., 2010; White et al., 1998; Calof, 1994). In general the results of these types of studies have found a positive relationship between firm size and internationalization. Baird, Lyles and Orris (1994) highlighted that larger industrial firms were more involved in international business than retail or service firms. Wolff and Pett (2000) however argued that smaller firms can and do engage in international business and may utilise different decision processes when internationalising. They presupposed that the RBV provided a theoretical perspective for explaining their success in the international market. They stated that small firms would capitalise on resources that are unique and not impacted by cost efficiencies and economies of scale.

Dhanaraj and Beamish (2003) supported these findings using a resource-based theory of the firm in a sample of Canadian firms. Studies have found a positive relationship between firm size and export intensity, (Czinkota & Johnston, 1983; O'Rourke, 1985). Other studies however found a negative or non-existent relationship while others found that small firms generated a greater level of international intensity than large firms (Bilkey, 1978; Holden, 1986). Mittelstaedt, Harben and Ward (2003) argue that small firms with fewer than 20 employees are too small to engage in international business as their size inhibits their ability to acquire the knowledge or experience necessary to engage in internationalisation. Poof and Heriot (2005) refuted the Mittelstaedt et al. (2003) study and showed that a firm size of 20 employees is not a necessary and sufficient condition for export activity and concluded that micro firms can also engage in exporting activity for performance gains.

Luk et al. (2008) study found that firm size had a positive but insignificant effect on international performance of transition and market based economy firms. O'Cass and Weerawardena (2009) found that firm size had a positive and significant effect on the international performance of South African firms. This illustrates that firm size does have an effect on the level of international performance but does not limit the ability of a firm to operate globally. Firm size is expected to therefore have beneficial effects on international expansion activities and subsequently on the international performance of firms.

Organisation demographics have been proposed as an important characteristic that enables firms to gain performance advantage. Larger firms are viewed as having a

greater ability to expand resources and absorb risks than smaller one (White et al., 1998) and usually possess more product lines and higher product capacity together with organisational resources and slack (Tseng et al, 2007; Alvarez & Barney, 2001; Penrose, 1959). Smaller firms and those with less business and international experience tend to deal with greater uncertainty when confronted with external environmental changes than larger firms due to the relative lack of resources and limited capabilities. This implies that they have to be more innovative and flexible in order to gain performance improvements (Lu et al., 2010). This implies that the level of resources of a firm, when deployed with existing capabilities is expected to improve the level of firm performance as it internationalises.

2.3.2 Firm Resources, Capabilities and International Performance

A dominant view is that resources and capabilities are clearly distinguishable from one another (Makadok, 2001; Lu et al., 2010; Grant, 1991). Synthesising prior notions (Amit & Schoemaker, 1993; Dhanaraj & Beamish, 2003; Lu et al., 2010) this study followed a typology that categorises resources separately from capabilities. A review of literature resulted in the selection of three firm capabilities as study variables. These were organisation innovation intensity, knowledge capability and adaptive capability.

Organisation innovation intensity has been defined as the “application of ideas that are new to the firm, which add value either directly for the enterprise or indirectly for its customers. The newness and added value are embodied in products, processes, services, or in work organisation, management or marketing systems” (O’Cass & Weerawardena, 2009 p. 111). Porter (1990) viewed innovation as both technological improvements and improved methods in processes and product changes, new

approaches to marketing and distribution. Previous research is biased towards technological innovation and has primarily focused on product innovation (O’Cass & Weerawardena, 2009). However, firms undertake both technological and non-technological innovations (Porter, 1990). It has also been noted that technological and non-technological innovations can be implemented at the same time within a firm (O’Cass & Weerawardena, 2009; Rothwell, 1992). This reflects the need to define innovation broadly, incorporating all forms of innovation (Porter, 1990; Zeng et al., 2009).

Organisation innovation intensity enables firms to gain entry into competitive international markets and has been found to have a positive effect on performance. Anderson (2000) studied international entrepreneurs and discovered that they introduced new processes and sources of materials as they engaged in new product development. Luk et al. (2008) found that administrative and product related innovation had a positive and significant effect on financial and market performance of Chinese firms. O’Cass & Weerawardena (2009) found that firms broadly use four types of innovation, namely product, process, market and business systems and that it had a positive and significant effect on the international innovative performance of South African firms.

Knowledge capability refers to the ability of a firm to acquire and access international market knowledge and the ability to rapidly obtain situation specific, precise, up to date knowledge about foreign market conditions, customer needs and the regulatory requirements (Zhou, Barnes & Lu, 2010; Lu et al., 2010; Zahra et al., 2009). According to the knowledge-based view of the firm, new knowledge creation and

exploitation influences the international performance of a firm (Tseng et al., 2007; Zahra et al, 2009; Felin & Hesterly, 2007 Grant, 1996). Zahra et al. (2000) highlights that knowledge acquired from global operations enhance organisational learning and the firm's knowledge base. This is expected to improve their international performance. A number of studies have found a positive effect between knowledge capabilities and international performance (Lu et al., 2010; Tseng et al., 2007; Zeng et al., 2009). Knowledge capability and learning assists the firm in opportunity recognition; strategic renewal; environmental management; and enables organisations maintain network relationships with key stakeholders enhancing their ability to be adaptable, which is especially important for internationalising firms (Kropp et al., 2006; Lumpkin & Lichtenstein, 2005; Day, 1994; Sinkula, 1994; Keskin, 2006; Farrell, Oczkowski & Kharabsheh, 2008).

Human capital is the major agency for organisational learning and has been acknowledged in literature as the primary source of value creation and critical innovation infrastructure (Zahra, Ucbasaran & Newey, 2009). Management is therefore expected to influence the level of capability development within a firm as it operates internationally through knowledge acquisition and management.

Adaptive capability is defined as “a firm's ability to coordinate, recombine and allocate resources to meet the changes required to meet the requirements of foreign customers and suppliers” (Lu et al., 2010 p.422). Research has reiterated the adaptive capability is a key determinant of superior performance as it is essential for firms to meet the different cultural and technological standards in the new markets that they enter by tailoring their products and services to the market requirements (Dow, 2006).

Foreign markets tend to be more dynamic, uncertain and competitive than domestic markets (Oviatt & McDougall, 2005). Large multinational firms from developed economies may possess slack resources and may not be quick to react to changes in the foreign markets. Firms from developing economies are generally smaller in size and may experience resource constraints which limit their ability finance strategies to changes in foreign markets. The firms therefore need to have the capability to adapting quickly (Shinkle, Aldas & Kriauciunas, 2010).

Previous research has highlighted conflicting results on the effect of firm resources and capabilities on international performance (Lu et al., 2010; O’Cass & Weerawardena, 2009; Dhanaraj & Beamish, 2003; Eren-Erdogmus et al., 2010). Lu et al. (2010) highlights that the conflicting results may be due to not considering mediating effects on the relationships and proposed the investigation of the effect of capability deployment on the firm resources and international performance relationship.

Grant (2002) conceptualised a framework depicting the relationship between firm resources, capabilities and competitive advantage. Previous studies results have supported the mediating effect of firm capabilities on the effect of firm resources on international performance (Dhanaraj & Beamish, 2003; O’Cass & Weerawardena, 2009). Research has combined internationalisation theory with the resource based view in order to investigate the effect of elements of institutional capital on performance. Dhanaraj and Beamish (2003) found the relative importance of resource and capability mix on the performance of exporting firms both in US and Canada. This study assessed a single resource and capability relationship effect on

performance. Tseng et al. (2007) studied the impact of firm resources on the growth on multinationality of US public firms in the manufacturing industry and the results showed that knowledge based resources generate faster and longer lasting influences on international growth than the property based resources. The study however focused only on the resource effect on international performance without considering the role that firm capabilities play in the firm resources and international performance relationship. Zeng et al. (2009) found that management systems and senior management knowhow had the most significant positive effect on the international performance of firms.

Luk et al. (2008) studied the effect of social capital and various types of innovation on the international performance of firms in transition and market based economies in light of institutional theory. The effect of social capital (management ties with government) on administrative innovation was found to be positive and significant for Chinese firms and not so for firms in Hong Kong. It was also found that the product related innovativeness and financial/social performance relationships to be stronger and more significant for Hong Kong firms than Chinese firms. O’Cass & Weerawardena (2009) found a positive effect of firm organisational intensity on the influence of firm size and international entrepreneurship on international performance of South African firms in the manufacturing industry. This study however, only looked at the effect on one capability on two singular firm resource factors. Shinkle, Aldas and Krianciuna (2010) found that there was a significant effect of economic institutions and firm characteristics on the export growth of Central and Eastern European firms under different levels of free market institutional developments. Lu et al. (2010) combined the resource-based view of the firm and the capability-building

perspective of rent creation to determine the role of firm-specific capabilities of adaptive and knowledge capability on the firm resource and performance relationship. The study only reviewed the effect of external institutional capital and management ties on international performance and found that knowledge capability did mediate the effect of external institutional capital and management ties on international performance. However, adaptive capability was found to have positive and significant effect on international performance, but was not a mediator in the above mentioned relationships.

Management characteristics determine the ability of a firm to identify international opportunities and act swiftly. Close relationships with foreign partners allow firms to tailor and change their products and services to meet expectations faster than competition (Bruton, Dess & Janney, 2007). As relates to management characteristics, capabilities and international performance, Morris and Sexton (1996) found a significant positive relationship between entrepreneurial intensity, innovation and increased growth, but not increased profitability of US firms. Antoncic and Hisrich (2000) study reported that entrepreneurial orientation is related to the growth of Slovenian and United States of America (USA) established firms of various sizes, and to profitability of Slovenian, but not USA firms.

The existence of available technological and knowledge based resources, positive management attitudes and international orientation enables a firm to be more flexible in responding to partner requests and to the changing needs in the international market place (Oviatt & McDougall, 2005). Although social ties have been studied within the context of internationalisation, there has been limited focus on the influence of home

and foreign based social network ties of the firm on the international performance relationship through capability enhancement. Participation in existing institutional arrangements and government programs like trade fairs also provides firms with opportunities to internationalise through linkages with potential customers and suppliers. These institutional structures enable firms to adapt more quickly and easily to the international market place thereby enhancing performance of the firm (Shinkle, Aldas & Kriauciunas, 2010; Lu et al., 2010). The concept of the born global firm has also illustrated that firms do not have to experience the traditional paths to internationalisation and can implement a springboard approach by leveraging the firm's capabilities in the global market place, thereby leading to improved performance (McDougall & Oviatt, 2000).

A born global firm, sometimes referred to as an international new venture or a global start-up, is defined as “a business organisation that from inception, seeks to derive significant competitive advantage from the sales of outputs in multiple countries (Oviatt & McDougall, 1995 p.49). These firms have international origins, generate 25% of sales from international sales, have international resource commitment and have internationalised within three years of inception (Knight, Madsen & Servais, 2004). This has resulted in an increased interest as to what are the determinants of international performance (Zeng et al., 2009) and which factors in particular contribute to the achievement of accelerated internationalisation and superior performance. Zhou et al. (2007) reiterates that assessing institutional aspects of firms is relevant because they explain how firms utilise the business and network ties to access knowledge of a foreign sourced products or technology, get advice and experiential learning about foreign partners and business opportunities and referral

endorsement to build trust to attract foreign technologies, capital and management skills. O’Cass & Weerawardena (2009) argue that a firm’s organisation innovation intensity (technological and non-technological innovation) positively influences the effect of firm size on international performance firms and the effect of international entrepreneurship on internationalisation. They also suggest that developing market firm internationalisation and performance is an entrepreneurial activity. Although, innovation is considered the primary strategy for value creation, the available international business literature that examines the role of firm resources on innovation and international market performance has been limited.

Overall, the literature available on the role of innovation, knowledge and adaptive capabilities in Kenyan firms’ efforts to enter global markets remains limited, reflecting a substantial gap in literature. In response to reducing the research gap, the current study established the relationship between firm resources of institutional capital, management characteristics and organisation demographics; and firm capabilities and the mediating effect of firm capabilities on the relationship between firm resources and international performance within a developing economy context.

2.3.3 International Expansion and Firm International Performance

International expansion or degree of internationalisation refers to when a firm expands the sales of its goods or services across the borders of global regions and countries into different geographical locations or markets (Hitt, Ireland & Hoskisson, 2007, p. 251). In internationalisation theory, international expansion, multinationality, geographic diversification and degree of internationalisation tend to refer to the same process and terms are used interchangeably (Pattniak and Elango, 2009; Lu &

Beamish, 2004; Capar & Kotabe, 2003; Tihanyi, Johnson & Hoskisson, 2003). The Degree of Internationalisation (DOI) - performance relationship of organisations has been reviewed by various scholars (Ruigrok & Wagner, 2003; Sullivan, 1994). Researchers have attempted to support theoretically and empirically the view that international expansion is an antecedent to superior financial success. The findings of these inquiries have been inconsistent and contradictory (Sullivan, 1994). Prior studies hypothesized a linear relationship between DOI and performance. International expansion is expected to increase market power, improve the firms' learning curve in international markets, enhance capability development within organisations, assist with the deployment of firm specific intangible assets and reduce transaction costs of asset exchange across markets (Hitt, Tihany, Miller & Connelly, 2006; Ruigrok & Wagner, 2003; Bartlett & Ghoshal, 1989; Vernon, 1966; Contractor, 2007). There have been different models used to explain the internationalisation-performance relationship.

Sullivan (1994) indicated that the results of empirical studies have been heterogeneous and contradictory. Empirical studies have indicated a linear positive relationship between international expansion and performance while others have indicated a negative, U-shaped and even no relationship argument (Hitt et al., 2006; Ruigrok & Wagner, 2003; Lu & Beamish, 2001). Gomes and Ramaswamy (1999), by specifying performance types, found the influence of multinationality to be positive with respect to financial performance and negative with respect to an operational performance measures (Hult et al., 2008).

Contractor, Kundu & Hsu (2003), and Lu and Beamish (2004) have suggested a three stage relationship between international diversification and performance. The three stage model predicts a positive DOI-performance relationship —for most of the DOI range which is both preceded (following logic of U-shape hypothesis) and succeeded (following the logic of inverted U-shape hypothesis) by domains of negative DOI-Performance relationship. This illustrates the conflicting views about the relationship between degree of internationalization and the international performance of firms.

This current study established the relationship between the DOI and international performance of firms in Kenya. Moreover, this study focused on the role and nature the effect of DOI on the firm capability and international performance relationship and the effect of internationalization mode orientation the effect of firm capability and DOI.

2.3.4 Firm Capabilities, International Expansion and International Performance

International expansion is an important path to firm growth. This presents opportunities as well as challenges to firms. New knowledge and capabilities need to be acquired and developed to be able to successfully enter new markets. The firm also need to extend and build new relationships with stakeholders, hire new staff and establish its legitimacy in the new markets (Lu & Beamish, 2001). Previous studies have indicated that firm capabilities have a positive effect on the internationalisation and performance of firms. A review of available literature has highlighted a number of capabilities that are important to internationalisation (Lu et al., 2010; Dhanaraj & Beamish, 2003). A growing body of research examines the conditions resulting in a

firm's internationalisation and the consequences of this process for performance and capability building (Petersen, Pedersen & Lyles, 2008; Zahra, 2005; Soriano & Dobon, 2009). A firm's knowledge base and learning is enhanced by the international experience gained from international operations (Tsang, 2002). Geographic diversity exposes the firm to a rich array of environments, which facilitates learning and the accumulation of knowledge (Zahra et al., 2009).

Other perspectives suggest that firms also move across geographic boundaries for resource and knowledge acquisition as well as capability enhancement (Luo & Tung, 2007). The ability of a firm to learn from its experiences is an important determinant of its performance, especially in the international market place (Zahra, 2009; Slater & Narver, 1995). Improved performance requires an understanding and satisfaction of expressed and latent needs of customers (Day, 1994). Knowledge capability enables the firm to target and enter new markets, and enhance performance (Zahra et al., 2009). A firm's capability in gathering and processing information about foreign markets has a positive impact on international performance (Lu et al., 2010; Zeng et al., 2009; Keskin, 2006). However, firms operating in developing economies may experience difficulties obtaining information about foreign markets and may rely on government and other partners to provide information on market conditions, trade restrictions and overseas competition (Lu et al., 2010).

According to Kropp et al. (2006), a characteristic of internationalising firms is new entry into markets with new or existing goods/services and exceptional learners are often effective entrepreneurs. Knowledge capability therefore, has been associated positively with firm international expansion, innovation and performance (Harrison &

Leitch, 2005; Zahra et al., 2009; Lumpkin & Dess, 1996). Dhanaraj & Beamish (2003) study of 500 USA and 385 Canadian small and medium enterprises found that the effect of firm size to technological intensity was negative and insignificant. The study also found that the firm size had a positive and significant effect on DOI and enterprise (entrepreneurial resources) were found to have a positive and significant effect on technology intensity and DOI. Technological intensity was found to have a positive and significant effect on DOI. The degree of internationalisation of a firm was positively and significantly related to its performance (export intensity). The study analysed the data using structural equation modelling.

Pattnaik and Elango (2009) studied the impact of firm resources on the internationalisation and performance relationship on a sample of 787 Indian manufacturing firms and found a nonlinear relationship between internationalisation and performance, and that the firm capabilities of cost efficiency and marketing intensity had a negative and moderating impact on the relationship while no impact was found from technological intensity. Kuivaliinen, Puumalainen, Sintonen, & Kylaheiko (2010) studied the impact of organisational capabilities on the internationalisation and performance of 124 Finish small and medium size firms in the information and communication technology sector. The study found that management capability of international experience to be a key determinant of internationalisation and performance. The innovative, knowledge and adaptive capability of a firm is therefore expected to have a positive effect on international expansion and international performance. It is therefore also expected that the relationship between firm capabilities and international performance is mediated by the degree of internationalisation of a firm (O’Cass & Weerawardena, 2009; Lu et al., 2010).

2.3.5 Firm Capabilities, Internationalisation Orientation, internationalisation and Performance

Organisations have different possibilities of engaging in international business and entering foreign markets. The internationalisation orientation of a firm, that is, its propensity to engage in inward or outward internationalisation or both, has been cited in literature to be a successful means for developing country firms to access and exploit the vast global business opportunities that were previously dominated by Multinational firms from developed economies (Knight & Cavusgil, 2004; Zhou et al., 2007). Zahra (2005) has noted that the theoretical development in the international performance implications of rapid internationalisation and internationalisation orientation is still a topic worth investigation in the international entrepreneurship field. The internationalisation process of firms has been subject to widespread research, with the emphasis being on outward international operations, which is the penetration of foreign markets through various means (Johanson & Vahlne, 1990; Andersen, 1993; Lu & Beamish, 2006). Internationalisation literature recognises two types of internationalisation orientation, inward and outward.

Outward internationalisation modes include exporting, joint ventures, licensing agreements, franchising, contract manufacturing and foreign direct investment. Exporting has generally been the initial mode of entry into international markets. Inward internationalisation is defined as the movement of foreign consumers to the domestic market where the firm is located (Bjorkman & Kock, 1997; Bianchi, 2011) or the use of foreign management, technology and practices and investment (Zhou et al., 2007). This mode of internationalisation is mostly associated with services, where it is produced and consumed in the home market due to local resources or

impossibility of moving the service abroad. Such services include tourism, education, health and entertainment. Bianchi (2011) notes that although these companies may open a foreign office or provide the service in a foreign market, their internationalisation is normally focused on serving foreign customers in the domestic market during the initial internationalisation stages.

Most available research has been on the effect of outward internationalisation orientation on international performance. Although there is research on the relationship between internationalisation orientation and international performance, the results are conflicting (Zhou, Wu & Lou, 2007; Lu & Beamish, 2004; Autio, Sapienza & Almeida, 2000). Zhou et al. (2007) have suggested that the lack of conclusive findings may be due to the existence of other factors that influence this relationship. Additionally, the effect of internationalisation orientation on the relationship between firm capabilities and internationalisation and international performance has not been explored within the context of Kenyan firms.

2.4 Summary of Studies

There are various studies that have examined the determinants of firm international performance. As highlighted in the previous sections, the studies reflect different findings on the direct and indirect effects of firm level factors on international performance relationship. In addition to the above, there is no singular definitive agreement on which firm level account for the heterogeneity in internationalisation and firm international performance.

One important reason for different empirical results may be that researchers choose to study singular or different aspects of firm level factors and that differences in measurement of firm international performance were used (Lu et al., 2010). Additionally, most of these studies are based on the context of western economies and some emerging economies (Dhanaraj & Beamish, 2003; Lu et al., 2010; Kuivalainen et al., 2010). Additionally, few examine the relationship between institutional capital, management characteristics, firm capabilities, organisational demographics and internationalisation orientation and international performance in the context of firms operating in developing economies. Studies within the Kenyan and African context have focused on how other firm and industry level factors effect on internationalisation and international performance such as social and human capital, strategic and market orientation and internationalisation behaviour within the context of small and medium sized enterprises (Kabagambe, Munyoki & Ogutu, 2012; Tenai, Bitok, Cheruiyot & Maru, 2009; Musimba, 2010; K'Obonyo, 2004; Rutashobya & Jaensson, 2004). Table 2.2 summaries the findings of a number of the previous studies discussed.

Table 2.2: Previous Studies

Studies	Focus of the Study	Findings of the study	What this study will address
White et al. (1998)	<ul style="list-style-type: none">• Firm characteristics, international orientation, management attitudes, market characteristics, strategic advantage strategic motivation and international performance.	<ul style="list-style-type: none">• Mail survey administered to 1600 top executive of US based business to business service firms.• Study found a positive relationship between firm characteristics and export performance.• Provided more insight into differences between service and manufacturing firms in international performance.	<ul style="list-style-type: none">• Determine the influence of firm resources and capabilities on international performance of firms operating in developing economies.• Assess the effect of organisational demographics of firm size, age and industry segment on the firm capabilities and international performance relationship.
Dhanaraj & Beamish (2003)	<ul style="list-style-type: none">• Firm Resources (Firm size, enterprise and technological intensity) and export performance relationship.	<ul style="list-style-type: none">• Mail Survey administered to US and Canadian Small and Medium sized industrial exporters.• SEM analysis• Based on the resource based view.• Study found significant effect of technology intensity on the effect of firm size and enterprise on export strategy and performance.	<ul style="list-style-type: none">• Extend to study the effect of bundles of firm resources and capabilities on international performance.• Adopt combination of RBV and Institutional theory.• Study within the context of publicly quoted firms in various industries operating in the developing economy of Kenya.
Tseng et al.(2007)	<ul style="list-style-type: none">• Firms Resources and their effect on international performance of growth in multinationality.	<ul style="list-style-type: none">• Longitudinal Survey of US publicly held companies in the manufacturing sector.• Multiple Regression analysis• Study found that Knowledge-based resources generate faster and longer-lasting influences on international growth than property based resources. Specifically, knowledge resources related to technological and marketing, and	<ul style="list-style-type: none">• Study the impact of firm specific capabilities on the effect of firm resources on international performance.• Study publicly quoted companies in Kenya in various industry segments.

Studies	Focus of the Study	Findings of the study	What this study will address
		property-based resources related to organisational slack and Internally generated profits are found to be significant driving forces behind growth in multinationality.	
O'Cass & Weerawardena (2009)	<ul style="list-style-type: none"> • Firm size, International Entrepreneurship, Organisational innovation intensity, Internationalisation performance. 	<ul style="list-style-type: none"> • Survey administered to internationalised SMEs operating in the manufacturing sector in Australia. • Study found that organisational innovation intensity has a positive effect on firm size and international entrepreneurship and international performance of a firm. 	<ul style="list-style-type: none"> • Study the impact of firm specific capabilities on the effect of firm resources on international performance. • Study medium and large sized publicly quoted companies in Kenya in various industry segments.
Shinkle et al. (2010)	<ul style="list-style-type: none"> • Institutional arrangements, firm size and age and international performance relationship. 	<ul style="list-style-type: none"> • Studied sample of multi country Eastern and Central European firms operating in transitional economies. • Study found a U shaped relationship between institutional, size and age to performance in less advanced economies. • Findings suggested the importance and influence of economic institutions, firm size and age on firm international performance under different levels of free market institutional development. 	<ul style="list-style-type: none"> • Study will examine the effect of other firm level factors on international performance. • Study medium and large sized publicly quoted companies in Kenya in various industry segments within the context of developing economy.
Lu et al. (2009)	<ul style="list-style-type: none"> • Firm resources extend (institutional capital and management), firm Capabilities 	<ul style="list-style-type: none"> • Survey administered to Chinese entrepreneurial firms in an emerging economy. • Partial Least Squares Analysis 	<ul style="list-style-type: none"> • Include other levels of institutional capital – individual and intra-organisational. • Study medium and large sized

Studies	Focus of the Study	Findings of the study	What this study will address
	(knowledge and adaptive capability), and international performance among	<ul style="list-style-type: none"> • Finding demonstrated support for the mediating role of capabilities in the relationship between resources and international performance. 	<p>publicly quoted companies in Kenya in various industry segments within the context of developing economy.</p> <ul style="list-style-type: none"> • Extend to include other firm specific characteristics.
Zeng et al. (2009)	Firm size, Technology, cost, innovation, management system, international business experience, senior management, labour availability, brand consciousness, expanding, overseas markets, international performance.	<ul style="list-style-type: none"> • Survey administered to manufacturing firms in China. • Study found that the marketing resources and capability of the firm plays the most important role in improving international performance. Also found a significant effect of management characteristics on international performance but no significant relationship between controlling resource capacity and international performance. • Study also highlighted that the types of ownership and industry have a significant impact on performance however the relationship is not significant between firm size and international performance. 	<ul style="list-style-type: none"> • Study medium and large sized publicly quoted companies in Kenya in various industry segments within the context of developing economy. • Differentiate firm resource capability profiles. Investigate the mediating effect of capability development on relationship between resources and international performance.
Kuivalainen et al. (2010)	Organisational capabilities, internationalisation and performance	<ul style="list-style-type: none"> • Survey of Finnish ICT firms. • Study found a positive relationship between firm capabilities and internationalisation and performance. 	<ul style="list-style-type: none"> • Study will focus on identifying how firm capabilities transform resources to enable international performance within developing economy firms.
Musimba (2010)	Human Capital, Social Capital, Internationalisation	<ul style="list-style-type: none"> • Survey of ICT firms in Kenya. • Study found a positive relationship between 	<ul style="list-style-type: none"> • Establish the effect of other firm level factors on the international

Studies	Focus of the Study	Findings of the study	What this study will address
Tenai et al. (2009)	Establish the moderating effect of Firm size, Corporate entrepreneurship, Firm competitiveness, Planning horizon, CEO attributes, Longevity on SME strategies and competitiveness in international market.	<p>social capital and internationalisation and a positive relationship between human capital and internationalisation in terms of scope, mode.</p> <ul style="list-style-type: none"> • Survey of 50 Horticultural traders in Kenya. • Found that a mix of internal and external factors to the firm moderate the relationship between strategies and competitiveness. 	<p>performance of Kenyan firms.</p> <ul style="list-style-type: none"> • Effect of other firm level factors on the degree of internationalisation and performance of Kenyan firms.
Kabagambe, et al. (2012)	Firm competencies, Export marketing strategies and export performance.	<ul style="list-style-type: none"> • Survey of 76 exporting manufacturer SMEs in Ugandan. • Marketing and Sales competencies have a positive effect on export performance 	<ul style="list-style-type: none"> • Assessing the mediating effect of firm capabilities in the effect of firm level factors on international performance.

2.5 Conceptual Framework

The initial studies on internationalisation and performance were based on organisations from the western, developed economies of United States of America, Japan and Europe. Market maturity and increased local and international competition has pushed companies to seek growth opportunities in less developed and developing countries (Cheng et al., 2011). The globalisation of markets has now witnessed a change in the flow in international investments. Instead of the traditional internationalisation of western economy organisations to other countries, firms from emerging and developing economies have developed global perspectives seeking new opportunities in foreign markets. These foreign market environments present different political and cultural contexts to organisations, which often require changes to product and service mix and methods of operation (Lu et al., 2010).

Based on the above mentioned literature review, the conceptual model framework for the current study is presented in Figure 2.1 below. The conceptual model sought to establish the direct and indirect effects of firm level factors on the internationalisation and international performance of publicly quoted companies in Kenya.

As illustrated in the Figure 2.1 below, the conceptual model used in this research sought to determine how a firm's proficiency in transforming available firm resources using firm specific capabilities, subject to the firm's internationalisation orientation and degree of internationalisation, explains variations in international performance of publicly quoted companies.

The schematic diagram below represents the relationship variables being studied.

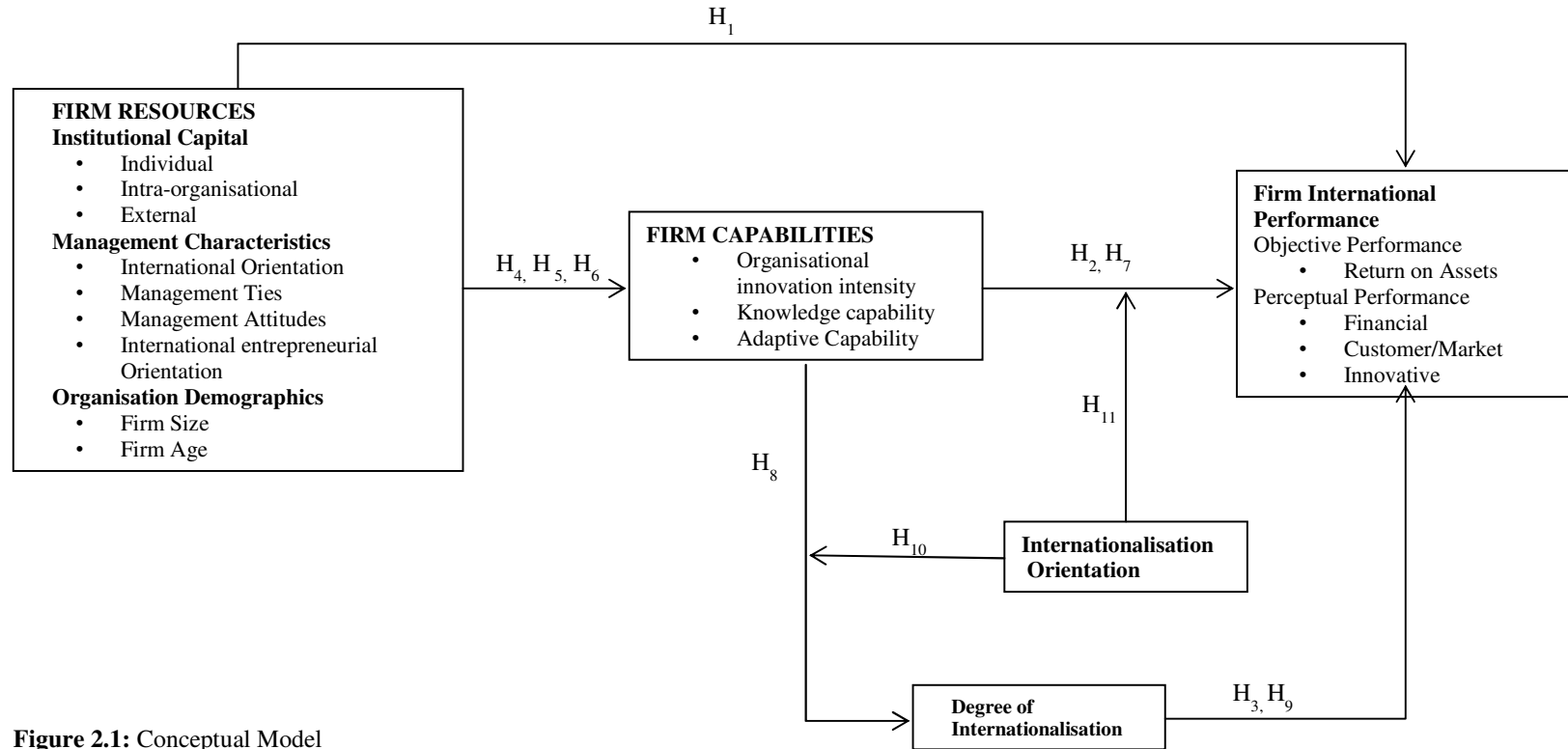


Figure 2.1: Conceptual Model

2.6 Research Hypotheses

A review of existing literature and the conceptual model leads to the following

hypotheses as outlined in Table 2.3.

Table 2.3: Research Hypotheses

Objective	Hypotheses
i. Establish the effect of firm level factors on the international performance of publicly quoted companies listed on the Nairobi Securities Exchange.	H₁: A firm's resources are positively related to its international performance.
	H₂: A firm's capabilities are positively related to its international performance.
	H₃: There is a positive relationship between the degree of internationalisation and firm international performance.
ii. Assess the effect of institutional capital, management characteristics and organisational demographics on firm capabilities.	H₄: Institutional capital has a positive effect on firm capabilities.
	H₅: Management characteristics have a positive effect on firm capabilities.
	H₆: Organisation demographics have a positive effect on firm capabilities.
iii. Determine the effect of firm capabilities on the relationship between firm resources (institutional capital; management characteristics; and Organisation Demographics) and firm international performance.	H₇: A firm's capabilities mediates the effect of firm resources on firm international performance.
iv. Establish the effect of degree of internationalisation on the relationship between firm capabilities and firm international performance.	H₈: There is a positive relationship between firm capabilities and degree of internationalisation.
	H₉: The degree of internationalisation mediates the effect of firm capabilities on firm international performance.
v. Assess the moderating effect of internationalisation orientation on the relationship between firm capabilities and the degree of internationalisation.	H₁₀: Internationalisation orientation moderates the relationship between firm capabilities and degree of internationalisation.
vi. Determine the moderating effect of internationalisation orientation has on the relationship between firm capabilities and firm international performance.	H₁₁: Internationalisation orientation moderates the relationship between firm capabilities and firm international performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology adopted in this study. The research objectives and conceptual framework provided the basis for the methodological direction implemented and analytical path adopted in this research. This chapter provides a brief explanation of the research philosophy, research design applied in the study, and provides details on the research setting, population, data collection methods and instruments and data analysis techniques adopted in the research study.

3.2 Research Philosophy

Literature highlights two major research philosophies, namely positivist also known as scientific and interpretivist or subjectivism (May 2001). According to positivists, reality is stable and can be observed from an objective viewpoint. In order to identify relationships, manipulation of independent variables is performed. In positivism, predictions can be made on the basis of the previously observed and explained realities and their inter-relationships (Levin, 1988). Positivism is said to be in the realm of theory, where the data is theory driven and research design is utilised to test the accuracy of the theory (May 2001).

Subjectivism or interpretivists argue that reality can only be understood through subjective interpretation and intervention. The study of phenomena in their natural environment is crucial to the interpretivist philosophy. The approach also acknowledges that researchers cannot avoid affecting the phenomena they study (Kothari, 2004). Subjectivism focuses on the meaning the individuals give to their

environment and not the environment itself (May, 2001). The current research adopted a positivistic philosophical perspective. It utilised an empirical setting to investigate the theoretical relational paths drawn from literature and tested them through hypotheses. The conceptual framework sought to quantify the data for the purposes of explaining the causal relationships. This study was based on the premise that knowledge is founded on facts and that no abstractions or subjective status of individuals is considered. This study therefore, sought to derive a quantitative perspective, which holds that there is an objective reality that can be expressed numerically, with explanatory and predictive power (Neuman, 2006).

According to positivism the most logical, dominant, or relevant framework is consistently utilised and the objective reality exists beyond the human mind (Hjorland, 2004). This study adopted a positivistic philosophy as it aimed to offer explanations and it also started from hypotheses statements backed by facts contained in data sourced from respondents self-reporting, and secondary data of publicly quoted companies in Kenya. The data was then analyzed to test the accuracy of the theory. The approach also comprised of quantitative research tools and techniques.

3.3 Research Design

The study was a cross-sectional survey which is deemed appropriate as it has been found to be robust for effects of relationship studies and has been adopted in previous international business research (Lu et al., 2010; White et al., 1998, Tseng et al., 2007). The research study was analytical in nature and involved testing of hypotheses quantitatively. The main strength of this research approach was that it provided a concise answer to the research questions through the collection and analysis of

information that could be aggregated from survey data. This offered an enhanced understanding of the relationships that existed among the variables. The study constructs and phenomena that were being investigated were known and the aim was to describe them and explain them better through empirical investigation. The study used analytical and predictive models to establish the relationships between the variables under study. The research methodology employed was designed mainly to be confirmatory in nature.

A survey instrument was developed to collect data to empirically test the interrelationships among firm resources, capabilities, international expansion, internationalisation orientation and international performance as proposed by the study's conceptual model. The hypothesized relationships were tested based on testing of existing theory. The research, using theoretical knowledge and empirical research, postulated the relationship pattern a priori and tested the hypotheses statistically (Schreiber, Stage, King, Nora & Barlow, 2006).

3.4 Population and Research Setting

The primary objective of this research was to examine the relationships between firm level factors and international performance. To further narrow the scope of study, the research setting that was chosen was publicly quoted companies in Kenya. Publicly quoted companies are firms listed on the Nairobi Securities Exchange. This setting was selected for a number of reasons. Firstly, existing international business literature shows that there is a positive relationship between international expansion of firms and the economic growth in developing countries (Rutashobya & Jaensson, 2004; Calof, 1993). While national international performance is an area of interest at a

macro-level, firm level analysis forms the basis of micro level analysis and provides better understanding of what the determinants of international success and failure for companies. The publicly quoted companies operate in key sectors of the economy, which include agriculture, commercial and services, financial and investment and industry and allied. Agriculture, industrial and service sectors accounted for 22%, 15% and 62% of GDP respectively in 2009 (World Bank, 2010). This implies that the improved performance of these firms may contribute to improved growth in the various industry sectors. The international success of firms has been argued to contribute to the national economic growth and development of countries (Rutashobya & Jaensson, 2004).

Secondly, the emergence of emerging market multinationals from Latin America, Eastern Europe and Asia, as well as African countries like South Africa, has motivated firms from other emerging and developing economies to adopt outward oriented internationalisation led growth from import substitution programs (Eren-Erdogmus et al., 2010). Currently all publicly quoted companies in Kenya engage in a form of international business, with an inward or outward internationalisation orientation. However, some publicly quoted companies are clearly more successful in the international market place and differentiated. The study examined the relative effect of firm level factors on the international performance of these firms in order to establish which factors cause greater variability in performance.

Thirdly, it has been argued in literature that for a modern economy to be competitive and capable of responding to the requirements of globalization, an efficient and operational capital market has to exist within it (Parkinson & Waweru, 2008). Listed

companies contribute to international trade in Kenya and they represent firms that have sought growth opportunities locally through established capital markets and internationally through international trade. Fourthly, in the international market place, resource profiles, firm capabilities and other firm characteristics are of paramount importance due to the highly competitive nature of the international business environment. Lack of multinational expansion or international activity reflects the probability of insufficient resources and capabilities, which may in turn constrain international participation (Tseng et al., 2007). This research provided an opportunity to contribute to the existing body of empirical research by establishing the effect of particular firm level factors on the internationalisation and international performance of Kenyan firms.

Publicly quoted companies have publicly available information, containing data on financial and operational performance. They are regulated by the Capital Markets Authority and are required to provide financial statements that are audited by reputable audit firms. This provides for objective and reliable economic and financial performance data of these organisations. As an explanatory step in this research process, these organisations are able to provide public information on performance relative to their firm level factors needed to achieve superior performance. The consistency of the reporting requirements also provided an opportunity for comparison and evaluation across firms within the same NSE industry groups and across different industries (Hult et al., 2008).

Finally, limiting the investigation to a single nation helped to control for extraneous potentially confounding variables such as cognitive cultural and legal institutions that

may have resulted in differences in the institutional environment within the firm (Lu et al., 2010). Fourthly, the researcher is resident in Kenya, which enabled easy access to Kenyan data sources and the study provides developing country data for increasing generalisability. This study took the form of a census of all publicly quoted companies in Kenya as all engage in a form of international business. These companies are listed on the Nairobi Securities Exchange, details of which are contained in the NSE Handbook, 2011. Firms with operations involving inward or outward forms of cross border activities were studied.

The population for this survey is derived from the list of publicly quoted companies provided by Nairobi Securities Exchange and contained in the NSE Handbook 2011. At the time of the study, there were 58 publicly quoted companies. The NSE Handbook 2011 categorised listed companies into four industry sector groups. These were Agriculture, Commercial and Services, Industrial and allied and Financials and Investments. Industry grouping of the population is presented in Table 3.4.

Table 3.4: Population Industry Grouping

NSE Sector Categorisation	Number of firms
Agriculture	7
Commercial and Services	18
Industrial and Allied	14
Finance and Investment	19
Total	58

Source: NSE Handbook 2011

3.5 Data Collection

The study collected quantitative data from primary and secondary sources. Primary data was collected through a structured questionnaire adopted from similar relevant

studies with some modifications aimed at addressing the specific context. In order to evaluate individual item content and response format, the revised survey was further refined through pre-testing. No systematic problems were identified.

The questionnaire package sent to potential respondents comprised of a cover letter outlining the purpose of the study, an introductory letter from the University of Nairobi, Graduate School of Business and supporting authorisation from the National Council on Research and Technology of the Ministry of Higher Education, Research and Technology. Directions on how to respond to the questionnaire and confidentiality issues were highlighted at the beginning of the questionnaire. The research questionnaire, cover letter and relevant information are contained in Appendix II.

A key informant research approach was employed in data collection (Campbell, 1955). Management and business research has highlighted that people have different perspectives on the boundary of an organisation or firm (Dillman, 2000). For the purposes of this study, the unit of study was a firm or organisation listed on the Nairobi Securities Exchange and those with multi-divisional characteristics within the national boundary were viewed as a single entity. This was done to avoid possible information duplication that may be caused by multiple responses from a single unit or firm. Consequently, a single response was solicited from each firm for the same reason.

Prior management research has suggested that the perceptions of top management reflect the collective perspective of the organisation and therefore the subjective

measures or opinions of top managers are held as reliable sources of firm level data (Campbell, 1955; Pecotich, Purdie & Hattie, 2003). The respondents consisted of the Chief Executive Officer (CEO), or designated general manager, director of operations, Chief finance officer, Company secretary or the managers in charge of strategy or international business. The informants were required to be aware of the overall firm direction and international business activities. This followed Campbell (1955) suggestions that key informants be knowledgeable about the issues being studied and be willing to communicate this information.

The study employed the self-administered survey approach, using Dillman's mixed mode survey technique (Dillman, 2000). The questionnaires were hand delivered or posted, sent by courier services or emailed to ensure fast return. The questionnaires were sent with a cover letter outlining the objectives of the research, accompanied with directions for filling out the survey. Prior to sending the questionnaire, phone calls were made to the firms to verify the contacts. Some questionnaires were completed in the presence of the researcher. Six weeks later, the researcher made follow up phone calls, email and personal visits to the organisations who had not yet responded to the survey. A follow-up questionnaire replacement, where interested firms had not received or had lost the questionnaire was also made by personally dropping, mailing or emailing as requested. As an additional effort to increase response rate, the survey offered different options of questionnaire responses when providing replacement questionnaires (Dillman, 2000).

Primary data was used to address the constructs of institutional capital, firm capabilities, management characteristics, degree of internationalisation,

internationalisation orientation and international performance. Respondents were asked to assess scales operationalizing the study variables from a semi structured questionnaire containing direct measures and likert type scales. Secondary data was collected from the publicly quoted companies' annual reports and audited financial results for the period 2010 and NSE Handbook 2011, and these were used to measure organisational demographics and the level of objective firm international performance.

A number of assumptions underlay this research. The questionnaire was constructed based on several common assumptions. First, because the study administered questionnaires, it assumed that the respondents were capable of answering the relevant questions knowledgeably and accurately. The study also assumed that corporate executives were expert informants and had been used in numerous firm performance research studies for their ability to provide the insights or experience necessary to answer specific survey questions. Additionally, the methodology in general assumed that what respondents answer was representative of firm behaviour and practices.

3.6 Operationalisation of Variables

An extensive review of existing conceptual and empirical literature produced the measurement scales for each of the variables. Therefore the measurement scales used in the questionnaire were deemed to have face validity because they reflect the key components of the study. The data collection questionnaire was framed to incorporate close-ended questions, some requiring response on various five-point; and/or four point likert type scale item questions and providing two or one level(s) of agreement,

an opinion and two or one level(s) of disagreement respectively for a wide choice of fitting descriptions. Historical organisational performance and factual status data collection questions were to the point. The current study's constructs, as previously indicated in the conceptual model, are discussed hereafter. Table 3.5 provides a summary on the operationalization of the variables studied.

3.6.1 Firm International Performance

Firm International Performance is the dependent variable in the study. It was operationalized as the financial, customer and innovative performance of the firm. International performance was measured as objective and perceptual performance. The objective measure was a financial ratio of Return on Assets (Hult et al., 2008). Return of assets is the ratio of net income to total assets. The perceptual measures for international performance were operationalized into three dimensions: (a) financial performance (b) international market/customer performance and (c) firm innovative performance.

A four item perceptual financial performance measurement scale consisted of an international market share item, a turnover objectives item, success in international markets item and profitability effect of internationalisation item. Respondents were asked to indicate the extent to which their firms had achieved these four levels of performance. The items were measured on a 5 point likert scale of 1 (not at all) to 5 (very great extent) denoting the extent to which the performance was achieved.

The international market/customer performance was measured using a five item scale adopted from O'Cass & Weerawardena (2009), assessing how successful the

organisation is in entering new markets, increasing market share, increasing customer satisfaction and reducing the average development costs associated to products and services and reducing the time to market of new products and related process. The items were measured on a scale of 1 (not at all) to 5 (very great extent).

The firm innovative performance was measured with four items and was adopted from O’Cass & Weerawardena (2009). The items assessed the organisation’s success in the reduction of average costs associated to new products, the enlargement of the company’s competency base, the level of improvement in innovativeness of products and processes and improvement of sales volume and market acceptance of new products.

3.6.2 Institutional Capital

Based on Oliver (1997) and Lu et al. (2010) institutional capital was operationalised at three levels individual, intra-organisational and external. Individual level institutional capital was measured using a six item five point Likert type scale to capture management and staff norms and habits. This was based on Oliver (1997) and developed for the context of the study.

The intra-organisational level was measured using a seven item five point likert type scale to capture the firm’s corporate culture and systems and the external level was measured using a five item five point likert type scale to capture the existence and strength of relationships with other firms within the industry, firms in other industries and government (Lu et al., 2010; Oliver, 1997). The scales were developed from literature on institutional theory and capital (Lu et al., 2010; Oliver, 1997).

3.6.3 Management Characteristics

Management characteristics were operationalized as four aspects; namely, management ties, international orientation, management attitudes and international entrepreneurship. Management ties was measured using a six item five-point Likert type scale developed to capture the extent to which managers have established business ties with firms which are their customers, suppliers and foreign competitors cultivates and utilises ties with government, local social networks and local communities. This was based on previous measures developed by Peng and Luo (2000) and Lu et al. (2010).

Additionally, a three item 5 point Likert type scale was used to capture the level of personal/social ties and networks with other top managers in buyer, supplier and competitor firms and a three item 5 point Likert type scale to assess the level of personal/social ties and networks utilised with political leaders, industrial bureau officials, and regulatory and supporting organisations officials. These measures were adopted from Zhou et al. (2007).

International orientation was operationalized as the extent to which the management and staff of the organisation trained and work abroad. Measures developed for this study were based on previous literature of White et al. (1998) which captures whether the firm sends its management and employees abroad for work and training and an additional measure of level of internationally acquired skills and knowledge of the management and employees compared to competitors in the same industry. This was measured on a four point Likert type scale with 1 for above industry and 4 denoting below industry.

Management attitudes was operationalized as the top managements attitudes towards internationalisation and was measured using a three item five-point likert type scale to capture management attitudes towards internationalisation and the firm's ability to internationalise, a firm operations internationally and top management support towards firm internationalisation (White et al., 1998; Hutchinson et al., 2006).

This study operationalised international entrepreneurship as a firm's proactiveness, innovativeness and risk taking posture in the international market place. This is a firm level construct and is also a process construct and concerns the methods, practices and decision making styles of managers and their international entrepreneurship practices (O'Cass & Weerawardena, 2009; McDougall & Oviatt, 2000). It was captured using a ten item five point semantic differential type scale that conceptualized innovation, proactiveness and risk taking behaviours of the firm. Innovativeness measurement scale items indicated a firm's tendency to engage in, and support new ideas, novelty, experimentation, and creative process which may result in new products, services, or technological processes. Risk taking measurement scale items measured whether the firm incurs heavy debt or makes large resource commitment by seizing opportunities in the market place in the interest of high returns. Proactiveness was measured as a firm engaging in proactive behaviour by taking initiative by anticipating and pursuing new opportunities and by participating in emerging markets.

3.6.4 Organisational Demographics

Organisational Demographics were measured as two constructs, firm age and firm size. Firm age is measured by year of incorporation of the organisation and the number of years the company had been engaging in international business (Lu et al., 2010). Firm size (FS) is measured by the number of employees (Calof, 1993, 1994; O’Cass & Weerawardena, 2009; Lu et al., 2010) available from the NSE Handbook 2011.

3.6.5 Firm Capabilities

Three types of firm capabilities were captured in this study, knowledge capability, adaptive capability and organisational innovation intensity. Knowledge Capability was operationalized as the firm’s ability to acquire knowledge in and about foreign market conditions. It was measured using a three item five-point likert type scale to capture the extent to which a firm could acquire information required to understand foreign customer needs, identify overseas market opportunities and comply with the requirements of foreign trading partners as adopted from Lu et al. (2010) measured on a scale of 1 (not at all) to 5 (very great extent).

Adaptive capability was operationalized as a firm’s ability to adapt to foreign market conditions and environment and was measured using three five-point likert type scale items. Respondents were asked to indicate the extent to which their firms could meet foreign customer demands in terms of product and service specifications, tailor products and services to foreign customer requests and respond to a price change demand from a foreign customer as adopted from Lu et al. (2010) measured on a scale of 1 (not at all) to 5 (very great extent).

Organisation innovation intensity is operationalised in terms of the type and the degree of innovation capturing the degree of organisation innovation intensity of the company. Organisational innovation intensity construct was conceptualised as technological and non-technological innovation. The construct was measured using an eight item five-point semantic differential type scale to capture the extent of managerial, marketing, product and process innovation intensity in the firm (O’Cass & Weerawardena, 2009). The respondents were asked to indicate the extent and degree to which these four types of innovations were implemented by the firm.

3.6.6 Internationalisation Orientation

The construct of internationalisation orientation was operationalized at two levels, inward and outward orientation. Inward internationalisation was measured using a three item 5 point likert type scale measuring the extent to which firms utilised advanced management skills, technology from foreign countries and the extent to which they were involved in foreign direct investment. The items were measured on a scale of 1 (denoting “not at all”) to 5 (denoting “to a very great extent”).

Outward Internationalisation orientation was measured using a two item 5 point likert type scale assessing the extent to which the organisation aggressively seeks foreign markets and develops alliances with foreign partners measured on a scale of 1 (not at all) to 5 (very great extent). These measurement scales were adopted from Zhou et al. (2007).

3.6.7 Degree of Internationalisation

The DOI represents the level of international expansion and international business that the organisation is engaged in globally. The DOI construct comprised of the following indicators; Internationalisation intensity which is foreign sales as a percentage of total revenue, foreign customer base as a percentage of total customers and multinationality which is the number of countries that a firm operates in (Tesar, 1977; Cavusgil, 1980; Zeng et al., 2009; Tseng et al., 2007). These measures were provided by the management and also computed based on financial data that was provided in the annual reports and NSE Handbook 2011.

3.6.8 Control Variables

The control variables for this study comprised of industry segment and perceived environmental uncertainty. Industry segment has been used as a control variable in some studies because it has an effect on international performance (Lu et al., 2010). Industry segment was a control variable and each firm was assigned a dummy variable to reflect the NSE industry group of the organisation (Lu et al., 2010).

Perceived Environmental Uncertainty (PEU) has been reported in previous research to have an impact on the international performance of firms (Lu et al., 2010). PEU measures a firm's perception about the external foreign market environment and the perceived effect of international market risk on its ability to forecast the sales quotas of products or turnover generated from services in overseas markets, the influence of changes in the trade policies of overseas markets on product/services exported or imported and the ability to forecast the competitive advantage of products/services in overseas markets.

Table 3.5: Operationalization of the study variables

Constructs	Sub-constructs/Indicators	Measurement Scale	Informing Literature	Relevant Questions and Sources	
Institutional Capital	Individual	Interval Scale Five point likert type scale	<ul style="list-style-type: none"> • Oliver (1997) • Bresser and Millonig (2003) • Lu et al. (2010) 	Part II Item 9 a-r	
	Intra-organisational				<ul style="list-style-type: none"> • Corporate culture, processes and organisational systems
	External				<ul style="list-style-type: none"> • Strength of relationship with <ul style="list-style-type: none"> ○ Firms in same industry ○ Firms in other industries ○ Government
Management Characteristics	Management Attitudes (MAT)	Interval Scale Five point likert type scale	<ul style="list-style-type: none"> • Peng and Luo (2000) • Lu et al. (2010) • White et al. (1998) • Hutchinson et al. (2006) 	Part III Item 14	
	Management Ties				<ul style="list-style-type: none"> • Relationships with foreign customers, suppliers, competitors. • Relationships with government, social networks and local communities. • Management personal ties, networks and connections with business firms. • Management personal ties, networks and connections with government, industrial and regulatory bodies.
	International Orientation	<ul style="list-style-type: none"> • International work experience and training abroad. 	Closed ended		Part III Item 10

Table 3.5: Operationalization of the study variables

Constructs	Sub-constructs/Indicators	Measurement Scale	Informing Literature	Relevant Questions and Sources	
		<ul style="list-style-type: none"> Level of internationally acquired skill and knowledge compared to competitors in same industry 	Interval Scale Four point Likert type scale		
	International Entrepreneurship	<ul style="list-style-type: none"> Innovation Proactiveness Risk Taking 	Semantic Differential Scale Five point	<ul style="list-style-type: none"> McDougall & Oviatt (2000) O’Cass & Weerawardena (2009) 	Part IV Items 15
Organisational Demographics	Firm Size	<ul style="list-style-type: none"> Number of Employees 	Log Value	<ul style="list-style-type: none"> Lu et al. (2010) Tseng et al. (2007) 	Part I
	Firm Age	<ul style="list-style-type: none"> Number of years since incorporation 	Log Value	<ul style="list-style-type: none"> White et al. (1998) Hult et al (2008) O’Cass & Weerawardena, (2009) 	
Firm Capabilities	Knowledge capability	Extent to which firm could acquire information <ul style="list-style-type: none"> To understand foreign customer needs Identify overseas market opportunities Comply with requirements of foreign trading partners 	Interval Scale Five point Likert type scale	<ul style="list-style-type: none"> Lu et al. (2010) 	Part V Item 16
	Adaptive capability	Extent to which the firm can: <ul style="list-style-type: none"> Foreign customer demands in terms of product and service specifications Tailor products and services to foreign customer requests 	Interval Scale Five point Likert type scale	<ul style="list-style-type: none"> Lu et al. (2010) 	Part V Item 17

Table 3.5: Operationalization of the study variables

Constructs	Sub-constructs/Indicators	Measurement Scale	Informing Literature	Relevant Questions and Sources	
		<ul style="list-style-type: none"> Respond to price change demands from foreign customers 			
	Organisational Innovation Intensity	<ul style="list-style-type: none"> Product Process Managerial Marketing 	Semantic Differential scale Five point	<ul style="list-style-type: none"> O’Cass & Weerawardena, (2009) 	Part V Item 18
Internationalisation Orientation	Inward	<ul style="list-style-type: none"> Utilises advanced management skills with foreign countries Utilises advanced and new technology from foreign countries Utilised foreign direct investment 	Interval scale Five point Likert type scale	<ul style="list-style-type: none"> Zhou et al. (2007) Welch & Luostarinen (1993) 	Part VI Item 19
	Outward	<ul style="list-style-type: none"> Aggressively seeks foreign markets Develops alliances with foreign partners 	Interval Scale Five point Likert scale		
Degree of Internationalisation	Internationalisation Intensity	Foreign sales/ turnover to total sales/turnover	Ratio	<ul style="list-style-type: none"> Hult et al. (2008) Zeng et al. (2009) 	Part VII Items 20-23
	Foreign Customer base	Percentage of Customer base that is foreign	Ratio		
	Multinationality	Number of foreign countries firm services	Ratio		
Firm International Performance	Objective International Performance	Return on Assets	Ratio	<ul style="list-style-type: none"> Lu and Beamish (2001) 	Annual Report

Table 3.5: Operationalization of the study variables

Constructs	Sub-constructs/Indicators	Measurement Scale	Informing Literature	Relevant Questions and Sources	
	Perceptual International Performance	Financial Customer/Market Innovative	Interval Scale 5 point Likert type scale	<ul style="list-style-type: none"> • Zahra and Garvis, (2000) • Hult et al. (2008) • Venkatraman and Ramanujam, (1986) • Lazzarotti (2011) 	Part VIII Items 24, 25, 26
Control Variables					
Industry Segment	NES Industry Segment		Dummy Variable	<ul style="list-style-type: none"> • Lu et al. (2010) 	Annual Reports
Perceived Environmental Uncertainty	<p>Difficult to forecast the sales quotas of products or turnover generated from services in overseas markets.</p> <p>The product/services exported or imported are greatly influenced by changes in the trade policies of overseas markets.</p> <p>Difficult to forecast the competitive advantage of our products/services in overseas markets.</p>		Interval scale 5 point likert type scale	<ul style="list-style-type: none"> • Lu et al. (2010) 	Part I Item 8

3.7 Data Analysis

Data analysis was conducted using the multiple regression technique, Structural Equation Modeling Partial Least Squares (SEM-PLS) approach. SEM-PLS is an approach for testing simultaneously multivariate models using empirical data (Hair, Hult, Ringle & Sarstedt, 2013). SEM-PLS is a multivariate technique that estimates the linear and causal relationships between multiple exogenous or independent and endogenous or dependent constructs through the simultaneous multiple equation estimation process (Babin & Svensson, 2012). It has become an important tool in theory testing and development in various social science disciplines (Hair, Ringle & Sarstedt, 2011).

SEM-PLS regression uses a two stage procedure to test predictive models. The initial step is the evaluation of the outer or measurement model to determine the validity and reliability of the constructs used to measure the variables in the study. The next step is the assessment of the inner or structural model, which tests the hypotheses of the relationships under investigation (Ringel et al., 2011).

SEM-PLS assumes linear relationships, or unidirectional causal relationships, between the research indicators and latent variables, as well as between latent variables (Bryne, 2001). SEM-PLS incorporates observed and latent variables. The measurement models measures the validity and reliability of the latent variable indicators while the inner or structural model describes the direct and indirect relationships among the latent variables and describes the extent of explained and unexplained variances (Hair et al., 2013)

SEM-PLS is a component based technique and was used as the primary technique for examining the relative effects of firm level factors on international performance of publicly quoted companies. PLS was used due to its ability to model latent constructs. It should be noted that SEM-PLS makes no prior distributional assumptions on the data being analysed. Additionally, the technique can be applied effectively to small sample sizes (Hair, Ringle & Sarstedt, 2011; Sambamurthy & Chin, 1994).

Component based SEM technique was utilized in the research because PLS has a number of functionalities which were deemed appropriate in this research. PLS analyses complex models with large sets of relationships among constructs and sub-constructs. It provides more flexibility in modeling second order constructs and formative constructs (Chin, 1998) and supports hierarchical component approach in second order construct modeling by assigning all indicators of first order factors (Wold, 1982). Additionally, PLS can account for measurement errors of latent constructs and assess significance of structural models simultaneously. SEM analysis was relevant for this research because it can handle multiple independent and dependent variables simultaneously (Bryne, 2001). SEM also allows relationships among constructs to be automatically corrected by measurement errors as the estimation of measurement and structural models are being performed simultaneously (Bryne, 2001).

Data analysis was performed in a number of stages. Once the questionnaires were collected, data from the questionnaire was coded and analysed and items grouped into the various dimensions of constructs. Data screening was performed. Initially, each

questionnaire was tracked by date of return and also based on whether it was a result of a follow up. Survey responses were then input into SPSS for initial descriptive data analysis. General characteristics of the respondents, response rates, non-response bias and measurement differences were analysed. Potential non-response bias was performed following the approach proposed by Armstrong and Overton (1977). The approach involves comparing the responses of early respondents to that of late respondents by dividing the returned responses into two groups based on return dates. Early response accounted for 80% while the late responses were 20%. The two groups were compared using a random selection of variables and an independent sample t-test was conducted to compare the characteristics of early and late response so as to assess the possibility of non-response bias. The results are presented in Chapter 4.

Descriptive statistics were run to test for the normality of data and presence of outliers. The Shapiro Wilks test and measures of skewness and kurtosis were assessed. No severe outliers were found in the data. Other tests on the data included multicollinearity to find out whether there was a high correlation among the independent variables to bring to perspective the value of testing each variable. The research controlled for autocorrelation using the approach provided by Lu et al. (2010), the approach requires the computation of the Durbin-Watson statistic. The statistic measures the correlation between variables. There was no autocorrelation found. Multicollinearity poses several problems such as increases in the standard errors of the β coefficients, meaning that the β s have relatively higher variability across samples and are less likely to represent the population.

Once data screening was completed SPSS 20 and PLS software, SmartPLS 2.0 Beta (Ringle, Wende & Will, 2005) were used to perform the analysis. Initial descriptive analysis was performed using SPSS 20. The mean and standard deviation was used for descriptive analysis. This assisted with the generalisation of results. Once descriptive statistics were compiled, measurement model estimation and structural model development were conducted using partial least squares analysis. The model was developed and analyzed in two stages. Initially the measurement model was developed and measurement properties of multi-item constructs were analyzed for reliability, validity, convergent and discriminant validity by conducting confirmatory factor analysis (CFA). The second stage involved the development and analysis of the proposed structural model for hypotheses testing.

3.7.1 Measurement model development

Once initial descriptive analysis was completed, data purification with exploratory factor analysis was performed. The research constructs were purified using Exploratory Factor Analysis (EFA) and reliability analysis using SPSS 20. Measurement purification was necessary as the scales adopted from the internationalisation literature have not been applied to the publicly quoted companies setting in Kenya. The aim of EFA was to refine the variables into the most effective number of factors by selecting the variable with high correlations among themselves but low correlations with all other variables (Babin & Svensson, 2012).

Initially all variables were divided into groups representing the research constructs. EFA using principal component analysis and oblique rotation method was conducted. This was to ensure that the analysis would highlight theoretically meaningful constructs (Hair Anderson, Tatham & Black, 1998). EFA results were analysed using a number of criteria to determine the factors to proceed with for further analysis. These included eigen values greater than 1, total variance explained, item to total correlations, factor loadings and reliability coefficients. Items with low item to total correlations and low loading to intended factor and high cross loadings were removed. Once EFA had identified the underlying factors, the measurement model was developed using PLS. The factors were each assessed to ensure reliability and validity of variables.

Partial least squares estimation was used to examine the causal relationship among latent variables (Hair et al., 1998). Correspondingly, outer or measurement models were developed for the constructs in the research study. The outer model consisted of the relationships between the observed variables and the constructs measured. The indicators in the outer model can be modeled as reflective or formative. Reflective indicators are viewed as affected by the same underlying concept which is the Latent Variable. The change in the underlying LV will result in similar changes in its reflective indicators. Thus, reflective indicators should be correlated. In contrast, formative indicators are measures that form or cause the creation or change in a latent variables and they are not assumed to be correlated (Hair et al., 2011; Chin, 1998). According to Wold (1980) independent latent variables should be modeled as reflective and dependent latent variables as formative when there is low theoretical knowledge. The current research

adopted this approach in creating the firm international performance framework. Institutional capital, management characteristics, organisational innovation intensity, knowledge capability, adaptive capability and internationalisation orientation and degree of internationalisation are modeled reflectively and international performance was modeled formatively.

SEM-PLS was used to validate the outer model. Initially, confirmatory factor analysis (CFA) was used to validate the measurement scales, Construct reliability, validity and dimensionality was evaluated as variables were all measured using multiple items. Second order constructs were also assessed using CFA to evaluate dimensionality and measurement model of the constructs. Model identification was accomplished by examining path coefficients or betas for hypothesis testing (Hair et al., 2013).

Hair et al. (2011) have indicated that a challenge in PLS is determining model fit. PLS does not use a specific test statistic. PLS tests the relationships by resampling the data through a bootstrapping procedure. The resultant T-tests statistics from the procedure provide the basis for determining which relationships are statistically significant (Hensler et al., 2009). In addition to using the bootstrapping procedure, a blindfold procedure is used to ascertain predictive relevance of the model by calculating the Stone-Geisser Test Criterion (Hensler et al., 2009). There are four criteria suggested in literature used to ensure model fit in PLS. These are construct unidimensionality, construct reliability, convergent validity and discriminant validity (Hair et al., 2011).

Construct unidimensionality verifies that the items used to measure a particular construct only measure that single construct. Exploratory factor analysis and/or confirmatory factor analysis can be used to measure this criterion (Hair et al., 2011; Hensler et al., 2009; Hulland, 1999). Construct reliability measures whether the scales used to measure a particular construct provide consistent measurement results. Reliability analysis is conducted on each scale (Hensler et al., 2009; Cronbach, 1970).

Convergent validity is used to ensure that measurement items for relevant constructs actually measure that particular construct. Convergent validity is assessed using confirmatory factor analysis and PLS regression and the specific measures applicable in PLS are composite reliability (CR) and average variance extracted (AVE) (Hair et al., 2011).

Discriminant validity measures the specific uniqueness of the constructs to each other in the model. In PLS, blindfold analysis was used to calculate the Stone-Geisser Test Criterion (Hensler et al., 2009). The Coefficient of Determination (R^2) and comparing the Average variance extracted (AVE) to the variance among the constructs are also used to confirm discriminant validity (Hair et al., 2011). In this research, SmartPLS^(R) software (Ringle, Wende & Will, 2005), a SEM PLS software was employed to develop the measurement and structural model under study, conduct regression analysis, bootstrap and blindfold procedures. Regression Analysis in PLS provided the regression coefficients for the model. The criterion used to assess the model are discussed below and presented in Table 3.6.

3.7.1.1 Reliability

The reliability of the individual items was assessed by inspecting the internal consistency values and the loading of the items on their corresponding constructs. The data was subjected to reliability tests to check on consistency of the measurement sets (Fornell & Larcker, 1981). Reliability tests cited by researchers under the relevant empirical studies were adopted alongside the application of the most common measure of internal consistency known as Cronbach's Alpha (Cronbach, 1979). This measure of reliability indicates the extent to which a set of items can be treated as measuring a single latent variable. The recommended value of Cronbach alpha is 0.7 and above was used as cut off point so as to ensure the internal consistency of values. All measurement scales in the study met this threshold requirement and attained Cronbach alpha of 0.7 and above.

Composite reliability was also assessed to establish whether the specific indicators in the measurement model were sufficient to represent the respective constructs. Composite reliability threshold is 0.7 and above (Nunnally, 1978) with 0.7 suggested as a reference for modest reliability applicable and over 0.8 as an indication of high reliability. Item to total correlation was also analysed to assess reliability of the measurement scale. SPSS 20 was used to run the analysis. The threshold for item to total correlations was 0.5 and inter-item correlations was 0.3 (Bryne, 2001).

3.7.1.2 Validity

An extensive review of existing conceptual and empirical literature review produced the measurement scales for each of the variables. Therefore the measurement scales used in

the questionnaire are deemed to have face validity because they reflect the key components of the firm level factors being studied. Face validity which is commonly used in research of this nature was applied to determine if the instrument measured what it was supposed to measure. To ensure content validity, the preliminary questionnaire was pre-tested on a small set of respondents for comprehension, logic and relevance. Views on the overall content of the questionnaire were obtained from academicians, scholars and doctoral students in a university setting.

To ensure face and content validity, a preliminary survey instrument was evaluated by departmental, open and doctoral forum committees comprising of academic scholars and professors in the areas of business and education research methodology, business management, international business, strategy and organisational behavior and other business disciplines. The feedback obtained assisted in revising the scales before administering the final questionnaire to all study respondents. Validity was also assessed using confirmatory factor analysis to test the measurement with the criterion of checking factor loading of at least 0.4 (Stevens, 2002). Criterion validity reflects the success of measures for prediction and estimation and consists of concurrent validity which represents how well the measures relate to the predictor. The predictive validity dimensions were demonstrated by the results of hypotheses testing.

Convergent validity was tested using the squared multiple correlations from the confirmatory factor analysis to calculate the average variance explained (AVE) which was created by Fornell and Lacker (1981). AVE values were all greater than the 0.5

threshold. Discriminant validity, which evaluates whether the constructs analysed are distinguishable, was measured by AVE being greater than the variance shared between one construct and the other constructs in the model (Fornell & Lacker, 1981). This was within the acceptable range for the constructs in the study details of which are contained in chapter 4.

3.7.2 Structural Model Development and Estimation

Once the measurement model had been evaluated and the study measures had been validated, the inner or structural regression model was examined to test the plausibility of hypothetical relationships among latent variables (Bryne, 2001). This two-step approach, the outer model and the inner model have been preferred by many researchers because they believe that accurate representation of the reliability of the indicators is best accomplished in two steps to avoid the interaction of outer and inner models (Hair et al., 1998; Lu et al., 2010; Hensler et al., 2009).

Path coefficient estimates, T-values, overall model fit and significance levels for the structural paths were evaluated to investigate the causal relationships among the research constructs as proposed in the integrative model. Finally, post hoc model modifications were conducted to provide alternative models. A number of measures were used to compare models, and the effect of adding one or more causal relationships (Hair et al., 1998). Model measure fit criterion is presented in Table 3.6.

Table 3.6: Measures to Fit PLS Model

Measures	Procedure	Statistical Criterion
Construct Unidimensionality	Confirmatory Factor Analysis	Factor Loading $\geq .70$ Eigen Value ≥ 1 Item to Total Correlation Total Variance Explained
Construct Reliability	Reliability Analysis	Cronbach Alpha ≥ 0.6
Convergent Validity	Factor Analysis Composite Reliability Variance	Factor Loadings $\geq .50$ Composite Reliability $\geq .70$ Average Variance Extracted $\geq .50$
Discriminant Validity	Fornell-Larker Measure	AVE \geq (Highest correlation for factor) ²
	Coefficient of Determination	of $R^2 \geq .19$ (weak) $R^2 \geq .33$ (moderate) $R^2 \geq .57$ (substantial)
	Stone Geisser Test Criterion	$Q^2 \geq 0$
	Variance Inflation Factor (VIF)	VIF < 10 or VIF < 3.30 for formative factors

Sources: Hair et al., 2006; Hensler et al., 2009; Bryne, 2001; Chin, 1998

3.7.3 Testing for mediation and moderation

Mediation is the process by which a variable or variables influence other variables through intervention. In this study, the mediating variables are firm capabilities and degree of internationalisation. The strength of the effect of the mediators was determined by two approaches. The Sobel test and bootstrapping are both recommended approaches for determining the strength and significance of the mediation (Hensler et al., 2009; Preacher & Hayes, 2004). Bootstrapping is used for smaller samples which sometimes may have a higher likelihood of not having a normal distribution. The current sample however, did not have a normal distribution. For the purposes of this study, bootstrapping was used draw from the original respondents 500 samples (with replacement).

According to Hair et al. (2011), and Preacher and Hayes (2004) bootstrapping is a better predictor of the strength of mediation with a small sample. The Sobel test uses the regression weights (β) and standard error (SE) of the two paths: Independent variable - Mediator and Mediator - Dependent Variable. This results in a z -score and p -value to determine the strength of the mediation. This approach assumes that normal distribution of the sample exists. Initially the direct effect of the independent variable was determined without the mediator. The mediator was then included in the model. After bootstrapping the sample, corresponding T- statistics were used to determine the strength of mediation alongside the Sobel Test statistics. This also involved determining the direct effects of the relationships with and without mediation; and the indirect effect of the mediating variable on the predictor – dependent variable relationship (Hair et al., 2013). Both approaches were used to provide a clearer understanding of the effects of the mediation paths within the models.

Moderation occurs when the variable, say M, alters the relationship between the variables, say X and Y, by enhancing, strengthening or weakening the relationship (Sauer & Dick, 1993). In order to determine the function of the moderator, two recommended tests are used: SmartPLS Moderating effect tool, which uses the product indicator approach recommended by Chin, Marcolin and Newsted (1996), and difference in R^2 as recommended by Carte and Russell (2003). The f^2 predictive effect was also calculated (Hair et al., 2011).

3.7.4 Hypotheses Testing

The table 3.7 below provides an outline of the objectives of the study, presented with their respective hypotheses and how they were tested.

Table 3.7: Summary of Hypotheses Testing

Objective	Hypothesis	Analysis	Accept/Reject Criteria
Establish the effect of firm level factors on the international performance of publicly quoted companies listed on the Nairobi Stock exchange.	H₁ A firm's resources are positively related to its international performance.	Partial Least Squares Analysis Path coefficient and T values Degree of Correlation is Positive or Negative	Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)
	H_{1a} . A firm's institutional capital is positively related to its international performance.		
	H_{1b} . A firm's management characteristics is positively related to its international performance.		
	H_{1c} . A firm's organisational demographics are positively related to its international performance.		
	H₂ A firm's capabilities are positively related to its international performance.	Partial Least Squares Analysis Path coefficient and T values Degree of Correlation is Positive or Negative	Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)
	H_{2a} . A firm's organisational innovation intensity is positively related to its international performance.		
	H_{2b} . A firm's knowledge capability is positively related to its international performance.		
	H_{2c} . A firm's adaptive capability is positively related to its international performance.		
	H₃ There is a positive relationship between degree of internationalisation and firm international performance.	Partial Least Squares Analysis Path coefficient and T values Degree of Correlation is	Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level

Table 3.7: Summary of Hypotheses Testing

Objective	Hypothesis	Analysis	Accept/Reject Criteria
		Positive or Negative	$\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)
Establish the effect of firm resources on firm capabilities.	H₄ Institutional capital has a positive effect on a firm's capabilities.	Partial Least Squares Analysis Path coefficient and T values Degree of Correlation is Positive or Negative	Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)
	H_{4a} . Institutional capital has a positive effect on a firm's organisation innovation intensity.		
	H_{4b} - Institutional capital has a positive effect on a firm's knowledge capability. H_{4c} . Institutional capital has a positive effect on a firm's adaptive capability.		
	H₅ Management characteristics have a positive effect on firm capabilities.	Partial Least Squares Analysis Path coefficient and T values Degree of Correlation is Positive or Negative	Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)
	H_{5a} . Management characteristics have a positive effect on a firm's organisation innovation intensity.		
	H_{5b} – Management characteristics have a positive effect on a firm's knowledge capability. H_{5c} _ Management characteristics have a positive effect on a firm's adaptive capability.		
	H₆ Organisation Demographics has a positive effect on firm capabilities.	Partial Least Squares Analysis Degree of Correlation is Positive or Negative Path coefficient and T values	Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$
	H_{6a} _ Organisation demographics has a positive effect on a firm's organisation innovation intensity.		

Table 3.7: Summary of Hypotheses Testing

Objective	Hypothesis	Analysis	Accept/Reject Criteria
	<p>H_{6b} – Organisation demographics has a positive effect on a firm’s knowledge capability.</p> <p>H_{6c} – Organisation demographics have a positive effect on a firm’s adaptive capability.</p>		(two tailed)
Determine the effect of firm capabilities on the relationship between firm resources (institutional capital, management characteristics and organisational demographics) and international performance.	<p>H₇ A firm’s capabilities mediates the effect of firm resources on firm international performance.</p> <p>H_{7a} - A firm’s capabilities influences the effect of institutional capital on firm international performance.</p> <p>H_{7b} . A firm’s capabilities influences the effect of management characteristics on firm international performance.</p> <p>H_{7c} . A firm’s capabilities influences the effect of organisation demographics on firm international performance.</p>	Partial Least Squares analysis, Sobel Mediation Test and Bootstrapping.	<p>Accept hypothesis if Sobel Test results Z score ≥ 1.96 Alpha ≤ 0.05</p> <p>$Y = \beta_{01} + \square X + \varepsilon_1$, Firm International Performance = f (firm resources + Firm capabilities) $P_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ Where $P_1 =$ firm international performance $\beta_0, \beta_1, \beta_2$, are regression coefficients $X_1 =$ Firm resources $X_2 =$ Firm Capabilities $\varepsilon =$ Error term</p>
Establish the effect the degree of internationalisation on the relationship between firm capabilities and firm international performance.	<p>H₈ There is a positive relationship between firm capabilities and the degree of internationalisation of a firm.</p> <p>H_{8a} - There is a positive relationship between organisation innovation intensity and the degree of internationalisation of a firm.</p>	Partial Least Squares Analysis Degree of Correlation is Positive or Negative Path coefficient and T values	<p>Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)</p>

Table 3.7: Summary of Hypotheses Testing

Objective	Hypothesis	Analysis	Accept/Reject Criteria
	<p>H_{8b} - There is a positive relationship between knowledge capability and the degree of internationalisation of a firm.</p> <p>H_{8c} - There is a positive relationship between adaptive capability and the degree of internationalisation of a firm.</p>		
	<p>H₉ The Degree of Internationalisation influences the effect of firm capabilities on firm international performance.</p> <p>H_{9a} - The degree of internationalisation influences the effect of organisation innovation intensity on firm international performance.</p> <p>H_{9b} - The degree of internationalisation influences the effect of knowledge capability on firm international performance.</p> <p>H_{9c} - The degree of internationalisation influences the effect of adaptive capability on firm international performance.</p>	<p>Partial Least Squares analysis, Sobel Test and Bootstrapping.</p>	<p>Accept hypothesis if Sobel Test results Z score ≥ 1.96 Alpha ≤ 0.05</p> <p>$Y = \beta_{01} + \square X + \varepsilon_1$, Firm International Performance = f (firm capabilities + DOI) $P_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$ Where $P_1 =$ firm international performance $\beta_0, \beta_1, \beta_2$, are regression coefficients $X_1 =$ Firm Capabilities $X_2 =$ DOI $\varepsilon =$ Error term</p>
Assess the moderating effect of Internationalisation orientation on the relationship between firm capabilities and degree of internationalisation.	<p>H₁₁ Internationalisation Mode moderates the relationship between firm capabilities and degree of internationalisation.</p> <p>H_{11a} - Internationalisation Mode moderates the relationship between organisation innovation intensity and degree of internationalisation.</p>	<p>Partial Least Squares Analysis – Moderator Interaction PLS and Bootstrapping for path coefficient and T values R^2 and f^2</p>	<p>PLS Moderating effect tool, R^2 and f^2 effect Accept hypothesis when level of significance, indicated by T values T values $\geq 1.65 - 0.1$ Sig. level $\geq 1.96 - 0.05$ $\geq 2.5 - 0.001$ (two tailed)</p>

Table 3.7: Summary of Hypotheses Testing

Objective	Hypothesis	Analysis	Accept/Reject Criteria
	<p>H_{11b} - Internationalisation orientation moderates the relationship between knowledge capability and the degree of internationalisation.</p> <p>H_{11c} - Internationalisation orientation moderates the relationship between adaptive capability and the degree of internationalisation.</p>		<p>Degree of Internationalisation = f (Firm capabilities + Internationalisation orientation)</p> <p>$p_i = \alpha + \beta X + \tau M + \beta X M + \varepsilon$</p> <p>Where p_i = Degree of internationalisation</p> <p>β are regression coefficients</p> <p>X = Firm capabilities</p> <p>M = Internationalisation Orientation</p> <p>ε = Error term</p>
Determine the moderating effect of Internationalisation orientation on the relationship between firm capabilities and international performance.	<p>H₁₁ Internationalisation orientation moderates the relationship between firm capabilities and firm international performance.</p> <p>H_{11a} - Internationalisation Orientation moderates the relationship between organisation innovation intensity and firm international performance.</p> <p>H_{11b} - Internationalisation Orientation moderates the relationship between knowledge capability and firm international performance.</p> <p>H_{11c} - Internationalisation Orientation moderates the relationship between adaptive capability and firm international performance.</p>	<p>Partial Least Squares Analysis – Moderator Interaction</p> <p>PLS and Bootstrapping for path coefficient and T values</p>	<p>PLS Moderating effect tool Statistic - R^2</p> <p>Accept hypothesis when level of significance, indicated by T values</p> <p>T values $\geq 1.65 - 0.1$ Sig. level</p> <p>$\geq 1.96 - 0.05$</p> <p>$\geq 2.5 - 0.001$</p> <p>(two tailed)</p> <p>International Performance = f (Firm capabilities + Internationalisation orientation)</p> <p>$p_i = \alpha + \beta X + \tau M + \beta X M + \varepsilon$</p> <p>Where p_i = international performance</p> <p>β are regression coefficients</p> <p>X = Firm capabilities</p> <p>M = Internationalisation Orientation</p> <p>ε = Error term</p>

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

The main objective of this chapter is to provide the statistical analysis results, interpretation and findings. This chapter presents the analyses conducted to test the conceptual model and reports the results of this study. This chapter provides information on population demographics and respondent characteristics, response rates, data screening, test results for non-response bias and measurement differences, measurement model estimation and the testing of the hypotheses. Additionally, details on measurement and structural model estimation using PLS regression are discussed. The findings are presented based on the study objectives and their respective hypotheses tested.

4.2 Background Information

The general objective of the quantitative study was to establish the effect of firm level factors on the international performance of publicly quoted companies in Kenya. The firm level factors studied were institutional capital, management characteristics, organisational demographics, organisational innovation intensity, knowledge capability, adaptive capability, internationalisation orientation and the degree of internationalisation. The research sought to determine the direction, strength and significance of the relationships between firm level factors and international performance.

The current study also analysed the mediating effect of firm capabilities on the relationship between specific firm resources (institutional capital, management characteristics and organisational demographics) and the firm international performance. The study also established the moderating effect of internationalisation orientation on the relationship between firm capabilities and degree of internationalisation and on the relationship between firm capabilities and international performance.

Questionnaires were sent to publicly quoted companies in Kenya, whose information is provided in the NSE handbook 2011. The questionnaires were sent to a total 58 publicly quoted companies. All the NSE listed firms engaged in a form of international business. Their international business involvement was inward, outward and/or cooperation. Data analysis was initiated with the verification of completeness of the questionnaires. In order to gain a high level of precision in data entry, descriptive statistics of frequency distribution, mean and standard deviation were conducted and verified. Details on the response rate, respondent firm demographics and descriptive statistics are discussed later in this chapter.

The normality of data and existence of outliers was assessed. The reliability and internal consistency of the items constituting the constructs were also estimated. Multicollinearity was diagnosed using Variance inflation factor (VIF). None of the factors were found to register VIF greater than 10. This indicated that the possibility of collinearity of data was not evident. The Durbin-Watson test was used to test for autocorrelation. No score was found to be less than 1 or greater than 3, and so the residuals were found to have independent errors. The probability-probability plots (P-

P plots) were used for visual test of normality of data, while Kolmogorov-Smirnov (K-S) test and Shapiro-Wilk test, which compares the scores in the population of study to a normally distributed set of scores. The results were not significant at $p < .05$, and so the data was assumed to be normally distributed.

4.2.1 Response Rate

A total of 51 questionnaires were returned. Three firms declined to participate or were not available for the survey while four did not send a response. The firm's executive or their secretaries stated that their organisation had a "no-survey" policy or that they could not participate at that time. This resulted in a response rate of 87.9%. However, on examination of the completeness of the questionnaires there was one questionnaire that had at least 20% of the overall questionnaire incomplete. This case was omitted from the preliminary analysis.

A few missing responses were found randomly in another three questionnaires. This may have been due to the perceived confidentiality of data, lack of understanding or reluctant attitude of the respondents to answer a question that they thought was irrelevant to their business operations and practices. A sub- group mean value replacement function was used to replace those missing values (Ringle, Wende & Will, 2005; Hair, Hult, Ringle & Sarstedt, 2013). Therefore upon removal of one case response, a total of 50 questionnaires were usable, resulting in an adjusted effective response rate of 86.2%. Table 4.8 provides presents information on the response rate.

Table 4.8: Response Rate

	Frequency	Percentage
Initial Population	58	100%
Firms not participating for the following reasons:	7	12%
a “no-survey” policy	1	2%
Not available	2	3%
No response	4	7%
Returned questionnaires (one incomplete response)	51	88%
Agriculture	6	10%
Commercial and Services	11	19%
Financials and Investment	18	31%
Industrial and Allied	16	28%
Usable responses	50	
Adjusted effective response rate	86.2%	

4.2.2 Non-response bias and measurement differences

The possibility of non-response bias was measured using the extrapolation method of Armstrong and Overton (1977). Out of the total useable 50 responses, 82% (n=41) responses were categorised as early responses and 20% (n=9) were categorised as late responses. In this study, the evaluation of non-response bias was conducted by comparing the means of characteristics of early and late respondents on selected demographic, firm level and performance variables. The two sample t-test showed no significant differences at the 0.05 level of significance between early and late respondents in terms of randomly selected variables.

Two sample t-test results for the two demographic variables of number of years in business and number of years in international business were 0.255 and 0.143 at the .05 significance level. In addition, two sample t-test results for three firm level

variables and two performance variables evidenced that there were no statistically significant differences at the .5 level between early and late responses; p values for number of years in international business, organisation innovation intensity, institutional capital, performance variables of return on assets and perceptual firm performance were 0.143, 0.169, 0.3, 0.307 and 0.706 respectively. The results are presented in Table 4.9.

Table 4.9: Non response Bias

Characteristics	Categories	Mean	F-Value (d.f)	Sig. level
Number of Years in Business	Early response	55.27	1.330 (48)	.255
	Late response	44.33		
Number of years in international business	Early response	27.79	2.221 (48)	.143
	Late response	36.67		
Organisation Innovation Intensity	Early response	3.5409	1.950 (48)	.169
	Late response	3.9376		
Institutional Capital	Early response	3.7474	1.066 (48)	.307
	Late response	3.9254		
Return on Assets	Early response	.1658	.144 (48)	.706
	Late response	.1203		
Perceptual Firm Performance	Early response	3.3138	.425 (48)	.518
	Late Response	3.3457		

Out of the total 50 responses, 84% (n=42) were categorised as without follow up and 16% (n=8) responses were categorised as with follow up. For each and all constructs the MANOVA test statistics indicated that there were no statistically significant differences between the without follow up group and with follow up group. P values were all higher than .10. The results suggested that measurement differences possible caused by different follow up methods should not be a problem in the study.

4.2.3 Firm Demographics

The characteristics of the publicly quoted companies that participated in the study was collated and reviewed. The analysis was based on information provided in the questionnaire, annual reports and publicly available information and data from the NSE Handbook 2011. The research captured various attributes of the organisations surveyed. Firm demographics such as industry group, firm age and duration of involvement in international business, type of internationalisation mode, number of employees and annual turnover were reviewed. Although some of this demographic data did not have an effect on the level of analysis, it assisted in providing general information about the population under study.

Tables 4.10 and 4.11 summarise the information on the business characteristics of the study respondents. Preliminary analysis of firm characteristics illustrated that 14% of firms that responded were operating in the agriculture industry group, 22% were commercial and services firms, 34% operated in the financial and investment industry group, while 30% were industrial and allied firms. This information is represented in Table 4.10.

Table 4.10: Categorisation by NSE Industry sector groups

NSE Industry Groups	Frequency	Percent
Agriculture	6	14.0
Commercial and Services	11	22.0
Financials and Investment	17	34.0
Industrial and Allied	16	30.0
Total	50	100.0

The results presented in Table 4.10 indicate that all the NSE industry groups were represented in the study. In terms of job position, the key informants of the survey

held key decision making positions within the organisation, 12% of the key informants comprised of the chief executive officer, managing director or director, 66% were deputy managing directors, general managers, chief financial officer, commercial executive, regional executives, head or director of operations, strategy, marketing and company secretary; 22% were other designated senior/middle management and those in key positions directly involved in international market operations, and decision making relating to strategy, marketing and international business. The level of position of the key informants participating in the survey, contributed to the quality of data. This information is presented in Table 4.11.

Table 4.11: Firm Demographics

Items	Frequencies	Percentage
Designation of Respondents		
Managing Director/Chief Executive Director/Director	6	12%
General Manager/Deputy Managing Director/Regional executive/Commercial Officer/Chief Financial Officer/Commercial Officer/Executive	33	66%
Other Designated Executive/Manager	11	22%
Total	50	100%
Annual Turnover (in KShs. Billion)		
Less than 100	4	8%
101 – 1,000	9	18%
1001 – 5,000	21	42%
5001 – 10,000	6	12%
10,001 – 15,000	5	10%
Over 15,000	5	10%
Number of Employees		
Less than 1000	30	60%
1001 – 5000	18	36%
Over 5000	2	4%

Items	Frequencies	Percentage
Firm Age (Business experience in years)		
Under 20 years	6	12%
21 to 40	8	16%
41 to 60	19	38%
61 to 80	8	16%
81 to 100	4	8%
Over 100	5	10%
International Business Experience (in years)		
Under 10	18	36%
11 – 20	13	26%
21 to 40	3	6%
41 to 60	9	18%
61 to 80	5	10%
Over 80	2	4%
Number of foreign markets in which firm operates		
Less than 5	32	64%
6 – 10	8	8%
11 – 15	3	6%
Over 15	6	12%
Percentage of customer base that is foreign		
Less than 10%	15	30%
11% - 20%	10	20%
21%-40%	15	30%
41%-60%	4	8%
Above 60%	6	12%
Percentage of Turnover that is from foreign sales		
Less than 10%	19	38%
11% -20%	4	8%
21% - 40%	17	39%
41% - 60%	5	10%
Above 60%	5	10%
Internationalisation Orientation		
Outward	41	82%
Inward	38	76%
Co-operation	21	42%

In terms of annual turnover, Table 4.11 indicates that 8% of the respondents generated a turnover of less than KShs.100 billion in 2010, 18% generated sales of between KShs. 100 million to KShs.1 trillion. Majority of the respondents, 42%, generated sales between KShs 1 to 5 trillion with the remaining 32% generating turnover of over KShs.10 trillion in 2010.

The respondents were also asked to provide information on the number of employees in the organisation. According to the Ministry of Industrialization and the Medium and Small Enterprise Act 2012, Kenyan firms are categorised as small, medium and large based on number of employees and company's annual turnover. Small firms have 10 to 50 employees; medium firms have 50 to 100 employees and large have more than 100 employees. Based on this categorisation, publicly quoted companies in this study are medium and large. 8% of the respondent organisations were medium sized firms and the remaining 92% are categorised as large firms. The median number of employees is 550.

In terms of firm age, over 88% of the firms studied had been in operation for over 20 years and 36% had engaged in international business for less than ten years and 64% had engaged in international business for more than ten years. The average number of years in business operation was 53.3 years and the average number of years of being engaged in international business was 29.46 years. As illustrated in the table 4.11 above, 82% of the respondent firms engaged in outward internationalisation, while 70% of the firms engaged in inward internationalisation while 42% engaged in a form of cooperation mode of internationalisation.

Regarding internationalisation intensity, which is the percentage of total turnover that is generated from foreign sales, 38% generated 10% or less of their sales from international business, and 47% had an internationalisation intensity of between 11% and 40%, while 20% had an internationalisation intensity of over 40%. The foreign customer base of the organisations studied comprised of below 20% for 40% of the respondents, 38% indicated that foreign customers accounted for between 21% to 60% of their overall customer base and 12% indicated that their foreign customer base was above 60%.

The type of internationalisation mode utilised by the organisations as they engage in international business is outlined in Table 4.12. As the results indicated, for majority of the firms that engaged in outward modes of internationalisation, exporting was the most common with 48% of the firms studied reported as being involved in it. 18% were involved in outward foreign direct investment, 16% were engaged in joint ventures, 12% of firms indicated that they practiced outward licensing and another 12% subcontracting, 8% utilised contract manufacturing and another 8% were involved in franchising, 6% project exporting and 4% utilised knowhow agreements.

In terms of inward internationalisation modes, 26% of the firms imported from foreign countries, 16% were licensed by foreign firms to sell locally, 14% engaged in inward foreign investments and another 14% serviced foreign clients locally; 10% were involved in indirect selling, 8% were subcontracting and another 8% were involved in inward joint ventures; 4% were involved in franchising, knowhow agreements and project exporting while 2% were involved in contract manufacturing. As regards cooperation modes, 18% of organisations studied indicated that they

cooperated with foreign partners on purchasing, 16% were involved in cooperation in research and development and 12% were engaged in cooperation in manufacturing of products.

Table 4.12: Internationalisation Mode

	Industry				Total	Percent
	Agriculture	Commercial & Services	Financial & Investment	Industrial & Allied		
Outward Mode						
Exporting	5	4	2	13	24	48%
Licensing, selling	-	1	1	4	6	12%
Knowhow agreement	-	1	-	1	2	4%
Franchising	-	3	1	-	4	8%
Subcontracting	-	-	3	3	6	12%
Contract Manufacturing	-	1	1	2	4	8%
Project exporting	-	1	1	1	3	6%
Joint/Mixed Ventures	-	2	5	1	8	16%
Outward Foreign Direct Investment	-	2	7	-	9	18%
Inward Mode						
Export, indirect, direct, own/self export	2	-	-	3	5	10%
Servicing foreign clients locally	-	2	5	1	7	14%
Importing	2	3	1	7	13	26%
Licensing, selling	-	2	1	5	8	16%
Knowhow agreement	-	1	-	1	2	4%
Franchising	-	2	-	-	2	4%
Subcontracting	-	1	-	3	4	8%
Contract Manufacturing	-	-	1	-	1	2%
Project exporting	-	1	-	1	2	4%
Joint/Mixed Ventures	-	2	1	1	4	8%
Inward Foreign Direct Investment	-	3	4	-	7	14%

	Industry				Total	Percent
	Agriculture	Commercial & Services	Financial & Investment	Industrial & Allied		
Cooperation Modes						
Cooperation on manufacturing	2	-	-	4	6	12%
Cooperation on Purchasing	-	7	1	1	9	18%
Cooperation on Research and Development	-	1	2	5	8	16%

4.2.4 Principal Component Analysis, Reliability and Construct Validity

The study's construct measures were initially purified using exploratory factor analysis (EFA) and tested for reliability analysis using SPSS 20. The raw measures were purified and tested for validity and reliability by running a series of tests. The initial assessment was the unidimensionality of measures. Exploratory factor analysis was performed to assess construct unidimensional scales and identify the structure of the measurement or outer model for the items in the study. Exploratory factor analysis was performed to achieve measure purification and refine the variables into the most effective number of factors. Reliability analysis was then conducted.

Each of the constructs was refined by utilising principal component analysis on the initial items comprising each construct. Each principal component analysis extracted factors, and factor loadings greater than 0.5 were retained for each principal component extracted (Hair et al., 2010). To assess the factorability of items, the researcher examined three indicators (i.e. Kaiser Meyer-Olin Measure of Sampling Adequacy, Barlett's Test of Sphericity and communalities). For every EFA, it was found that manifest variables have KMO Measures of Sampling Adequacy above 0.78, which is above the threshold of 0.6 (Kaiser, 1974), as well as p values for

Barlett's test of Sphericity (Barlett, 1954) below 0.05. Communalities were also found well above 0.5 suggesting satisfactory factorability for all items. When applying EFA, the results showed a clear factor structure with an acceptable level of cross loadings. Additionally, the reliability and internal consistency of the items constituting each construct was estimated. Scale refinement was assessed using item to total correlations analysis, with indicators with an item to total correlation threshold of 0.3 and higher being maintained for further analysis (Hair et al., 2010). Confirmatory factor analysis (CFA) was then performed using SmartPLS software for measurement model estimation. The purpose of CFA was to establish the extent to which the observed data validated and fit the pre-specified theoretically based model. Below are the synopses of scale purification for each construct.

4.2.4.1 Institutional Capital

The institutional capital construct was measured using three summated subscales, namely, individual, intraorganisational and external institutional capital. Each subscale was treated as a separate indicator for the latent variable of institutional capital in the partial least squares analysis. The scales were reviewed for reliability and convergent validity prior to PLS analysis.

The individual institutional capital subscale (IIC) consisted of six statements. The statements in the questionnaire related to the level of individual institutional capital within the organisation. Each scale was rated on a five point Likert type scale ranging from 1 denoting "to a little extent" to 5 denoting "to a very great extent". Average scale ratings ranged from 3.85 to 4.26. This indicated that the respondents believed that their firms did exhibit medium to high levels of individual institutional capital.

The highest rating was 4.6 for the statement “there is a total agreement on our organisational vision across all levels, functions, and divisions” (SD= .694, n=50). The statement with the lowest mean rating of 3.85 was “Management do not make decisions that are habitual and unreflective and embedded in norms and traditions” (SD= .808, n=50). The individual institutional capital additive scale ranged from 6 to 30 out of a maximum score of 30. The average scale total was 24.53 (SD = 3.471) which was a high rating implying that the respondent firms exhibited high levels of individual institutional capital.

The intra-organisational institutional capital (IOIC) scale consisted of seven items. Each scale was rated on a five point Likert type scale ranging from 1 for “to a little extent” to 5 denoting “to a very great extent”. Average scale ratings ranged from 3.90 to 4.22. This indicated that the respondents believed that their firms did exhibit high levels of intra-organisational institutional capital. The highest mean rating was 4.22 for two statements “Our organisation has management development programmes that promote continuous resource improvement” (SD= .864, n=50) and the statement “Our organisation has information technology systems that accelerate the diffusion and use of resource capital” (SD=.840, n=50). The statement with the lowest mean rating of 3.90 was “We are not afraid to reflect critically on the shared assumptions we have made about our customers” (SD= .839, n=50). The intra-organisational institutional capital additive scale ranged from 6 to 30 out of a maximum score of 30. The average scale total was 28.42 (SD = 5.049) which was a high rating indicating that on average, the respondent firms had high levels of intra-organisational institutional capital.

The external institutional capital scale (EC) consisted of five items. The scale was intended to describe to what extent the organisation participates in inter firm alliances to facilitate new resource learning and knowledge sharing (two items) and the extent to which the organisation has received support from government to facilitate international business (three items). Each scale was rated on a five point Likert type scale ranging from 1 denoting to a little extent to 5 denoting to a very great extent. Average scale ratings ranged from 2.85 to 3.45. This indicated that the respondents believed that their inter-firm alliances facilitated fair levels of new resource learning and knowledge sharing and that government support and assistance in international business was at very low levels.

The highest mean rating was 3.45 for the item “Our firm participates in inter-firm alliances within our industry that facilitates new resource learning and knowledge sharing” (SD=1.126, n=50). The item with the lowest mean rating of 2.85 was “Our firm has been helped by government to participate in international trade fairs in the local area” (SD= 1.262, n=50) implying that there is little support from government to participate in international trade fairs locally. The external institutional capital additive scale ranged from 6 to 30 out of a maximum score of 30. The average scale total was 15.95 (SD = 4.554) which was on average medium level of external institutional capital. This indicated that the companies studied exhibited on average medium levels of external institutional capital. This was relatively lower than the individual institutional capital and intra-organisational institutional capital scores.

Exploratory factor analysis using principal component analysis with oblique rotation revealed that all the factor loadings were above the acceptable threshold of 0.5 (Hair

et al., 2010). Item to total correlations of above 0.3 was achieved for all items in the scale. The individual institutional capital subscale had loadings of between 0.617 and 0.841 and achieved item to total correlations of between 0.466 to 0.804. The cronbach alpha for the scale was high at 0.849. The intra-organisational institutional capital scales items had loadings of 0.557 to 0.895 and item to total correlations of 0.671 to 0.802. The reliability analysis resulted in a cronbach alpha of 0.918 which is high.

The external institutional capital subscale achieved loadings of 0.816 to 0.977 and item to total correlations of 0.519 to 0.709. The cronbach alpha was 0.812. All the scale items were therefore maintained for measurement model estimation as they achieved the required thresholds for reliability and convergent validity. All items on the subscale were retained for further analysis. The above discussed details on institutional capital construct are presented in Table 4.13.

Table 4.13: Institutional Capital scale

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	to Alpha If item deleted
All employees are committed to the goals of our organisation	50	4.24	.687	0.681	.804	.784
Employees view themselves as partners in charting the direction of the organisation.	50	4.04	.856	0.841	.742	.789
There is a commonality of purpose in my organisation.	50	4.24	.625	0.617	.649	.814
There is a total agreement on our organisational vision across all levels, functions, and divisions.	50	4.26	.694	0.639	.466	.843
Management do not make decisions that are habitual and unreflective and embedded in norms and traditions.	50	3.85	.808	0.770	.608	.818
We are not afraid to reflect critically on the shared assumptions we have made about our customers.	50	3.90	.931	.0.809	.526	.841
Individual Institutional capital (Scale)	50	24.53	3.471			
Cronbach Alpha of IIC scale = 0.849						
Intra Organisational Institutional Capital						
Our organisation has management development programmes that promote continuous resource improvement.	50	4.22	.840	0.895	.746	.905
Our organisation has firm incentive systems tied to competency sharing and resource innovations.	50	3.98	.915	0.686	.763	.904
Our organisation has Decision support systems that encourage resource innovation.	50	3.92	.944	0.628	.802	.899
Our organisation has information technology systems that accelerate the diffusion and use of resource capital.	50	4.22	.864	0.843	.671	.913
Our organisation has Training programmes that accelerate the adoption of new capabilities within the firms operations.	50	4.08	.877	0.781	.703	.910
Our firm has Formal resource monitoring and evaluation systems that are used regularly.	50	4.10	.886	0.557	.780	.902
Our organisation makes the use of decentralised cross-functional team based structures to facilitate continuous resource improvement and reduce conformity to taken for granted resource routines.	50	3.90	.839	0.895	.761	.904
Intra-organisational Institutional capital (Scale)	50	28.42	5.049			

Table 4.13: Institutional Capital scale

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	Alpha If item deleted
Cronbach Alpha	.918					
External Institutional Capital						
Our firm participates in inter-firm alliances within our industry that facilitates new resource learning and knowledge sharing.	50	3.45	1.126	.977	.519	.800
Our firm participates in Inter-firm alliances across different industries that facilitate new resource learning and knowledge sharing.	50	3.44	1.198	.959	.553	.791
Government conditions favourable for exports/international business.	50	3.31	1.198	.816	.553	.791
Government support for international trade fairs in the local area.	50	2.85	1.262	.973	.709	.742
Government support for international trade fairs across domestic regions or in overseas markets.	50	2.90	1.233	.884	.676	.753
External Institutional Capital Inter firm (EC)	50	15.59	4.554			
Cronbach alpha - .812						

4.2.4.2 Management Characteristics

Management characteristics construct was a second order reflective construct that was measured using four first order reflective constructs, international orientation, management ties, management attitudes and international entrepreneurship. The measurement scales were reviewed for reliability and convergent validity prior to PLS analysis.

International orientation measured the extent to which the firm had sent its management and staff to work and train abroad and the comparability of its internationally acquired skills and knowledge to that of its competitors in the same industry. It was a summated scale indicator that comprised of two items. The first item indicated whether the organisation sent its staff to work and train abroad. The second item required the organisation to rate the level of internationally acquired skills and knowledge as compared to their competitors. This was measured on a four point Likert type scale with one denoting that the firm was better/above industry standard and four denoting that it was below standard and was subsequently reverse coded. International orientation had a mean score of 0.88 for international work and training experience and 3.51 for internationally acquired knowledge and skills compared to competitors. The international orientation construct scored an average rating of 4.389 (SD=0.726) indicating that the respondent firms rated their internationally acquired skills and knowledge better than that of competitors in the same industry.

Management ties was measured using a five point Likert type scale to measure the extent to which the management had beneficial relationships with foreign and local entities at a business level and its level of personal ties and networks. 1 denoted "to a very little extent" and 5 denoted "to a very great extent". The average item scale means ranged from 2.65 to 4.04. The four additive subscales for management ties ranged from 5 to 15 with a maximum of 15. The average additive scale means were 10.06 (SD=2.516), 12.14(SD=2.213), 10.01(SD=2.811) and 9.52(3.053) for firm relationship with foreign entities; firm relationships with governments, social networks and local communities; personal ties and networks with business firms; and personal ties and networks with governments, industrial and regulatory bodies respectively. The ratings were medium to high indicating that the firms had established and utilised management ties at the business and personal, social level as they engaged in international business.

Management attitudes were measured using three indicators. It was a reflective construct measured using a three item five point Likert type scale. The average mean scores of the items were 4.02 (SD=0.915), 4.29 (SD=0.756), 4.16 (SD=0.841) for attitudes towards firms exporting capability, attitudes towards international operations and level of top management support respectively. The results indicated that the firm's management had positive attitudes to international business and the organisation's ability to operate internationally. The average scale mean for the management attitude summated scale was 12.47 (SD=2.287) which denote a high positive attitude toward the international business of the respondent firms.

EFA was performed on the management characteristics constructs of management attitudes, international orientation and management ties. The factor loadings ranged from 0.459 to 0.944 and item to total correlation ranged from 0.447 to 0.892. The cronbach alpha for the indicator scales ranged from 0.712 to 0.824 which were all above the 0.7 threshold. The measurement scales were therefore maintained for further analysis using PLS.

The international entrepreneurship construct comprise of three summated indicators measuring the extent to which a firm behaviour is proactive, innovative and risk taking. The items were measured on a five point semantic differential type scale with adjectives describing opposite aspects of international entrepreneurial firm behaviour. The innovation indicator comprised of three items. The mean scores for the individual scale items ranged from 3.23 to 3.96. The respondent firms indicated that they were more inclined toward innovation and technological leadership; they have marketed new products and services in the past five years and had fairly implemented dramatic changes to products and services over the past five years. The mean score for the innovation additive scale was 10.49 (SD=2.922) out of a maximum score of 15. This indicates that the firms on average exhibited a medium to high levels of innovative behaviour in the past five years.

The proactive scale comprised of three items. The mean scale scores ranged from 3.43 to 3.64. The highest mean score was 3.64 (SD=1.096) for the “the firm is often the first business to introduce new products and administrative techniques. The lowest mean score

was 3.43 (SD=1.258) indicating that firms are very competitive and maintain a "beat the competition" posture. The average for the summated proactive scale was 10.68 (SD=2.807) indicating on average a medium to high proactive posture.

The international entrepreneurship risk taking subscale was measured using four items. The risk taking behaviour measures were assessed by tendency for high risk - high return investments, financing of projects through external sources, implementing wide ranging changes to achieve objectives and being bold and aggressive. The lowest mean score was 2.98 (SD=1.317) for financing project using externally generated funds and the highest mean score was 3.31(SD=1.092) indicating that the firms on average, had a high appetite for high risk–high return investments. The results indicated that respondent firms used externally generated funds for projects, had an appetite for high-risk high return projects, were fairly aggressive in pursuing opportunities and implemented changes when necessary to achieve objectives. The average mean score for the summated proactive indicator scale was 12.78 (SD=3.694) indicating a medium to high risk taking posture.

The factor loadings of the international entrepreneurship measurement items ranged from 0.628 to 0.915 and item to total correlations ranged from 0.433 to 0.799 which were above the 0.5 and 0.3 thresholds respectively. The reliability analysis resulted in cronbach alpha scores of between 0.736 and 0.789 which were all above the 0.7, indicating good reliability of measurement items. The management characteristics PCA, reliability and convergent validity results are presented in Table 4.14.

Table 4.14: Management Characteristics Scale Items

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	Alpha to item deleted	If deleted
International Orientation							
Employees sent to work and train abroad.	50	0.88	0.328	.490	.447		.804
Rate the level of internationally acquired knowledge and skills of your employees to that of other organisations within the same industry?	50	3.50	0.646	.459	.703		.806
International Orientation scale.	50	4.389	0.726				
Cronbach Alpha - 0.712							
Management Ties							
MT1 – Firm relationships business							
Relationship with foreign Customers.	50	3.70	.902	.662	.612		.801
Relationship with Foreign suppliers.	50	3.71	1.068	.816	.617		.796
Relationship with Foreign competitors.	50	2.65	1.073	.817	.564		.806
MT1 scale	50	10.06	2.516				
Cronbach Alpha – 0.766							
MT2 – Firm relationships government and other							
Ties with Local government agencies.	50	4.04	.856	.561	.537		.779
Utilisation of local social networks.	50	3.82	1.063	.878	.705		.789
Strengthened ties with local communities.	50	4.28	.784	.859	.501		.803
MT2 Scale	50	12.14	2.213				
Cronbach alpha – 0.740							
MT3 - Personal ties, networks and connections in business firms							
Personal ties, networks and with Top managers at buyer firms.	50	3.63	1.101	.882	.825		.769
Personal ties, networks and connections Top managers at supplier firms.	50	3.69	1.092	.853	.755		.776
Personal ties, networks and connections with Top managers at competitor firms.	50	2.69	1.072	.768	.494		.784
MT3 Scale	50	10.01	2.811				
Cronbah alpha = 0.824							
MT4 – Personal ties, networks and connections political and regulatory							
Personal ties, networks and connections over the past three years with	50	2.69	1.358	.865	.660		.789

Table 4.14: Management Characteristics Scale Items

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	Alpha If item deleted
Political leaders at various levels of government. Personal ties, networks and connections over the past three years with Officials in industrial bureaus.	50	3.31	1.146	.906	.755	.771
Personal ties, networks and connections over the past three years with Officials in regulatory and supporting organisations such as tax bureaus, state banks, commercial administrations bureaus or the like.	50	3.57	1.107	.757	.519	.769
MT4 scale Cronbach alpha = 0.797	50	9.57	3.053			
Management Attitudes						
Attitude toward ability of firm to engage in international business.	50	4.02	.915	.888	.698	.938
Top management's favourable attitude towards operating internationally.	50	4.29	.756	.944	.892	.773
Top management is support for international business.	50	4.16	.841	.862	.804	.835
Cronbach Alpha – 0.803						
International Entrepreneurship						
Innovation						
Emphasis on R&D expenditure, technological leadership and innovation.	50	3.23	1.297	.704	.630	.844
Firm has marketed many new products and services.	50	3.96	1.177	.806	.566	.850
Changes in products and services have been dramatic.	50	3.30	1.067	.743	.678	.842
Innovation scale Cronbach alpha – 0.770	50	10.49	2.922			
Proactive						
Firm typically initiates actions to which competitors respond.	50	3.62	1.135	.890	.662	.842
Firm is often the first business to introduce new products, administrative techniques.	50	3.64	1.096	.897	.480	.857
Firm has a very competitive “beat the competitors” posture.	50	3.43	1.258	.628	.482	.858
Proactive scale Cronbach alpha – 0.736	50	10.68	2.807			

Table 4.14: Management Characteristics Scale Items

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	Alpha If item deleted
Risk Taking						
Firm has a strong tendency for high risk investments (with chances for very high rates of return).	50	3.31	1.092	.746	.692	.840
Top managers in firm have a policy primarily financed through external sources such as borrowing.	50	2.98	1.317	.630	.433	.883
Bold and wide ranging changes are necessary to achieve the firm's objectives.	50	3.27	1.208	.915	.799	.830
Firm adopts a "bold and aggressive" posture to maximise potential opportunities.	50	3.22	1.111	.834	.654	.843
Risk taking scale	50	12.78	3.694			
Cronbach alpha – 0.789						

4.2.4.3 Firm Capabilities

Three types of firm capabilities were studied, namely organisational innovation intensity, knowledge capability and adaptive capability. Organisational innovation intensity was measured using eight items denoting technological (product and process innovations) and non-technological (management and marketing innovations) innovations undertaken by the organisation. The items were measured using five point semantic scale. The average mean scores were 7.02 (SD=1.964), 7.51 (SD=1.905), 7.00 (SD=1.948) and 7.37 (SD=1.892) for product, process, managerial and marketing innovation respectively.

The results indicated that the highest level of organisational innovation intensity was at the process level followed by marketing, then product and lastly managerial innovation for the firms studied. The factor loadings of the items ranged from 0.581 to 0.885 and the item to total correlations ranged from 0.586 to 0.808 which were acceptable. The cronbach alpha for the scale was 0.914 which was a high reliability. All items were therefore retained for further analysis.

Knowledge capability was a first order reflective construct measured using three items measured on a five point Likert type scale. The respondents were asked to indicate the extent to which their organisation is able to acquire information required to understand foreign customer needs, information necessary to identify overseas opportunities and the information needed to comply with the requirements and expectations of foreign trading partners. A "1" denoted "to a little extent" and a "5" denoted "to very great extent". The mean scores for the items were 3.63 (SD=.895), 3.80 (SD=.903) and 3.92 (SD=.900)

respectively. This implies that the organisations had medium to high levels of knowledge capability, the highest being the ability to acquire information needed to comply with the requirements and expectations of foreign trading partners. The factor loadings ranged from 0.880 to 0.940 and the item to total correlations ranged from 0.756 to 0.869. This demonstrated acceptable convergent validity. The cronbach alpha was high at 0.904. All items within the knowledge capability scale were retained for further analysis.

Adaptive capability was a reflective construct measured with three items on a five point Likert type scale. The organisations were asked to indicate the extent to which they could meet foreign customer product/service specification demands, tailor products/services to foreign customer requests and respond quickly to the demand for a price change from a foreign customer. The organisations indicated a high adaptive capability in terms of meeting a foreign customers demand for product/service specification with a mean score of 3.81 (SD=0.825). The lowest mean score was 3.44 (SD=.878) for the capability to respond quickly to price changes from foreign customers. The factor loadings ranged from 0.784 to 0.872 and item to total correlations ranged from 0.540 to 0.730 which were acceptable. The cronbach alpha was 0.787 which indicated good reliability of measurement scale items. The results for the firm capabilities are presented in Table 4.15.

Table 4.15: Firm Capabilities Scale Analysis

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	Alpha to item deleted	If deleted
Organisational Innovation Intensity							
Limited Vs Extensive product innovations.	50	3.71	1.124	.812	.712	.901	
Incremental vs radical product improvements.	50	3.31	1.072	.726	.615	.909	
Product innovations	50	7.02	1.964				
Limited vs Extensive process innovations.	50	3.91	1.027	.885	.808	.893	
Incremental vs Radical process innovations.	50	3.60	1.003	.862	.752	.898	
Process Innovations	50	7.51	1.905				
Limited vs extensive managerial innovations.	50	3.65	1.078	.814	.759	.897	
Incremental vs radical managerial innovations.	50	3.35	.958	.815	.797	.894	
Managerial Innovations	50	7.00	1.948				
Limited vs extensive marketing innovations.	50	3.88	.961	.733	.706	.902	
Incremental vs extensive marketing innovations.	50	3.49	1.090	.581	.586	.912	
Marketing Innovations	50	7.37	1.892				
Cronbach alpha – 0.914							
Knowledge capability							
Information on Foreign Customer Needs (KC1).	50	3.63	.895	.940	.869	.811	
Overseas Opportunity Identification (KC2).	50	3.80	.903	.909	.805	.866	
Foreign Trading partners expectations (KC3).	50	3.92	.900	.880	.756	.907	
Knowledge Capability scale							
Cronbach alpha - .904							
Adaptive capability							
Product/Service Demand fulfilment (AC1).	50	3.81	.825	.784	.636	.707	
Tailor products to foreign customer request (AC2).	50	3.63	1.042	.872	.730	.592	
Response to price change request (AC3).	50	3.44	.878	.792	.540	.796	
Adaptive capability scale							
Cronbach alpha - .787							

4.2.4.4 Internationalisation Orientation

Internationalisation orientation comprised of two factors, inward and outward orientation. The two factors were reflective in nature and were measured on a five point Likert type scale. The organisations were asked to indicate the extent to which they utilise advanced management skills from foreign countries, advanced and new technology from foreign countries and foreign direct investment to measure the extent of inward internationalisation orientation. Outward Internationalisation orientation was measured as the extent to which the organisation actively sought foreign markets and developed alliances with foreign partners.

The item mean scores ranged from 2.80 to 3.56. The lowest rating was for the utilisation of foreign direct investment with a mean of 2.80 (SD=1.195) and the highest score was 3.56 (SD=1.053) indicating high utilisation of advanced and new technology from foreign countries. The average scale rating for internationalisation orientation was 16.58 (SD=4.042) which indicated on average medium levels of internationalisation orientation. The factor loadings ranged from .598 to .796 and the item to total correlations ranged from .417 to .597 which was acceptable. The cronbach alpha for internationalisation orientation scale was 0.776 which is good reliability. Details of the internationalisation mode scales are provided in Table 4.16.

Table 4.16: Internationalisation Mode Measurement items

Item	N	Mean	Standard Deviation	Factor Loading	Item to total Correlation	Alpha If item deleted
Utilises advanced management skills with foreign countries.	50	3.32	.978	.782	.597	.713
Utilises advanced and new technology from foreign countries.	50	3.56	1.053	.796	.595	.710
Inward Internationalisation orientation.	50	9.68	2.59			
Utilises foreign direct investment.	50	2.80	1.195	.598	.417	.773
Aggressively seeks foreign markets.	50	3.52	1.199	.700	.532	.732
Develops alliances with foreign partners.	50	3.38	1.159	.750	.590	.710
Outward Internationalisation Orientation.	50	6.90	2.13			
Internationalisation Mode Scale Cronbach Alpha – 0.776		16.58	4.042			

4.2.4.5 International Performance

International performance comprised of two aspects. Objective international performance which was measured using return on assets and perceptual international performance which was measured as three aspects, namely, financial, customer/market and innovative performance. Details of the measurement scales are presented in Table 4.17. The mean item scores for perceptual firm international performance ranged from 3.152 to 3.404 for financial performance, 3.271 to 3.708 for customer/market performance and 2.723 to 3.796 for innovative performance. The factor loadings ranged from .511 to .932 and item to total correlations ranged from .401 to .681. The cronbach alpha was .804 which indicated high reliability.

Table 4.17: Perceptual International Performance Measurement Scale

Item	N	Mean	Standard Deviation	Factor Loading	Item total Correlation	to Alpha If item deleted
Financial Performance						
Our organisation has met our international market share objectives	50	3.196	.9819	.932	.599	.773
Our organisation has achieved the turnover objectives we set for internationalisation	50	3.244	.9929	.897	.601	.773
In general, we are satisfied with our success in the international markets	50	3.152	1.0295	.857	.417	.791
Internationalisation has had a positive effect on our firms profitability	50	3.404	1.0431	.796	.512	.781
Financial IP scale	50	12.997	3.578			
Customer/Market Performance						
Entering New markets	50	3.271	1.0641	.523	.681	.763
Increased Market share	50	3.500	.9258	.699	.323	.799
Increased Customer Satisfaction	50	3.708	.8562	.511	.615	.774
The level of innovativeness of new products / processes was improved	50	3.542	.9249	.767	.661	.789
Sales volume and market acceptance of new products was improved	50	3.490	.9285	.784	.624	.783
Customer/Market IP Scale	50	17.511	3.383			
Innovative Performance						
The company's competency base was enlarged	50	3.796	.7554	.821	.556	.791
The average development costs of new products/services/processes has reduced	50	2.723	1.0242	.843	.401	.812
The time to market of new products / processes was reduced	50	2.809	.9613	.806	.470	.817
Innovative IP Scale	50	9.328	2.043			
Cronbach Alpha – 0.804						

4.3 Measurement Model Estimation

Following the purification and reliability testing of the measurement scales, descriptive analysis of the constructs and partial least squares analysis was conducted. Partial Least squares approach was employed to assess the relationship between constructs and to determine the predictive power of the conceptual model for the 50 publicly quoted companies in the research. SmartPLS software (Ringel et al., 2005) was used. Previous use of this methodology has been indicated in previous research and literature (Hensler et al., 2009; Hulland, 1999).

The statistical analysis process involved two stages. The first step was the estimation of the outer or measurement model which assesses the relationship between the observable variables and the theoretical constructs they represent. The second stage was the specification of the inner or structural model and evaluation of the relationships proposed and testing of hypothesis (Bryne, 2001).

A set of thirty four measurement items representing fourteen factors were subjected to confirmatory factor analysis (CFA) as part of the partial least squares outer model analysis. Each of the relationships between the observed variables and their respective factors were specified in an outer/measurement model. The measurement model or outer model defines how each block of indicators relates to their respective latent variables. The constructs in the study were measured using single or multiple items. Details on the type of constructs are contained in the Table 4.18.

Table 4.18: Types of Key constructs

Construct	Type of Construct
Institutional Capital	Reflective
International Orientation	Reflective
Management Ties	Reflective
Management Attitudes	Reflective
International entrepreneurship	Reflective
Management Characteristics	Second order Reflective
Organisational Innovation Intensity	Reflective
Knowledge capability	Reflective
Adaptive capability	Reflective
Internationalisation Orientation	Reflective
Degree of Internationalisation	Reflective
International Performance	Formative
Firm Size	Reflective
Firm Age	Reflective

The constructs were conceptualised in line with prior empirical studies and some modified to apply to the context of the study. To decide whether indicators should be modeled in a formative mode depends on three considerations namely theory/substantive knowledge, research objective and empirical conditions (Chin, 1998). As discussed in chapter three, institutional capital was hypothesised as a reflective construct consisting of three summated indicators of individual, intra-organisational and external institutional capital.

Management characteristics was a second order reflective factor comprising of four first order reflective factors of management ties, international orientation, management attitudes and international entrepreneurship. International performance was a formative construct comprising of three indicators representing perceptual international performance financial, customer market and innovative performance and one objective international performance indicator which was return on assets.

The degree of internationalisation was a reflective factor comprising of internationalisation intensity, multinationality and foreign customer base. Multinationality was later dropped as it did not obtain the required loadings in the CFA analysis. All the other factors were first order reflective factors. All the reflective constructs were assessed for reliability, validity and unidimensionality by conducting CFA using PLS software SmartPLS. Since reliability is irrelevant for formative constructs (Diamantopoulous & Siguaw, 2006), no reliability testing was conducted for the formative construct.

The confirmatory factor analysis was conducted in order to assess the extent to which the observed data fits the pre-specified theoretically driven model. CFA is a technique usually employed to confirm on a priori hypothesis about the relationship between a set of measurement items and their respective factors. CFA was conducted on each construct. The analysis was conducted using SmartPLS. There were four criteria used to validate the model fit in PLS. These were construct unidimensionality, construct reliability, convergent validity and discriminant validity (Hair et al., 2011).

4.3.1 Construct Unidimensiotnality

Construct unidimensionality was initially assessed by verifying that the measurement items measured the specific construct. Following the purification and reliability analysis of the measurement scales, PLS analysis was conducted so as to ensure the suitability of the constructs. Table 4.19 displays the mean and standard deviation with corresponding normality data statistics for the constructs in the outer model. Further construct

unidimensionality was performed through the verification of the cross loadings of scales and constructs to ensure that the scales loaded heavily on the relevant constructs. The cross loadings and corresponding T values were produced as part of a bootstrapping procedure that uses resampling to test the significance of the relationships between the constructs. The bootstrap process in this research used 500 resamples. Additionally, each factor was allowed to covary with other factors in order to assess the correlation. The loadings and cross loadings are presented in Appendix III Table A3.1. All the loadings and cross loadings were adequate and demonstrated construct unidimensionality.

Table 4.19: Descriptive Statistics for Measurement Scales and Test of Univariate Normality

Construct	Indicator	Number of Items	Mean	SD	Kurtosis	Skewness
Institutional Capital (IC)	Individual (IC1)	6	24.53	3.47	-.398	.123
	Intra-organisational (IC2)	7	28.42	5.05	-.937	.481
	External (IC3)	5	15.95	4.55	-.402	.462
Management Characteristics (MC)						
International Orientation (MGTIO)	International work and training experience	2	4.39	0.73	-.879	-.139
Management Attitudes (MA)	Attitude towards firm's capability to export service offering	1	4.02	0.91	-1.209	1.835
	Favourable attitude towards international operations	1	4.29	0.76	-.844	.308
	Top management support	1	4.16	0.84	-.757	-.052
Management Ties(MGTT)	Relationships with foreign customers, suppliers, competitors	3	10.06	2.51	-.381	.611
	Relationships with government, social networks and local communities	3	12.14	2.21	-.667	.321
	Management personal ties, networks and connections with business firms	3	10.01	2.81	-.975	1.243
	Management personal ties, networks and connections with government, industrial and regulatory bodies	3	9.57	3.05	-.314	-.209
International Entrepreneurship (IE)	Proactive (IEO1)	3	10.49	2.92	-.662	.077
	Innovative (IEO2)	3	10.68	2.81	-.736	.855
	Risk taking (IEO3)	4	12.78	3.69	-.004	-.826
Organisational Innovation Intensity (OII)						
	Product (FCOII1)	2	7.02	1.96	-.754	.800
	Process (FCOII2)	2	7.51	1.90	-.839	1.178
	Management (FCOII3)	2	7.00	1.95	-.621	.217
	Marketing (FCOII4)	2	7.37	1.89	-.953	1.073

Table 4.19: Descriptive Statistics for Measurement Scales and Test of Univariate Normality

Construct	Indicator	Number of Items	Mean	SD	Kurtosis	Skewness
Knowledge Capability (KC)	Information on Foreign Customer Needs (KC1)	1	3.63	0.89	-.751	.617
	Overseas Opportunity Identification (KC2)	1	3.80	0.90	-.956	1.139
	Foreign Trading partners expectations (KC3)	1	3.92	0.90	-.883	1.189
Adaptive Capability (AC)	Product/Service Demand fulfilment (AC1)	1	3.81	0.82	-.984	2.020
	Tailor products to foreign customer request (AC2)	1	3.63	1.04	-.968	.729
	Response to price change request (AC3)	1	3.44	0.88	-.836	1.008
Internationalisation Orientation (IO)	Inward (IOI)	3	9.68	2.59	-.667	.270
	Outward (IOO)	2	6.90	2.13	-.945	.447
Degree of Internationalisation (DOI)	Internationalisation Intensity (II) (%)	1	25.52	25.69	1.521	1.900
	Foreign Customer Base(FCB) (%)	1	25.62	25.58	1.342	1.476
Firm International Performance (IP)						
Objective International Performance (OIP)	Return on Assets (ROA) (%)	1	15.47	.14	1.36	2.01
Perceptual International Performance (PIP)	Perceptual Financial Performance (PIPF)	4	12.997	3.578	-.394	.696
	Perceptual Market and Customer Performance (PIPCM)	5	17.511	3.383	-.029	-.705
	Perceptual Innovative Performance (PIPI)	3	9.328	2.043	-.126	.409

*Number of items = number of questions in survey instrument to measure corresponding indicators (Appendix II)

**Indicator: Twenty out of thirty two indicators of corresponding scales developed into summated indicators.

4.3.2 Construct Reliability

Construct reliability was assessed by computing the composite reliability and the cronbach alpha of the constructs. Composite reliability measures were evaluated by using SmartPLS. The Cronbach alphas were all above the 0.6 threshold as specified for PLS analysis (Hair et al., 2010) and ranged from 0.723 and 0.94 which indicates average to good reliability and composite reliability of reflective items were all above the acceptable 0.7 threshold which means all the variables in the study exhibited construct reliability. All constructs were viewed to have acceptable reliability levels because the composite reliability scores for all constructs were above the 0.7 threshold. Details of construct reliability are presented in Table 4.20.

Table 4.20: Reliability of Constructs

Construct	Composite Reliability ≥ 0.7	Cronbach Alpha ≥ 0.6
Adaptive Capability	0.866	0.782
Institutional Capital	0.829	0.782
Internationalisation Orientation	0.816	0.776
Knowledge capability	0.942	0.907
Management Characteristics	0.804	0.723
Organisation Innovation Intensity	0.913	0.872
Degree of Internationalisation	0.967	0.931
Firm Age	0.769	0.703
Firm Size	1	1

4.3.3 Convergent Validity

Confirmatory factor analysis was conducted to assess the convergent validity of the constructs. Convergent validity was assessed using the value of standard loadings of the indicators for the underlying construct. The scores are to be statistically significant and above 0.5 (Nunnally, 1978). The CFA results of item loadings and their respective t-

values are reported in Table 4.21. The items were significantly loaded on the proposed factors with loading higher than 0.5. Convergent validity was also assessed using average variance extracted (AVE). The AVE of all constructs were above the 0.5 threshold indicating that the latent constructs account for at least fifty percent of the variance in the items. This indicates that the measurement scales exhibited adequate measurement validity (Hair et al., 2010).

Table 4.21: Convergent Validity of outer model

Construct	Sample Estimates	Sample Mean	Standard Error	t-value	AVE
Institutional Capital					0.6264
IC1	0.8774	0.8783	0.0336	26.1063	
IC2	0.8920	0.8963	0.0228	39.1667	
IC3	0.5602	0.5466	0.1078	5.1951	
Management Characteristics					0.5699
International Orientation	0.5498	0.5460	0.0837	6.5686	
Management Ties					
MGTT1	0.7511	0.7690	0.1124	6.6820	
MGTT2	0.5935	0.5468	0.1928	3.0782	
MGTT3	0.6024	0.5261	0.2773	2.1725	
MGTT4	0.5973	0.5017	0.2860	2.0882	
Management Attitudes					
MA1	0.8533	0.8513	0.0416	27.4841	
MA2	0.9601	0.9612	0.0065	63.3904	
MA3	0.9247	0.9252	0.0201	54.4778	
International Entrepreneurship					
IE1	0.9197	0.9220	0.0158	58.3273	
IE2	0.7844	0.7795	0.0699	11.2146	
IE3	0.7911	0.7819	0.0542	14.6018	

Construct	Sample Estimates	Sample Mean	Standard Error	t-value	AVE
Organisational Innovation Intensity					0.7237
OII1	0.8552	0.8572	0.0329	26.0045	
OII2	0.9052	0.9046	0.0241	37.5252	
OII3	0.8610	0.8614	0.0369	23.3152	
OII4	0.7764	0.7740	0.0680	11.4123	
Knowledge capability					0.8428
KC1	0.9458	0.9453	0.0127	74.6668	
KC2	0.9261	0.9260	0.0193	48.0843	
KC3	0.8820	0.8802	0.0453	19.4544	
Adaptive capability					0.6877
AC1	0.9131	0.9087	0.0292	31.3023	
AC2	0.8774	0.8746	0.0509	17.2358	
AC3	0.6786	0.6548	0.1566	4.3345	
Internationalisation Orientation					0.6949
IOI	0.9659	0.9219	0.1421	6.7957	
IOO	0.6772	0.6228	0.2844	2.3817	
Degree of internationalisation					0.9353
II	0.9661	0.9661	0.0140	68.9795	
FCB	0.9683	0.9677	0.0130	74.3219	
Firm Size	1	1	0	0	1
Firm Age	0.7707	0.6893	0.3708	2.0782	0.6258
	0.8110	0.5184	0.5191	1.6622	

4.3.4 Discriminant validity

A number of measures were used to assess the discriminant validity of the outer model. These were coefficient of determination (R^2) for the endogenous variables, the Forenell Lacker Measure and the Stone-Geisser Test (Q^2). The R^2 values of organisational innovation intensity, knowledge capability, adaptive capability, degree of

internationalisation and international performance were 0.5829, 0.1958, 0.3421, 0.1739 and 0.7134 respectively. The Fornell Larker measure compares the AVE to the highest squared correlation of each construct (Fornell & Larcker, 1981). As indicated in Table 4.22, all the constructs in the model met this criteria indicating that discriminant validity is supported. Alternatively, as indicated on Table 4.23, the square roots of the AVE on the diagonal elements are greater than the bi-variate construct correlations on the off diagonal elements. This also confirms discriminant validity as per the Fornell Larcker Criterion.

The Stone-Geisser Test is the Cross Validated redundancy measure for each construct. This measure was produced through a blindfolding procedure in SmartPLS and is required to be equal to or greater than 0. A Q^2 of 1 is considered to mean a perfect prediction of model scores while a 0 is considered to a weak measure. All the measures were above 0 and indicated a fair to strong prediction of the model. The discriminant measures are presented in Table 4.22 below. Discriminant validity was confirmed for the measurement model. As indicated in Table 4.23, the square root of the average variance extracted is higher than all its correlation with other constructs within the model.

Table 4.22: Measures of Discriminant Validity

Construct	$R^2 \geq 0.17$	Fornell Larker Measure (AVE \geq highest correlation ²)	Stone-Geisser Test ($Q^2 \geq 0$)
Institutional Capital	-	0.626>0.52	0.618
Management Characteristics	-	0.5699>0.29	0.346
Organisational Innovation Intensity	0.5829	0.7234>0.52	0.501
Knowledge Capability	0.1958	0.8428>0.27	0.142
Adaptive Capability	0.3421	0.6877>0.23	0.243
Internationalisation Orientation	-	0.6949>0.33	0.709
Degree of Internationalisation	0.1739	0.9353>0.195	0.119
Firm Size	-	1>0.06	0.984
Firm Age	-	0.6258>0.05	0.639
International Performance	0.7134	-	0.263

Table 4.23: Construct Correlation

	AC	DOI	FA	FS	IC	INGP	IO	IP	KC	MC	OII
AC	0.829*										
DOI	-0.220	0.967									
FA	0.098	-0.076	0.791								
FS	-0.169	0.086	0.038	Single Factor							
IC	0.483	-0.267	-0.130	0.122	0.7914						
IE	0.379	-0.388	-0.008	-0.091	0.580						
INGP	0.117	-0.387	0.026	0.030	0.132	Single Factor					
IO	0.481	-0.176	0.031	0.173	0.408	0.175	0.833				
IP	0.299	-0.442	-0.201	-0.170	0.623	0.387	0.418	-			
KC	0.394	-0.062	0.048	0.079	0.418	0.127	0.522	0.321	0.918		
MC	0.310	0.031	-0.195	0.252	0.530	0.219	0.539	0.495	0.303	0.7549	
OII	0.447	-0.435	0.097	0.225	0.721	0.175	0.540	0.581	0.523	0.471	0.850

*Diagonal elements are the square roots of AVE

4.3.5 Measurement model overall review

To assess the predictive relevance of the model, R-squared for dependent latent variables and average variance extracted measures are utilized. The R-Squared for the endogenous variable organisational innovation intensity (OII) is .5829, knowledge capability (KC) is .1958; adaptive capability (AC) is .3421; degree of internationalisation (DOI) was 0.1739 and International performance is (IP) .7134. The outer model was strong with all indicator variables being statistically significant.

As per the results of the CFA, all the subscales of the constructs had loadings that were statistically significant. The institutional capital subscales were statistically significant and had the following t-statistics, individual IC $t(499)=33.6078$, $p\leq 0.001$; intra-organisational IC $t(499)=45.34$, $p\leq 0.001$; and external IC $t(499)=6.134$, $p\leq 0.001$. The management characteristics construct had the following t-statistics $t(499)=8.5477$, $p\leq 0.001$ for international orientation.

Management ties = $t(499)=7.3681$, $p\leq 0.001$ for MT1, $t(299)=3.9941$, $p\leq 0.001$ for MT2, and $t(499)=3.0629$, $p\leq 0.001$ for MT3 and $t(499)=2.8183$, $p\leq 0.001$. Management attitudes were statistically significant at $p\leq 0.005$, with t values of 27.4841, 63.39 and 54.47 for MA1, MA2 and MA3 respectively at 499 degrees of freedom. International entrepreneurship was statistically significant with T-values of $t(499)=33.329$, $p\leq 0.001$ for proactiveness, $t(499)=29.773$, $p\leq 0.001$ for innovation and $t(499)=20.4806$, $p\leq 0.001$ for risk taking postures.

The firm capabilities construct indicators were all statistically significant. The T-values were $t(499)=34.20$, $p\leq 0.001$ for product innovations, $t(499)=48.14$, $p\leq 0.001$ for process innovations, $t(499)=27.61$, $p\leq 0.001$ for managerial innovations and $t(499)=12.08$, $p\leq 0.001$ for marketing innovations. The Knowledge capability indicators were statistically significant and the t statistics were $t(499)=79.06$, $p\leq 0.001$, $t(499)=70.67$, $p=0.001$ and $t(499)=21.19$, $p\leq 0.001$ for KC1, KC2 and KC3 respectively. The adaptive capability t statistics were $t(499)=41.43$, $p\leq 0.001$, $t(499)=22.46$, $p\leq 0.001$ and $t(499)=5.2568$, $p\leq 0.001$ for AC1, AC2 and AC3 respectively

The internationalisation orientation indicators of inward and outward IO were statistically significant with $t(499)=9.8703$, $p\leq 0.001$ and $t(499)=2.8131$, $p\leq 0.001$ respectively. Firm age indicators had t values of $t(499)=2.674$, $p\leq 0.001$ and $t(499)=1.75$, $p\leq 0.1$ for firm age since incorporation and firm age in international business. Degree of internationalisation indicators of internationalisation intensity and foreign customer base were also statistically significant at the 0.001 level of significance with t statistics of 72.26 and 108.36 respectively at 499 degrees of freedom.

Firm international performance was a formative construct. The assessment of formative construct involved an assessment of the indicators relative contribution to the construct, significance of weights and the VIF for multicollinearity. The results of the assessment of international performance presented in table 4.24 below are within acceptable parameters and were statistically significant at the 0.01 level of significance.

Table 4.24: International Performance Measurement Model Results

Construct	VIF	Weight	T-statistic
International Performance			
Return on Assets	1.35	0.1432	1.7035
PIPF	1.20	0.4700	2.2869
PIPCM	1.56	0.2768	4.4095
PIPI	2.01	0.1100	1.6503

As illustrated in Figure 4.2 the outer model reflected medium to high predictive relevance. The measurement characteristics of the constructs were all acceptable. Non-parametric evaluation using bootstrapping and blindfolding indicated that the quality of the reflective and formative measurement models was high. Path estimates were all statistically significant and meaningful. The endogenous constructs had medium to high levels of explained variance. Firm resources of institutional capital, management characteristics and organisational demographics of firm size and firm age, explain 58.3% of the variance in organisational innovation intensity, 19.6% of knowledge capability and 34.2% of adaptive capability. Firm capabilities explain 17.4% of the variance in degree of internationalisation while firm resources, firm capabilities, degree of internationalisation and Internationalisation orientation account for 71.3% of the variance in firm international performance.

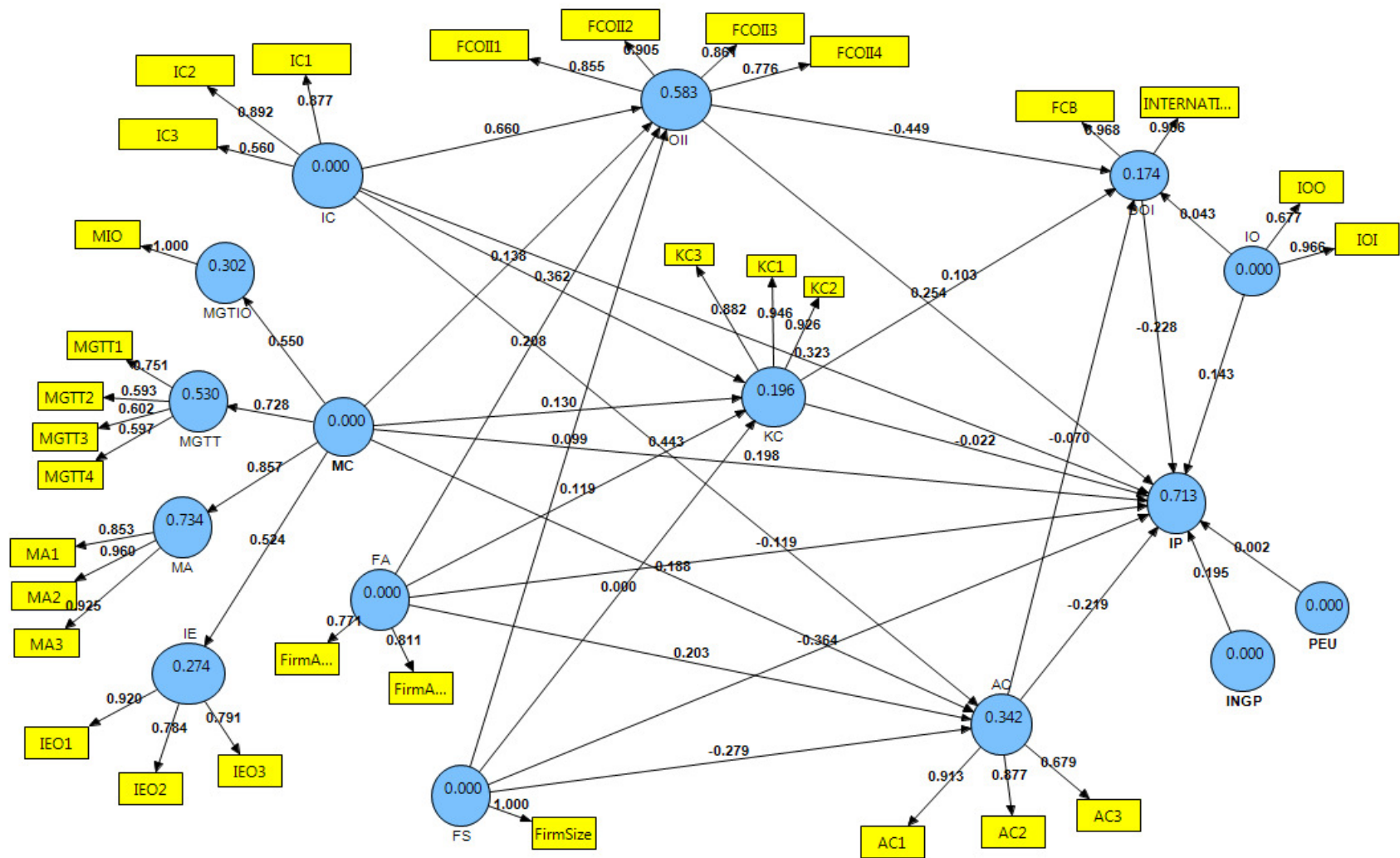


Figure 4.2: Measurement Model of study

NB: R^2 values contained in endogenous variables. Factor loadings on links between indicators and latent variables. B coefficient's on links between latent variables.

4.4 Structural Model Estimation and Hypothesis Testing

An evaluation of the outer model confirmed that the construct measures were reliable and valid. Once this was completed, the inner or structural model was estimated to examine its predictive capabilities and the relationships between the constructs. The criteria for evaluating the inner model are assessing the significance of the path coefficients, the level of R^2 values, the effect sizes f^2 and assessing the predictive relevance Q^2 and the q^2 effect sizes.

The inner model was evaluated using the path weighting or β coefficients and corresponding p values generated from the SmartPLS analysis. Consistent with Chin (1998), bootstrapping (500 resamples) was applied to produce standard errors and t statistics. This enabled the measurement of the statistical significance of the path coefficients. The degrees of freedom for all measures in the bootstrap analysis are equal to the number of resamples minus one, which is 499. f^2 effect levels were used to determine the strength of the R^2 values.

The statistical objective of PLS is to show high R^2 and significant t -values, thus rejecting the null hypothesis of no effect. Parameters with an absolute t -value greater than 1.65 indicate a significance level of 0.1 (i.e. $p < 0.1$), 1.96 indicate a significance level of 0.05 (i.e. $p < 0.05$), those with an absolute t -value over 2.58 present a significance level of 0.01 (i.e. $p < 0.01$), and those with an absolute t -value over 3.26 present a significance level of 0.001 (i.e. $p < 0.001$). The relevant p value and β coefficients are presented in Table 4.25. The structural model is presented in Figures 4.4 and 4.5.

Table 4.25: p coefficients and p values

	OII	KC	AC	DOI	IP
AC				-0.0697	-0.2195
DOI					-0.2276***
FA	0.2075**	0.119	0.2027*		-0.1186
FS	0.0994	0.0003	-0.2786***		-0.3643***
IC	0.6595***	0.3622***	0.4434***		0.3233***
IO				0.0427	0.1435
KC				0.1034	-0.0225
MC	0.1379	0.1295	0.1882		0.1982**
OII				-0.4495***	0.2544*
INGPu					0.1948***
PEU					0.0018

n=50 *p>0.1, **p>0.05; ***p>0.001 (two tailed)

The structural model path coefficients are examined for their significance using t values and their relevance. An analysis of the relative importance of the relationships provided for in Table 4.25 is necessary for interpreting results and drawing conclusions (Hair et al., 2013). This is discussed in the following section. The central research theme was to identify the firm level antecedents of international performance for publicly quoted companies in Kenya. In order to answer the research question a conceptual framework and a set of hypotheses were developed. The proposed model integrated ten constructs, all unique predictors of firm international performance, with four of them having an intervening effect in the proposed model and one having a moderating effect and two control variables. The hypotheses were tested using SmartPLS. The paths between the constructs represent each hypothesis. Each path was also assessed for the statistical significance of the path coefficients. The final model is presented in Figure 4.3. This section provides information of the results of the hypotheses testing following the SEM results for the path relationships in the model.

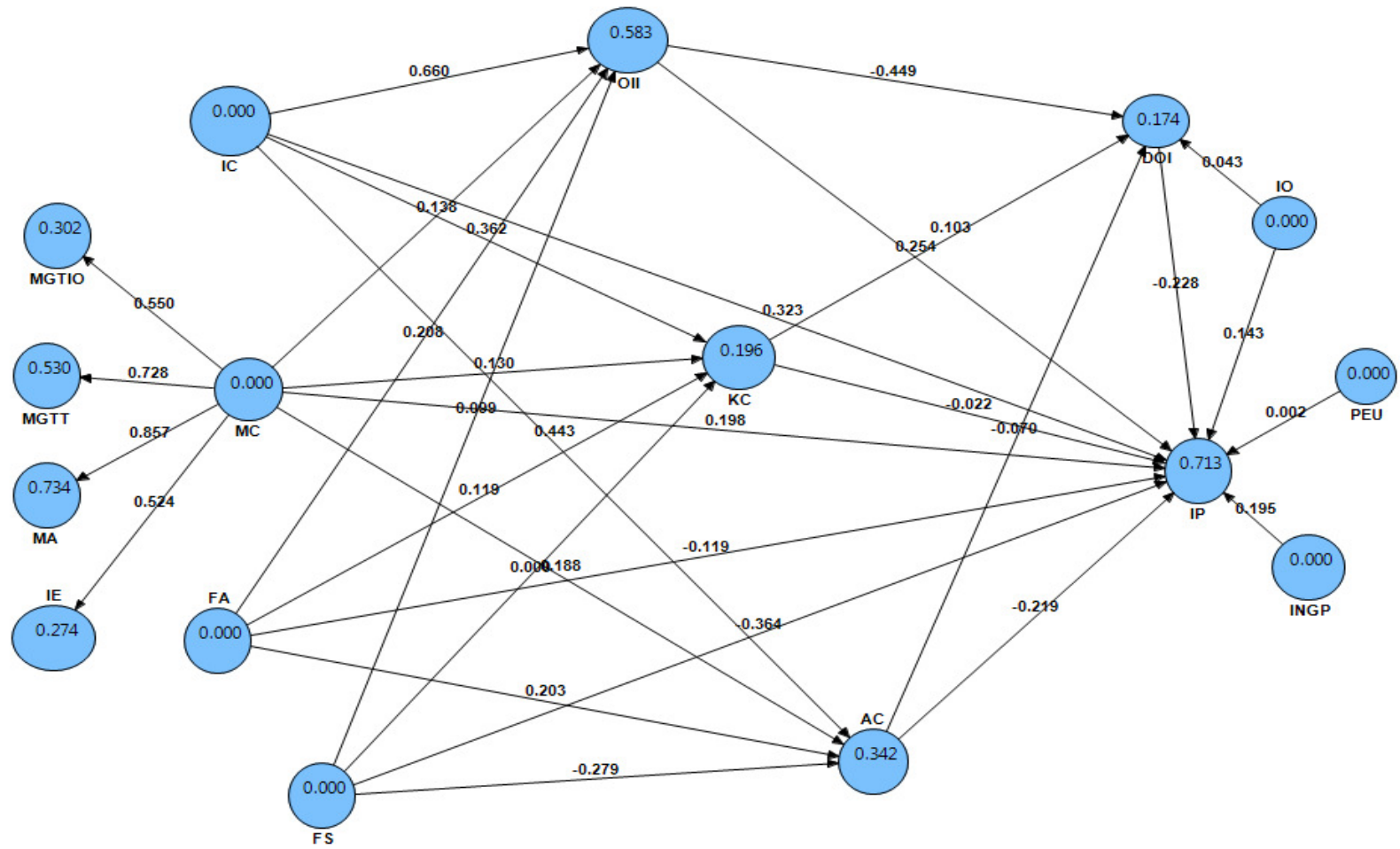


Figure 4.3: Structural Model path coefficients

NB: R^2 values contained in endogenous variables. Factor loadings on links between indicators and latent variables. B coefficient's on links between latent variables

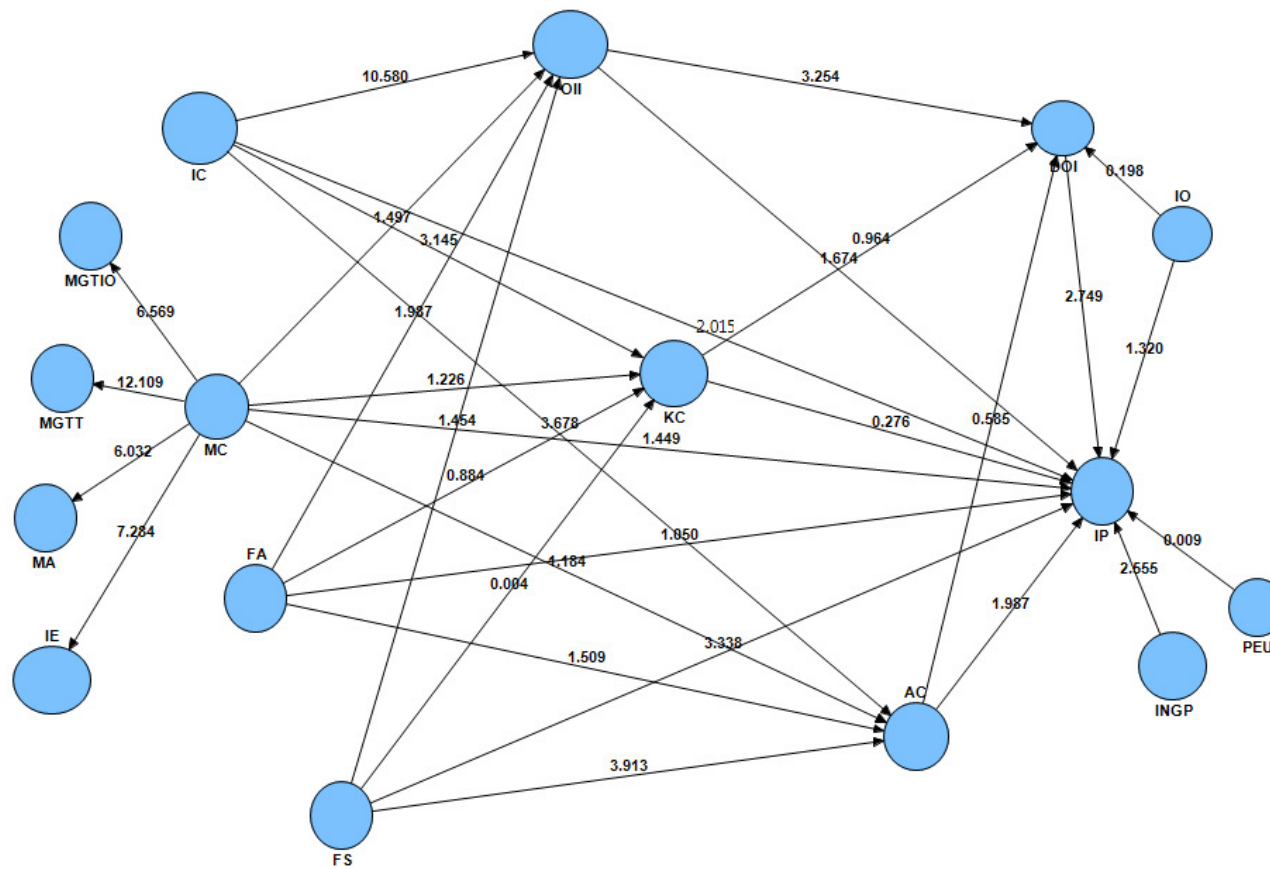


Figure 4.4: Structural Model T-Statistics

4.5 Firm Level Factors and International Performance

The first objective of this research was to establish the effect of firm level factors on the international performance of publicly quoted companies in Kenya. In order to ascertain the relationships of the constructs under study, a number of factors from existing literature were identified as influencing the international performance of firms. The factors studied in this research were institutional capital, management characteristics, organisational demographics, firm capabilities, internationalisation orientation and degree of internationalisation.

The respondent organisations were requested to indicate the extent that their firms exhibited these firm level factors in a questionnaire and additional information was provided from publicly available annual reports. The effect of firm level factors on firm international performance was analysed using factor analysis and SEM partial least squares analysis. Exploratory factor analysis, as discussed previously resulted in the further analysis of ten constructs. These constructs were used to develop an outer and inner model for PLS analysis. Path coefficients were used to determine the direction and strength while T-statistics provided information on the significance to the relationships. The f^2 measures if a specific exogenous variable has a substantial effect of and endogenous variable. Values of f^2 of 0.02, 0.05 and 0.35 denote small, medium and large effects (Cohen, 1988; Hair et al., 2013). Table 4.26 presents the path coefficients, their level of significance together with their respective size effects. The results of the hypotheses testing are discussed thereafter.

Table 4.26: Firm Level Factors and International Performance Relationships

Relationships	B	Sample Mean	Standard Error	T-Statistics	Level of Significance	f ²
IC -> IP	0.312	0.3189	0.1043	2.9919	0.001	0.052
MC -> IP	0.1982	0.1962	0.1153	1.9681	0.05	0.048
FA -> IP	-0.1186	-0.0997	0.101	1.2162	ns	0.0278
FS -> IP	-0.3643	-0.3464	0.0636	5.4503	0.001	0.097
OII -> IP	0.2544	0.2197	0.1034	2.2733	0.001	0.0279
KC -> IP	-0.0225	-0.0308	0.0628	0.5091	ns	0.0289
AC -> IP	-0.2195	-0.2133	0.091	2.3079	0.05	0.0871
DOI -> IP	-0.2276	-0.2183	0.0542	4.1763	0.001	0.1114
INGP -> IP	0.1948	0.1927	0.0556	3.4783	0.001	0.0279

4.5.1 Hypothesized Effect of Firm Resources on International Performance

Hypothesis H₁ – A firm’s resources are positively related to firm international performance.

Hypothesis 1 predicted the effect of firm resources on international performance. To test the above hypothesis, partial least squares analysis was conducted. The multiple regression results from testing the relationship of each of the firm resources studied of institutional capital, management characteristics and organisational demographics and firm international performance are presented in Table 4.26.

Institutional capital was found to have a positive and statistically significant relationship with firm international performance. The path coefficient was positive and significant at the 0.001 level ($\beta=0.3233$, $p<0.001$, $f^2=0.052$). Institutional capital is therefore confirmed to be an antecedent to the international performance of a firm. The effect size of institutional capital on international performance is medium with an effect size, f^2 of 0.052.

Management characteristics had a positive and statistically significant relationship with international performance at the 0.05 level of significance ($\beta=0.1982$, $p<0.05$, $f^2=0.048$). Management characteristics have a medium effect size on the international performance of firms. This implies that the management characteristics of international orientation, management ties, management attitudes and international entrepreneurship have a positive and statistically significant effect on international performance at the 0.05 level of significance.

The relationship between firm age and international performance was found to be negative and not statistically significant. The path coefficient was $\beta=-0.1186$ and the t statistics was 1.2162. The f^2 was small at 0.0278. The effect of firm size on international performance was negative and statistically significant with a medium effect size of $f^2=0.097$. The path coefficient was $\beta=-0.3643$ at the 0.001 level of significance. This implies that the size of a firm negatively influences its international performance.

An assessment of the relevance of the significance of the path coefficients reveals that institutional capital had the strongest positive significant effect on international performance ($\beta=0.3233$, $p<0.001$) followed by management characteristics ($\beta=0.1982$, $p<0.05$). Firm size had the strongest negative effect on international performance (-0.3643 , $p<0.001$). Hypothesis H1 is therefore supported as it relates to the effect of institutional capital and management characteristics on international performance.

4.5.2 Hypothesized Effect of Firm Capabilities on International Performance

Hypothesis H₂ – There is a positive relationship between firm capabilities and international performance.

Hypothesis 2 predicted the relationship between firm capabilities and international performance. Three types of firm capabilities (organisational innovation intensity, knowledge capability and adaptive capability) were measured and their respective relationships with international performance assessed. Partial Least Square analysis was used to test the hypothesis. The partial least squares analysis multiple regression results indicated that organisational innovation intensity had a positive relationship with international performance that is statistically significant ($\beta=0.2544$, $p<0.001$, $f^2=0.0279$). The effect size of the relationship is small. Hypothesis H_{2a} is that predicted a positive relationship between organisational innovation intensity and international performance is therefore supported.

Knowledge capability was found to have a negative and statistically insignificant relationship with firm international performance ($\beta=-0.225$, $p>0.05$, $f^2=0.089$). Hypothesis H_{2b} that predicted a positive relationship between knowledge capabilities and international performance is not supported. The effect size is medium. Adaptive capability had a negative statistically significant relationship with firm international performance ($\beta=-0.2195$, $p<0.05$, $f^2=0.0871$). Hypothesis H_{2c} that predicted a positive relationship between adaptive capabilities and international performance is not supported. This implies that the alternative hypothesis H₂ that predicted a positive relationship between firm capabilities and international performance is partially supported.

4.5.3 Hypothesized Effect of DOI on International Performance

Hypothesis H₃ – There is a positive relationship between degree of internationalisation and international performance.

Hypothesis 3 predicted the relationship between the degree of internationalisation and international performance. The PLS results indicated that the degree of internationalisation of a firm had a negative relationship with firm international performance a $\beta=-0.2276$ and was statistically significant at the 0.001 level of significance. The effect size was $f^2=0.1114$ which was medium. The alternative hypothesis H₃ that stated that there is a positive relationship between the degree of internationalisation and international performance is not supported.

4.5.4 Hypothesized Effect of Firm Level Factors on aspects of International Performance

The effect of the firm level factors on various indicators of international performance were also modelled and assessed. Institutional capital has a positive and significant relationship with financial and customer/market performance that is statistically significant at the 0.001 level of significance. Management characteristics had a positive statistically significant relationship with all aspect of financial, customer/market and innovative firm performance. Firm size had a negative relationship with financial performance and was statistically significant at the 0.1 level of significance.

Firm age and degree of internationalisation had a positive relationship with financial performance at the 0.001 level of significance with $\beta=0.2226$ and $\beta=0.2649$ respectively.

Firm size had a statistically significant negative relationship with customer and market and innovative international performance ($\beta=-0.3458$, $p<0.001$) and ($\beta=-0.1465$, $p<0.001$) and adaptive capability had a negative ($\beta= -0.1775$, $p<0.001$) and positive relationship respectively ($\beta=-2721$, $p<0.001$). Institutional capital and firm age had a positive and significant effect on return on assets. The nine factors explain 0.344, 0.319, 0.639 and 0.352 of the variance in return on assets and the perceptual measures of financial, customer and innovative performance respectively indicating moderate to substantial coefficient of determination. The results are presented in the Table 4.27.

Table 4.27: Firm levels Factors and aspects of International Performance

Factors	International Performance			
	ROA	Financial	Customer and Market	Innovative Performance
Institutional Capital	0.4399***	0.258**	0.4751***	-0.158
Management Characteristics	0.0461	0.2647**	0.2776***	0.4465***
Firm Age	0.4359***	0.1641	-0.0103	0.0809
Firm Size	-0.0878	-0.0182	-0.3422***	-0.1877*
Organisational Innovation Intensity	-0.0514	-0.4141***	0.0137	0.2737*
Knowledge capability	0.019	0.0339	-0.0074	0.1106
Adaptive Capability	-0.2273*	0.068	-0.1704	-0.2705*
Degree of Internationalisation	-0.1925	0.3567***	-0.0817	-0.1083
Internationalisation Orientation	-0.0257	0.1249	0.1971	0.0642

* $p<0.1$, ** $p<0.05$; *** $p<0.001$ two tailed

4.6 Effect of Firm Resources on Firm Capabilities

The second objective of the research was to establish the effect of institutional capital, management characteristics and organizational demographics on firm capabilities. The relationship between various firm level factors and firm capabilities was assessed. Table 4.28 provides the β coefficients and p values.

Table 4.28: Relationship between Firm level factors and Firm Capabilities

Factors	Firm Capabilities		
	Organisational Innovation Intensity	Knowledge Capability	Adaptive Capability
Institutional Capital	0.6595***	0.3662***	0.4434***
Management Characteristics	0.1379	0.1295	0.1882
Firm Age	0.2075***	0.119	0.2027*
Firm Size	0.0994	0.0003	-0.2786***

* $p < 0.1$, ** $p < 0.05$; *** $p < 0.001$ two tailed

Hypothesis H₄ – Institutional capital has a positive effect on firm capabilities.

Hypothesis 4 predicted the relationship between institutional capital and firm capabilities.

The effect of institutional capital on each type of firm capabilities (organization innovation intensity, knowledge capability and adaptive capability) was tested. The results of the partial least squares analysis indicated that the path coefficient for institutional capital and organizational innovation intensity was positive and statistically significant ($\beta=0.6595$, $p < 0.001$, $f^2=0.7122$). The results of testing the effect of institutional capital on knowledge capability indicated a positive and statistically significant relationship ($\beta=0.3662$, $p < 0.001$, $f^2=0.1131$). The results of testing the effect of institutional capital on the adaptive capability of the firm indicated a positive and statistically significant relationship ($\beta=0.4434$, $p < 0.001$, $f^2=0.1793$). The effect sizes were large, medium and medium for institutional capital effect on organisational innovation intensity, knowledge capability and adaptive capability respectively. Figure 4.5 shows the findings on the relationship between institutional capital and firm capabilities.

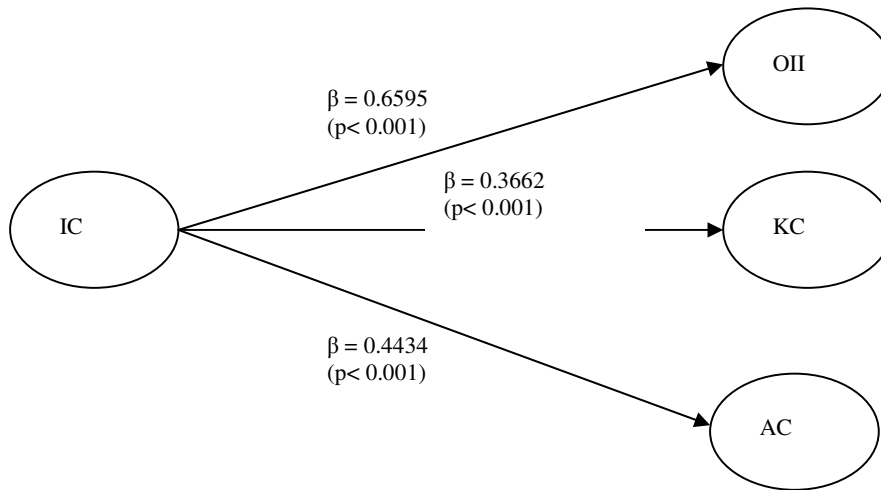


Figure 4.5: Relationship between Institutional capital and Firm Capabilities

Hypothesis H₅ – Management Characteristics have a positive effect on firm capabilities.

Hypothesis 5 tested the predicted relationship between management characteristics and firm capabilities. Management characteristics was a second order reflective factor composed of three reflective first order constructs, namely international orientation, management ties, management attitudes and international entrepreneurship. Table 4.27 presents the β coefficients and respective p values. The results of the partial least squares analysis indicated that management characteristics and organisation innovation intensity had a positive and statistically insignificant relationship ($\beta = -0.1379$). The path coefficient for management characteristics and knowledge capability is positive ($\beta = -0.1295$). This relationship is not significant. The relationship between management characteristics and adaptive capability is positive ($\beta = 0.1882$). This relationship is not significant ($p < 0.001$).

The effect sizes for each of the three relationships were f^2 of 0.0311, 0.0149 and 0.0349 for management characteristics effect on organizational innovation intensity, knowledge capability and adaptive capability respectively, which were all small.

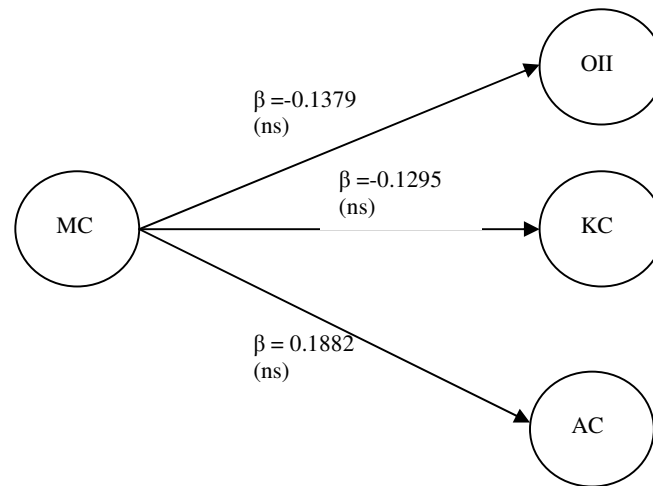


Figure 4.6: Relationship between Management Characteristics and Firm Capabilities

Hypothesis H₆ – There is a positive relationship between organization demographics and firm capabilities.

The predicted relationship between firm age and firm capabilities was assessed using PLS analysis. Firm age was measured as the number of years in business and number of years in international business. Firm age was found to have a positive and statistically relationship with organisation innovation intensity ($\beta=0.2075$, $p<0.001$, $f^2=0.0.0983$). The path coefficient for the relationship between firm age and knowledge capability was positive ($\beta=0.119$, $f^2=0.0.018$) and it was not statistically significant. The relationship between firm age and adaptive capabilities was positive and statistically significant ($\beta=0.2027$, $p<0.1$, $f^2=0.0.0851$). All the effect sized measured by f^2 for the relationships

between firm age and firm capabilities were small. The alternative hypothesis H_6 that states that there is a positive relationship between firm age and firm capabilities is partially supported.

Firm size was measured as number of employees. The relationship between firm size and organisation innovation intensity was found to be negative and statistically insignificant ($\beta= 0.0994$, $f^2=0.0240$). The path coefficient for the firm size and knowledge capability relationship was positive, ($\beta= 0.003$, $f^2=0.001$) and statistically insignificant. The relationship between firm size and adaptive capability was found to be negative and statistically significant ($\beta=-0.2786$, $p<0.001$, $f^2=0.1215$). The alternative hypothesis H_6 that states that there is a positive relationship between firm size and firm capabilities is not supported.

4.7 Firm Capabilities, Firm Resources and International Performance

Hypothesis H_7 – Firm capabilities mediates the effect of firm resources on international performance.

The third objective was to establish the mediating effect that firm capabilities had on the relationship between institutional capital/management characteristics/international entrepreneurship and international performance. The aim of this section was to assess the mediating effect of organisational innovation intensity, knowledge capability and adaptive capability on the relationship between international performance and institutional capital, management characteristic and organisation demographics. The strength of the effect of the mediators firm capabilities were determined by two

approaches. The Sobel test and bootstrapping were both used to determine the strength and significance of the mediation. The Sobel test uses the regression weights (β) and standard error (SE) of the two paths: Independent variable - mediator and mediator - dependent variable. This resulted in a Sobel test z -score and p -value to determine the strength of the mediation. Initially the direct effect of the independent variable was determined without the mediator. The mediator was then included in the model. For the purposes of this study, bootstrapping used 500 resamples (with replacements). After bootstrapping the sample, corresponding T- statistics was used to determine the strength of mediation alongside the Sobel Test statistics. The analysis and results are presented in Table 4.29.

The Sobel Test and bootstrapping results indicated that Organisational innovation intensity mediated the relationship between institutional capital and international performance and the mediation was statistically significant ($p < 0.05$). The indirect effect was 0.1047 with a T-statistic of 2.2085. The variance accounted for was 13.57%. Knowledge and adaptive capabilities did not mediate the relationship between institutional capital and firm international performance. The relationship between management characteristics and firm international performance was found not to be mediated by organisational innovation intensity, knowledge capability and adaptive capability. The relationship between organisational demographics and international performance was found not to be mediated by firm capabilities. Hypothesis 7 is therefore partially supported. The results of the Sobel Test and bootstrapping procedure are presented in Table 4.29.

Table 4.29: Sobel Test Results for mediation of firm capabilities on IC, MC and OD

Direct Path	R ²	B	SE	Meditated Path	R ²	β	SE	z-score	p-value
IC – IP	0.682	0.374	0.1658	IC-OII	0.590	0.4548	0.0524	2.1672	0.0302**
				OII – IP	0.688	0.2303	0.1029		
				IC – KC	0.196	0.3622	0.1165	-0.2592	0.7954 ^{ns}
				KC – IP	0.676	-0.0225	0.0865		
				IC – AC	0.342	0.4434	0.1242	-0.1962	0.8440 ^{ns}
				AC – IP	0.710	-0.2199	1.1161		
MC – IP	0.682	0.165	0.1482	MC – OII	0.583	0.1379	0.0956	1.058	0.2900 ^{ns}
				OII – IP	0.688	0.2433	0.1563		
				MC – KC	0.196	0.1295	0.1084	-0.2636	0.7920 ^{ns}
				KC – IP	0.676	-0.0229	0.0847		
				MC – AC	0.342	0.1882	0.1649	-0.9711	0.3314 ^{ns}
				AC – IP	0.710	-0.2102	0.1137		
FA-IP	0.682	-0.125	0.1461	FA – OII	0.583	0.2075	0.095	1.305	0.1918 ^{ns}
				OII – IP	0.688	0.2544	0.1563		
				FA – KC	0.196	0.119	0.1348	-0.2495	0.8029 ^{ns}
				KC – IP	0.676	-0.0225	0.0865		
				FA – AC	0.342	0.2027	0.0937	-1.3884	0.165 ^{ns}
				AC – IP	0.710	-0.2102	0.1161		
FS-IP	0.682	-0.378	0.1001	FS – OII	0.583	-0.0994	0.066	-1.2449	0.2131 ^{ns}
				OII – IP	0.688	0.2303	0.1041		
				FS – KC	0.196	0.0003	0.0906	-0.0033	0.9973 ^{ns}
				KC – IP	0.676	-0.0314	0.0653		
				FS – AC	0.342	-0.2786	0.0734	1.6341	0.1022 ^{ns}
				AC – IP	0.710	-0.2102	0.1161		

**p<0.05 (two tailed) ; ns=not significant

4.8 Firm Capabilities, Degree of Internationalisation and International Performance

Hypothesis H₉ – There is a positive relationship between firm capabilities and the degree of internationalisation.

Hypothesis H₁₀ – The degree of internationalisation mediates the effect of firm capabilities on firm international performance.

The fourth objective of the current research was to establish the mediating effect of degree of internationalisation on the relationship between firm capabilities and international performance. PLS analysis was performed to test the hypothesis concerning the degree of internationalisation, firm capabilities and international performance relationships. Hypothesis 9 predicted the effect of firm capabilities on the degree of internationalization. The results indicated that organization innovation intensity had a negative and significant effect on the degree of internationalisation ($\beta=-0.4495$, $p<0.001$). Knowledge and adaptive capabilities were found to have a positive and negative effect on the degree of internationalization that were statistically insignificant with $\beta=0.1034$ and $\beta=-0.0697$ respectively. Hypothesis 10 that predicted a positive relationship between firm capabilities and degree of internationalization was not supported.

Hypothesis 10 proposed that the degree of internationalisation mediated the relationship between firm capabilities and firm international performance. The Sobel Test statistics and bootstrapping procedure were conducted to determine the strength and significance of mediation. The path coefficient for degree of internationalisation and international performance is negative ($\beta=-0.2276$). This relationship is significant ($p<0.05$). Sobel test

and bootstrapping was performed to assess the mediation effect of degree of internationalisation on the firm capabilities and international performance relationship. The results are presented in Table 4.30.

The results presented show that the degree of internationalisation mediated the relationship between organisation innovation intensity and international performance and was statistically significant at the 0.05 level of significance. Degree of internationalisation did not mediate the relationship between knowledge capability and international performance and did not mediate the relationship between adaptive capability and international performance. Hypothesis 10 is therefore partially supported. The results of the Sobel mediation statistic test and bootstrapping procedure are presented in table 4.30.

Alternatively, the mediation effect was tested using the Preacher and Hayes (2004, 2008) approach as recommended by Hair et al., (2013). Details of the analysis are outlined in Table 4.31. The findings confirm that DOI mediates the effect of organizational innovation intensity on international performance. The mediation is partial as the Variance Accounted For (VAF) is 28.68% which is between 20%-80% as required by Hair et al., (2013). This implies that 28.68% of organizational innovation intensity effect on international performance is explained via DOI mediation.

Table 4.30: Mediation of DOI on the Firm Capabilities and International Performance relationship

Direct Path	R ²	B	SE	Meditated Path	R ²	β	SE	z-score	p-value
OII-IP	0.720	0.2382	0.164	OII-DOI	0.207	-0.4495	0.1324	2.204	0.0274**
KC-IP	0.720	-0.0322	0.0891	DOI - IP	0.713	-0.2276	0.0785	0.9038	0.3660 ^{ns}
				KC-DOI	0.185	0.1034	0.1087		
AC-IP	0.720	-0.2261	0.1353	DOI-IP	0.713	-0.2276	0.0785	0.5967	0.5506 ^{ns}
				AC-DOI	0.175	-0.0697	0.1143		
				DOI-IP	0.713	-0.2276	0.0785		

**p<0.05; ns=not significant

Table 4.31: Mediation effect of DOI on FC and IP relationship II

Direct Path	Direct without mediation β	Direct with Mediation β	Meditated Path	β	T statistics	Indirect Effect	Significance of indirect effect	Total Effect (Direct+ Indirect Effect)	VAF
OII-IP	0.295**	0.2544**	OII-DOI	-0.4495	3.099	0.1023	1.987	0.3567	0.2868
			DOI - IP	-0.2276	2.740				
KC-IP	-0.0322 ^{ns}	-0.0225 ^{ns}	KC-DOI	0.1034	0.1087	0.0235	0.706	-0.046	-
			DOI-IP	-0.2276	2.740				
AC-IP	-0.2261**	-0.2195**	AC-DOI	-0.0697	2.240	0.015	0.5411	-0.2036	-
			DOI-IP	-0.2276	2.740				

**p<0.05, ns=not significant

4.9 Internationalisation Orientation, Firm Capabilities and Degree of Internationalisation

Hypothesis H₁₁ – Internationalisation Orientation moderates the relationship between firm capabilities and the degree of internationalisation.

The fifth objective was to establish the moderating effect of internationalisation orientation on the relationship between firm capabilities and degree of internationalisation. Partial least squares analysis, using SmartPLS 2.0 was performed to establish the moderating effect of IO. Bootstrapping was performed to establish the T-statistics to establish the level of significance. In addition to the above, the f^2 test was calculated.

The results of the analysis are presented in Table 4.32 and Figure 4.7. Internationalisation Orientation was found to have a positive relationship with International performance and was statistically significant at the 0.1 level of significance ($\beta=0.1435$, $p<0.1$). The results indicate that internationalisation orientation moderates the relationship between knowledge capability and DOI. Computation of the f^2 effect statistic resulted in a score of 0.1279 which indicates a moderate effect. Internationalisation orientation however, does not moderate the relationship between organisation innovation intensity and international performance and the adaptive capability and international performance. This implies that Hypothesis 11 is partially supported.

Table 4.32: Moderating effect of IO on FC and DOI relationship

	β	SM	SE	T Statistics
AC -> DOI	0.0792	0.0729	0.1004	0.7887
AC -> IP	-0.2194	-0.1976	0.1215	1.8061*
DOI -> IP	-0.2277	-0.2451	0.0986	2.3087**
FA -> AC	0.2027	0.172	0.1324	1.5314
FA -> IP	-0.1186	-0.0857	0.1128	1.051
FA -> KC	0.119	0.1267	0.1391	0.8554
FA -> OII	0.2075	0.1625	0.0962	2.158**
FS -> AC	-0.2786	-0.2758	0.0784	3.5522***
FS -> IP	-0.3643	-0.3097	0.1099	3.3157***
FS -> KC	0.0003	-0.0123	0.093	0.0036
FS -> OII	0.0994	0.1061	0.0682	1.4567
IC -> AC	0.4434	0.4256	0.1268	3.4976***
IC -> IP	0.3233	0.3059	0.1584	2.0409***
IC -> KC	0.3622	0.3655	0.1141	3.1739***
IC -> OII	0.6595	0.6527	0.0666	9.9101***
INGP -> IP	0.1948	0.2018	0.0809	2.4065***
IO -> DOI	0.0429	-0.0024	0.1948	0.2204
IO -> IP	0.1434	0.123	0.1142	1.2562
KC -> DOI	0.1139	0.1446	0.0954	1.1944
KC -> IP	-0.0225	-0.0007	0.0889	0.2526
MC -> AC	0.1882	0.1939	0.1606	1.1722
MC -> IE	0.5238	0.5342	0.0775	6.7599***
MC -> IP	0.1982	0.1892	0.1376	1.4411
MC -> KC	0.1295	0.1212	0.1089	1.1894
MC -> OII	0.1379	0.1316	0.0963	1.4328
OII -> DOI	-0.3498	-0.3247	0.1339	2.6121***
OII -> IP	0.2544	0.2315	0.1554	1.6368
PEU -> IP	0.0019	0.0278	0.2059	0.0093
OII * IO -> DOI	0.0991	0.0991	0.2107	0.4702
KC * IO -> DOI	0.3517	0.2977	0.2053	2.0123*
AC * IO -> DOI	-0.0205	0.0016	0.1724	0.1188
<hr/>				
f² = 0.1279				
R² = 0.296				

*p<0.1, **p<0.05; ***p<0.001 (two-tailed)

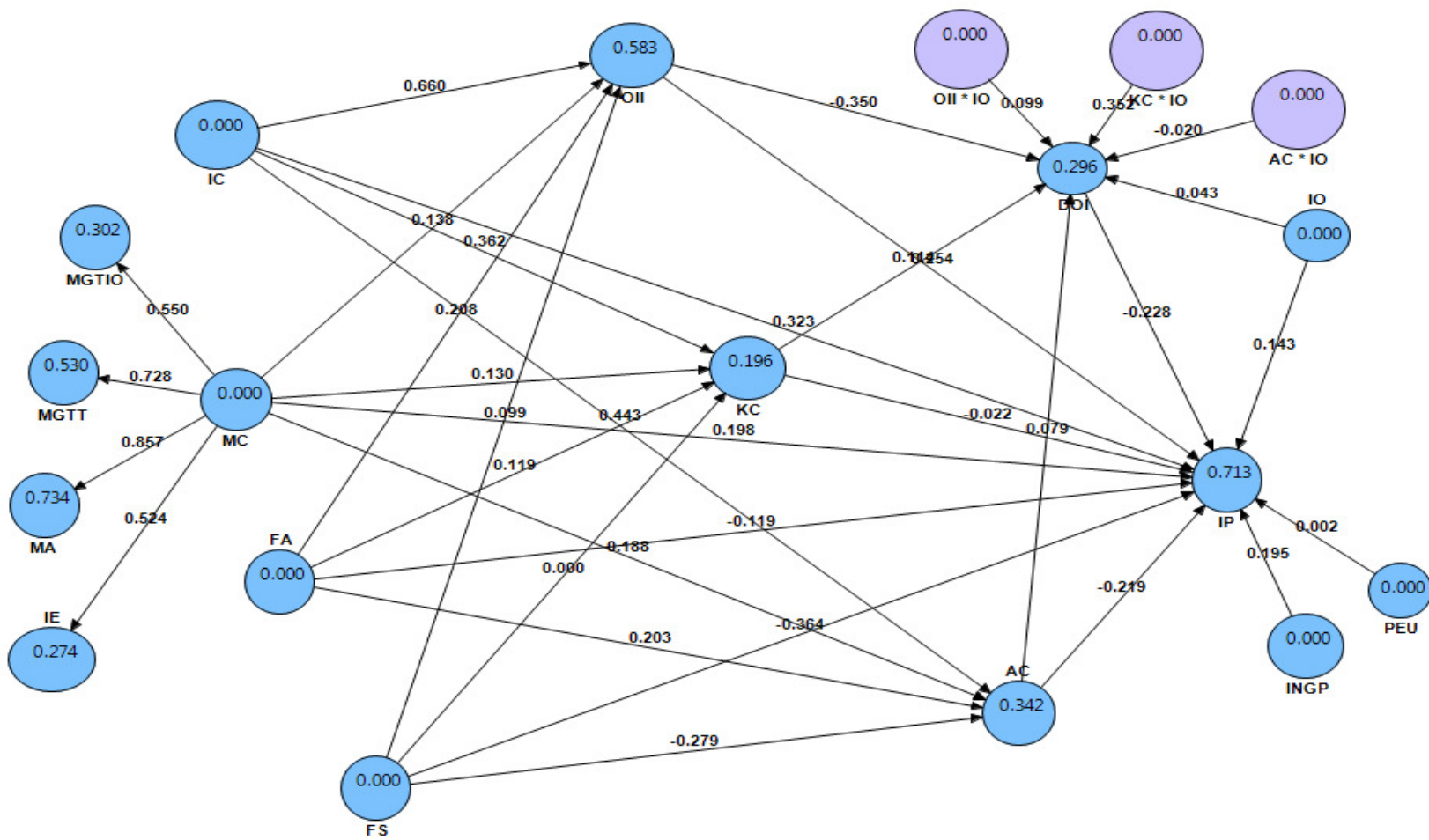


Figure 4.7: Moderating Effect of Internationalisation Orientation on Firm Capabilities and Degree on Internationalisation Relationship

4.10 Internationalisation Orientation, Firm capabilities and International Performance

Hypothesis H₁₂ – Internationalisation Orientation moderates the relationship between firm capabilities and firm international performance.

The sixth objective was to determine the moderating effect of internationalisation orientation on the relationship between firm capabilities and international performance. Internationalisation orientation was measured as both inward and outward internationalisation orientation of the firm. Partial least squares analysis, using SmartPLS 2.0 was performed to establish the moderating effect of IO. Bootstrapping was performed to establish the T-statistics to establish the level of significance. In addition to the above, the f^2 predictive effect test was calculated.

The results of the analysis are presented in Table 4.33 and Figure 4.8. The results indicate that internationalisation orientation moderates the relationship between organisational innovation intensity and firm international performance at the 0.05 level of significance. Computation of the f^2 effect statistic resulted in a score of 0.1619 which indicates a moderate effect. Internationalisation orientation however, does not moderate the relationship between knowledge capability and international performance and the adaptive capability and international performance relationship. Based on these results Hypothesis 12 is partially supported.

Table 4.33: Moderating effect of Internationalisation Orientation

	β	SM	SE	T Statistics
AC -> DOI	-0.0714	-0.0669	0.1131	0.631
AC -> IP	-0.2516	-0.1964	0.1252	2.0101***
DOI -> IP	-0.1985	-0.22	0.0974	2.0391***
FA -> AC	0.2048	0.1635	0.1375	1.4889
FA -> IP	-0.1264	-0.0987	0.1119	1.1302
FA -> KC	0.1302	0.1245	0.1435	0.9073
FA -> OII	0.2064	0.1571	0.1053	1.9593**
FS -> AC	-0.281	-0.279	0.0721	3.8969***
FS -> IP	-0.3165	-0.2651	0.0985	3.2126***
FS -> KC	-0.002	-0.0112	0.0863	0.0231
FS -> OII	0.0975	0.1013	0.0649	1.5029
IC -> AC	0.4434	0.4202	0.1181	3.7552***
IC -> IP	0.292	0.2953	0.1743	1.6758*
IC -> KC	0.3624	0.3596	0.1127	3.2145***
IC -> OII	0.6606	0.6533	0.067	9.8633***
INGP -> IP	0.163	0.169	0.086	1.8957*
IO -> DOI	0.0488	0.0138	0.215	0.2271
IO -> IP	0.0484	0.0788	0.1219	0.3973
KC -> DOI	0.1012	0.1128	0.1049	0.9646
KC -> IP	0.0365	0.0121	0.0926	0.3945
MC -> AC	0.1876	0.1961	0.1574	1.1925
MC -> IP	0.3421	0.2602	0.1418	2.4127***
MC -> KC	0.1314	0.1192	0.1075	1.2219
MC -> OII	0.1353	0.1347	0.0951	1.423
OII -> DOI	-0.451	-0.4271	0.1327	3.3993***
OII -> IP	0.1388	0.1328	0.2066	0.6715
PEU -> IP	0.0148	0.0392	0.1657	0.0894
OII * IO -> IP	-0.3185	-0.223	0.203	1.9688**
KC * IO -> IP	0.1263	0.0761	0.1814	0.6963
AC * IO -> IP	-0.0347	-0.0334	0.1905	0.1822
$f^2 = 0.1619$				
$R^2 = 0.753$				
*p<0.1, **p<0.05; ***p<0.001 (two tailed)				

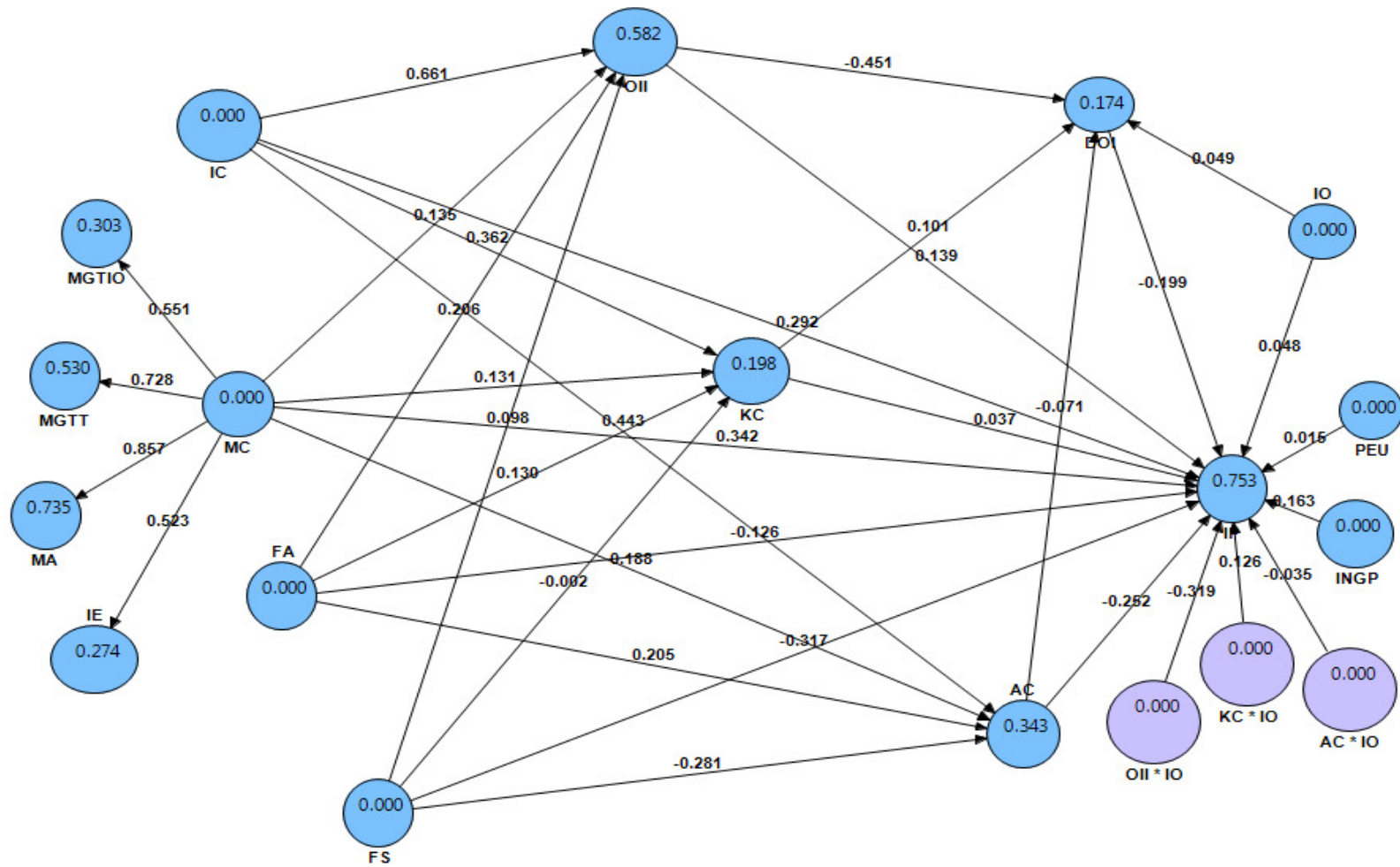


Figure 4.8: Moderating Effect of Internationalisation Mode on Firm Capabilities and International Performance Relationship

Table 4.34: Summary of Hypotheses Testing results

	Hypotheses	Estimate	t-value (p-value for mediation)	Result	Empirical Results
H₁	A firm's resources are positively related to its international performance.				Partially Supported
	H_{1a} A firm's Institutional Capital is positively related to its international performance.	0.3233	2.9919	Significant Positive	Supported
	H_{1b} A firm's management characteristics are positively related to its international performance.	0.1982	1.9681	Significant Positive	Supported
	H_{1c} There is a positive relationship between Organisational Demographics and firm international performance.				
	H_{1ci} There is a positive relationship between firm age and firm international performance.	-0.1186	1.2162	Insignificant Negative	Not Supported
H_{1cii} There is a positive relationship between firm size and firm international performance.	-0.3643	5.4503	Significant Negative	Not Supported	
H₂	Firm capabilities are positively related to firm international performance.				Partially Supported
	H_{2a} There is a positive relationship between organisational innovation intensity and firm international performance.	0.2544	2.2733	Significant Positive	Supported
	H_{2b} There is a positive relationship between knowledge capability and firm international performance.	-0.0225	0.5091	Insignificant Negative	Not Supported
	H_{2c} There is a positive relationship between adaptive capability and firm international performance.	-0.2195	2.3079	Significant Negative	Not Supported
H₃	There is a positive relationship between degree of internationalisation and firm international performance.	-0.2276	4.1763	Significant Negative	Not Supported
H₄	Institutional capital has a positive effect on firm capabilities.				Supported
	H_{4a} There is a positive relationship between institutional	0.6595	10.5799	Significant	Supported

Table 4.34: Summary of Hypotheses Testing results

	Hypotheses	Estimate	t-value (p-value for mediation)	Result	Empirical Results
	capital and organisational innovation intensity.			Positive	
	H_{4b} There is a positive relationship between institutional capital and knowledge capability.	0.3662	3.1449	Significant Positive	Supported
	H_{4c} There is a positive relationship between institutional capital and adaptive capability.	0.4434	3.6777	Significant Positive	Supported
H₅	Management Characteristics have a positive effect on firm capabilities.				
	H_{5a} There is a positive relationship between management characteristics and organisational innovation intensity.	0.1379	1.4969	Insignificant Positive	Not Supported
	H_{5b} There is a positive relationship between management characteristics and knowledge capability.	0.1295	1.2257	Insignificant Positive	Not Supported
	H_{5c} There is a positive relationship between management characteristics and adaptive capability.	0.1882	1.1845	Insignificant Positive	Not Supported
H₆	Organisational Demographics have a positive effect on firm capabilities.				
	H_{6a} There is a positive relationship between firm age and organisational innovation intensity.	0.2075	1.9874	Significant Positive	Supported
	H_{6a} There is a positive relationship between firm age and knowledge capability.	0.119	0.8837	Insignificant Positive	Not Supported
	H_{6c} There is a positive relationship between firm age and adaptive capability.	0.2027	1.5091	Insignificant Positive	Supported
	H_{6d} There is a positive relationship between firm size and organisational innovation intensity.	0.0994	1.4535	Significant Positive	Supported
	H_{6e} There is a positive relationship between firm size and knowledge capability.	0.0003	0.0036	Insignificant Positive	Not Supported
	H_{6f} There is a positive relationship between firm size and adaptive capability.	-0.2786	3.9135	Significant Negative	Not Supported
H_{7a}	Firm capabilities mediate the effect of institutional capital on international performance.				Partially Supported

Table 4.34: Summary of Hypotheses Testing results

	Hypotheses	Estimate	t-value (p-value for mediation)	Result	Empirical Results
	H_{7ai} Organisational innovation intensity mediates the effect of institutional capital on firm international performance.	2.1672	0.03	Significant Mediation	Supported
	H_{7aii} Knowledge capability mediates the effect of institutional capital on firm international performance.	-0.2592	0.7954	Insignificant	Not Supported
	H_{7aiii} Adaptive Capability mediates the effect of institutional capital on firm international performance.	-0.1962	0.8440	Insignificant	Not Supported
H_{7b}	A firm's capabilities mediate the effect of management characteristics on firm international performance.				Not Supported
	H_{7bi} Organisational innovation intensity mediates the effect of management characteristics on firm international performance.	1.058	0.2900	Insignificant	Not Supported
	H_{7bii} Knowledge capability mediates the effect of management characteristics on firm international performance.	-0.2636	0.7920	Insignificant	Not Supported
	H_{7biii} Adaptive Capability mediates the effect of management characteristics on firm international performance.	-0.9711	0.3314	Insignificant	Not Supported
H_{7c}	A firm's capabilities mediate the effect of organisational demographics on firm international performance.				Not Supported
	H_{7ci} Organisational innovation intensity mediates the effect of firm age on firm international performance.	1.385	0.1918	Insignificant	Not Supported
	H_{7cii} Knowledge capability mediates the effect of firm age on firm international performance.	-0.2495	0.8029	Insignificant	Not Supported
	H_{7ciii} Adaptive Capability mediates the effect of firm age on firm international performance.	-1.3884	0.165	Insignificant	Not Supported
	H_{7civ} Organisational innovation intensity mediates the effect of firm size on firm international performance.	-1.2449	0.2131	Insignificant	Not Supported
	H_{7ce} Knowledge capability mediates the effect of firm size on firm international performance.	-0.0033	0.9973	Insignificant	Not Supported
	H_{7cvi} Adaptive Capability mediates the effect of firm size	1.6341	0.1022	Insignificant	Not Supported

Table 4.34: Summary of Hypotheses Testing results

	Hypotheses	Estimate	t-value (p-value for mediation)	Result	Empirical Results
	on firm international performance.				
H₈	There is a positive relationship between firm capabilities and the degree of internationalisation.				Not Supported
	H_{8a} there is a positive relationship between organisation innovation intensity and the degree of internationalisation.	-0.4495	3.2536	Significant Negative	Not Supported
	H_{8b} there is a positive relationship between organisation innovation intensity and the degree of internationalisation.	0.1034	0.9643	Insignificant Positive	Not Supported
	H_{8c} there is a positive relationship between organisation innovation intensity and the degree of internationalisation.	-0.0697	0.5853	Insignificant Negative	Not Supported
H₉	The Degree of Internationalisation mediates the effect of firm capabilities on firm international performance.				Partially Supported
	H_{11a} Degree of internationalisation mediates the effect of Organisational innovation intensity on firm international performance.	2.204	0.0274	Significant Mediation	Supported
	H_{11b} Degree of internationalisation mediates the effect of Knowledge on firm international performance.	-0.9038	0.3660	Insignificant	Not Supported
	H_{11c} Degree of internationalisation mediates the effect of Adaptive Capability on firm international performance.	0.5967	0.5506	Insignificant	Not Supported
H₁₀	Internationalisation orientation moderates the relationship between firm capabilities and degree of internationalisation.				Partially Supported
	H_{11a} Internationalisation orientation moderates the relationship between Organisational innovation intensity and Degree of internationalisation.	0.0991	0.4292	Insignificant	Not Supported
	H_{11b} Internationalisation orientation moderates the relationship between knowledge capability and Degree of internationalisation.	0.3517	2.0123	Significant Moderation	Supported

Table 4.34: Summary of Hypotheses Testing results

Hypotheses	Estimate	t-value (p-value for mediation)	Result	Empirical Results
H_{11c} Internationalisation orientation moderates the relationship between adaptive capability and Degree of internationalisation.	0.0205	0.1188	Insignificant	Not Supported
H₁₁ Internationalisation orientation moderates the relationship between firm capabilities and firm international performance.				Partially supported
H_{10a} Internationalisation orientation moderates the relationship between Organisational innovation intensity and firm international performance.	0.3185	1.9688	Significant Moderation	Supported
H_{10b} Internationalisation orientation moderates the relationship between knowledge capability and firm international performance.	0.1263	0.6963	Insignificant	Not Supported
H_{10c} Internationalisation orientation moderates the relationship between adaptive capability and firm international performance.	-0.0347	0.1822	Insignificant	Not Supported

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents the discussion of the findings. The main objective of this study was to determine the relative effect of firm level factors on the international performance of publicly quoted companies in Kenya. The firm level factors studied included institutional capital, management characteristics, organisational demographics, internationalisation orientation, degree of internationalisation, and firm capabilities of organisational innovation intensity, knowledge capability and adaptive capability. Firm international performance was measured in terms of objective measure of return on assets and perceptual measures of financial, customer/market and innovative performance. This research sought to establish the direct effect of the above mentioned firm level factors on the firm international performance, the mediating role of firm capabilities and degree of internationalisation and the moderating effect of Internationalisation orientation. The findings are discussed in this chapter.

5.2 Direct Effect of Firm Level Factors on International Performance

The resource based view of a firm provides that a firm has a bundle of resources, skills and capabilities, and the accumulation, consolidation and utilisation of these resources will determine the economic performance of the firm (Pensrose, 1959; Barney, 1996). Firms in the same industry are expected to exhibit differences in international performance due to differences in their resource profiles. Institutional theory highlights the differences in institutionalised activities as a result of interrelated processes at the individual, intra-organisational and external levels are firm resources

and do impact the performance of organisations (Oliver, 1997; Lu et al., 2010). Institutional capital had a strong, positive influence on the international performance of firms. As a firm's resource base in terms of institutional capital grows, the organisation is more prone to experience improved international performance as they are able to deploy resources where they are most required. Firms studied were found to have high levels of individual and intra-organisation institutional capital and medium to low levels of external institutional capital. The levels of individual, intra-organisational and external institutional capital positively impact the level of firm international performance. The findings confirm (Oliver 1997) and Bresser & Millonig (2003) are consistent with Lu et al. (2010) study that found a positive and significant relationship between firm resources in the form of external institutional capital and international performance.

Managerial characteristics have been found to have a positive and significant relationship with international performance (Lu et al., 2010; Bilkey, 1978; Peng & Luo, 2000). The current study found that there is a positive and significant relationship between management characteristics and international performance. This is similar to previous research findings of Moghaddam et al. (2011), Leonidou, Katsikeas and Piercy (1998), Lu et al. (2010) and Peng & Luo (2000).

The international performance literature has reported mixed results on the relationship between firm size, firm age, international business age and the performance of firms. In this current study, organisational demographics were separated into firm age and firm size. Firm age comprised of both business age and international business age. The results found a negative and insignificant relationship between firm age and

international performance. Firm size was found to have a negative and significant relationship with international performance. Firm age was found to have a negative and insignificant effect on international performance. The findings are similar to Czinkota and Johnston (1983) and Cubin and Leech (1986) as regards firm size and contradict the findings of Shinkle et al. (2010) relating to firm age and international performance relationship. Some possible explanations for this are that the international performance of firms may not change on a linear scale with changes in firm age. Another reason may be that some firms may have been involved in international business from inception while others started internationalising much later. In the case of firm size, firms may focus on international markets due to domestic market restrictions and also may not be involved in international business due to trade restrictions and barriers.

The results of the current study have found that not all firm capabilities are unique and distinctive in their influence on firm international performance. The relationship between firm capabilities and international performance was found to be positive and significant for organisational innovation intensity, but negative and insignificant for knowledge capability and international performance relationship and negative and significant for adaptive capability and international performance relationship. The findings of this research support the findings of Dhanaraj & Beamish (2003) and O'Cass & Weerawardena (2009) which found a positive and significant relationship between organisational innovation intensity and international performance. They however contradict previous research of Lu et al., (2010) that has found a positive and significant relationship between knowledge capability/adaptive capability and international performance (Tseng et al., 2007; Felin & Hesterly, 2007). T

The relationship between internationalisation orientation and international performance was found to be positive and significant. This implies that the high levels of inward and outward orientation leads to higher levels of international performance. This supports internationalisation theory and studies on international expansion activities of firms (Johanson & Vahlne, 1977; Lu & Beamish, 2004; Zhou et al., 2007). The degree of internationalisation was found to have a negative and significant relationship with firm international performance. These findings are consistent with Contractor et al. (2003), and Lu and Beamish (2004) which suggest a negative effect of DOI on International performance during specific stages of internationalisation. A negative linear result suggests a decline in performance, perhaps with initial internationalisation.

The current study also found that firm level factors exhibit different effects on firm international performance. Firm size and Institutional Capital had the strongest significant effect, which were negative and positive respectively. Management characteristics also had a strong significant effect on international performance. This implies that firms should be aware of how their resources are deployed and utilized as this will have an effect on international performance.

5.3 Firm Capabilities, Firm Resources and international performance

Within the international context, the RBV tenets of firm heterogeneity and resource immobility are considered to be applicable to firm internationalisation and performance (Knight & Cavusgil, 2004; Tan & Mahoney, 2005). Based on this, firms in the same industry are expected to exhibit different levels of international

performance due to the differences in the resources that they own. The dynamic capabilities view, which is an extension of the resources based view, suggests that capabilities are a complex bundle of skills and accumulated knowledge, exercised through organisational processes that enable firms to utilise their assets and functions as key success factors, cost effectively deliver customer value and deploy resources advantageously (Day, 1994). It has also been suggested that capabilities enable firms to compete in the long term and may account for competitive advantage and superior performance (Grant, 2002; Lu et al., 2010).

Another extension of the RBV, the knowledge based view (KBV) of the firm (Grant, 2002; Balogun & Jenkins, 2003) suggests that knowledge is one of the most strategic resources of the firm, and intangible assets are highly valued (Grant, 2002; Mathews, 2003). KBV suggests that differences in performance between firms are as a consequence of knowledge asymmetries as a capability (DeNisi et al., 2003). The results of the current study indicated differences in the effect of firm capabilities on various firm level factors and international performance relationships. In particular, this study focused on the firm level factors of institutional capital, management characteristics and organisational demographics.

Institutional capital was found to have a positive and significant effect on firm capabilities. Management characteristics were found to have a positive but statistically insignificant effect on firm capabilities. Organisational demographics results were mixed. Firm age was found to have positive and significant relationship with organisation innovation intensity and a positive and insignificant relationship with knowledge capability and adaptive capability. Firm size was found to have a

positive and statistically insignificant relationship with organisation innovation intensity and knowledge capability and a negative and significant relationship with adaptive capability. The findings support the findings of previous studies of Lu et al. (2010), Dhanaraj and Beamsih (2003) and O’Cass & Weerawardena (2009) which found a positive and significant relationship between firm resources and firm capabilities.

The results for organizational demographics and firm capabilities relationships confirm the findings of Dhanaraj and Beamish (2003), and O’Cass & Weerawardena (2009) which indicated a positive effect of organizational demographics and firm capabilities with the exception of the effect of firm size on adaptive capability which was negative and significant. This implies that firms from developing economies can benefit from size and age advantages when operating in the international market place depending on the type of capability they deploy within their international operations. White et al. (1998) had indicated that larger firms have a greater ability to absorb risks and expand resources than smaller ones. Firms that have engaged longer in the international market place have gained experiential knowledge which assists them in the internationalization process (Johanson & Vahlne, 1977; Shinkle, Aldas & Kriauciunas, 2010).

The relationship between institutional capital and international performance was found to be mediated by organisational innovation intensity but not knowledge capability and adaptive capability. As related management characteristics, the firm capabilities were found not to have a significant mediating effect on the relationship with international performance. It may be concluded that the firm with high level of

firm resources experience better international performance when the resources are combined with firm capabilities on a global scale. The findings support previous findings of Lu et al. (2010), and O’Cass & Weerawardena (2009) as relates to organisation innovation intensity and contradicts the findings when knowledge and adaptive capabilities are concerned as found in Lu et al (2010).

5.4 Degree of Internationalisation, Firm Capabilities and International Performance

The relationship between firm capabilities and the degree of internationalisation is expected to be positive and significant based on previous studies (Tseng et al., 2007; Zeng et al., 2009; Kuivalainen et al., 2010). The current study results contradicted previous studies in that organisation innovation intensity was found to have a negative and significant effect on the degree of internationalisation. However, knowledge capability and adaptive capability were found to have insignificant positive and negative effects on DOI respectively.

The mediating effect of the degree on internationalisation on the relationship between firm capabilities and international performance was found to have distinct and unique effects based on the type of firm capability. The results showed that the degree of internationalisation mediated significantly the effect of organisation innovation intensity on the international performance of the firms studied. This supports previous research findings that argue that the innovation intensity of a firm positively impacts its international expansion activities and subsequently its international performance (Dhanaraj & Beamish, 2003; O’Cass & Weerawardena, 2009).

However, the relationship between knowledge capability and adaptive capability with international performance were found not to be mediated by the degree of internationalisation. Tseng et al. (2007) argues that the resources that may be transferable across nations within the boundary of the firm are not perfectly mobile across firms implying that the level of resources will limit the range of a firm's expansion strategies internationally. This may explain why the international performance of the firm may not improve with higher levels of knowledge and adaptive capability as firms may be limited to where they can utilise the available capability base and how mobile and transferrable across borders they are in line with the resource based view and internationalisation theory (Tseng et al., 2007)

5.5 Internationalisation Orientation, Firm Capabilities and Degree of Internationalisation

Literature suggests that two distinct, commonly used types of internationalisation orientation exist in international business, outward orientation and inward orientation. It has been suggested that outward orientation enables organisations to benefit from knowledge flows, and economies of scale as a result of international expansion activities (Zahra et al., 2009; Kogut, 1985). Inward orientation is expected to enhance the performance of organisations through the use of foreign technologies, management skills and capital investment (Zhou et al., 2007).

The proper use of firm resources and capabilities through technologies introduced by foreign firms is expected to enhance the international expansion and international performance of firms (Zhou et al., 2007; Wan & Hoskisson, 2003). Internationalisation orientation was found to have a positive and significant effect on the international performance of firms. This is consistent with Zhou et al. (2007) and

Zahra et al. (2009). The moderating effect of internationalisation orientation on the relationship between firm capabilities and degree of internationalisation was measured in the current study. The results showed that internationalisation orientation significantly moderated that relationship between knowledge capability and DOI. This implies that as firm deploy capabilities as they expand internationally, the level of outward and inward internationalisation orientation will impact their ability to internationalise. The higher the level of outward and inward orientation, the more effective and efficiently knowledge about foreign markets and customer requirements may be utilised in the international marketplace to enhance performance. It however found that there was no significant moderation on the relationship between organisational innovation intensity and DOI and that between adaptive capability and DOI. The findings contribute empirically to existing knowledge in this area of research.

5.6 Firm Capabilities, Internationalisation Orientation and International Performance

Prior literature has not explained why the direct effect of internationalisation orientation and international performance exists. Additionally, the moderating effect of internationalisation orientation on the firm capability and international performance relationship has not been studied. Internationalisation orientation was found to have a positive and significant effect on international performance. The moderating effect of internationalisation orientation on the relationship between firm capabilities and international performance was measured in the current study. The results showed that internationalisation orientation significantly moderated that relationship between organisational innovation intensity and firm international performance. This implies that high levels of inward and outward internationalisation orientation enhance the

effect of type and intensity of innovation firms implement on international performance. The current study however found that there was no significant moderation on the relationship between knowledge capability and international performance and between the adaptive capability and international performance relationship. The findings support the results of Zhou et al. (2007) that found a positive and significant relationship between Internationalisation orientation and international performance.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

In this chapter the summary of the findings and conclusions are presented. Additionally, the theoretical and empirical contributions of the study are discussed. Finally, managerial implications and policy implications are discussed and the limitations of the study are pointed out and the directions for future studies are put forward.

6.2 Summary of Findings

The current research set out to investigate the influence of firm level factors on international performance of publicly quoted companies in Kenya. Specifically the research investigated how institutional capital, management characteristics, organization innovation intensity, knowledge capability, adaptive capability, internationalisation orientation and the degree of internationalisation influence the international performance of NSE listed firms and how some of these factors influence each other.

The first objective of the research was to establish the relative effect of firm level factors on the international performance of firms. The relationships between firm level factors and international performance were tested using partial least squares analysis. Details of the hypotheses and results are presented in Table 4.34. The firm level factors tested were found to have different effects on international performance. Institutional Capital, management characteristics, organisation innovation intensity

and internationalisation orientation were all found to have a positive and significant effect on international performance. Institutional capital was found to have the strongest positive effect on international performance out of the factors studied. Firm age, firm size, knowledge capability, adaptive capability and degree of internationalisation were all found to have a negative effect on international performance. The effect of firm size, adaptive capability and degree of internationalisation were all found to have a significant and negative effect on international performance. Firm size was found to have the strongest negative effect on international performance followed by the degree of internationalization then adaptive capability.

The second objective was to establish the effect of firm resources of institutional capital, management characteristics and organisation demographics of firm age and firm size on firm capabilities. The results of hypotheses testing found that institutional capital and firm age had a positive and significant effect on organisation innovation intensity and adaptive capability. Management characteristics had a positive and insignificant effect on firm capabilities. Firm size was found to have a positive and insignificant effect on organization innovation intensity. Institutional capital had the strongest positive and significant effect on firm capabilities followed by firm age. Firm size was found to have a negative and statistically significant effect on adaptive capability. The hypotheses under the second objective were therefore partially supported.

The third objective of the research was to establish the mediating effect that firm capabilities have on the relationships between institutional capital/management

characteristics/organization demographics and international performance. The hypothesis tested the relationship between these three factors and firm capabilities using PLS. Firm capabilities were found to have a mediating effect on the relationship between institutional capital and international performance and this concerns organisational innovation intensity. Firm capabilities were however not found to mediate the effect of management characteristics and organisational demographics on international performance. The hypotheses under this third objective were therefore partially supported.

The fourth objective of the research was to establish the effect of the degree of internationalisation in the relationship between firm capabilities and international performance. The results from hypothesis testing found a negative and significant relationship between organisation innovation intensity and DOI and negative and insignificant between adaptive capability and DOI. The relationship between knowledge capability and DOI was positive but not significant. The results also found that the degree of internationalisation mediated the effect of organisational innovation intensity on international performance. It was however found that there was no significant mediation on the knowledge capability and international performance relationship and also on the adaptive capability and international performance relationship. The hypotheses under objective four were therefore partially supported.

The fifth objective was to establish the moderating effect of internationalisation orientation on the relationship between firm capabilities and degree of internationalisation. The results from hypothesis testing found that internationalisation orientation moderated the effect of knowledge capability on the

degree of internationalisation. The results also found that there was no significant moderating effect of internationalisation orientation on the effect of organisational innovation intensity on DOI and the effect of adaptive capability on DOI.

The sixth objective was to establish the moderating effect of internationalisation orientation on the relationship between firm capabilities and international performance. The results from hypotheses testing found that internationalisation orientation moderated the effect of organisational innovation intensity on international performance. The results also found that there was no significant moderating effect of internationalisation orientation on the effect of knowledge capability and adaptive capability on international performance.

6.3 Conclusion of the Study

A conceptual model and framework for conceptual insight was developed to enable the study achieve the research objectives and answer the research questions. The hypotheses were tested and the results and findings discussed. This research focused on the firm level factors of institutional capital, management characteristics, organisation demographics, firm capabilities, internationalisation orientation and degree of internationalisation and the effect that these factors have on international performance.

The study concluded that the dimensions of firm level factors tend to be interrelated as they are embodied and form an integral part of the firm. The results support the tenets of internationalisation theory, resourced based view and institutional theory confirming that firm resources and capabilities do have an effect on performance and

that the effect of firm heterogeneity on international performance. This confirms that some firm level factors account for greater variations in international performance. Drawing on previous research, this study verified hypotheses with empirical data collected and explored the international performance framework of Kenyan firms. Study findings of the research support the theoretical basis that some firm level factors do have a significant effect on the internationalisation and performance of firms (O’Cass & Weerawardena, 2009; Dhanaraj & Beamish, 2003; Tseng et al., 2007; Lu et al., 2010; White et al., 1998; Aaby & Slater, 1989).

Based on the findings, a number of conclusions can be made. Firm resources were found to relate positively to international performance and performance benefits are enhanced by organisation innovation and knowledge capabilities deployment. Additionally, institutional capital has a positive effect on international performance through capability deployment. This study reveals that the size of a firm and the degree of internationalisation relates negatively to the international performance of the firms studied. Based on respondent responses, firm capabilities play an important role in the international performance of firms.

The study also concludes that firm capabilities are unique and distinct in their effect on the international expansion and performance of firms. This confirms aspects of internationalisation theory and the resource based view. Firm capabilities have also been found to enhance the effect of firm resource deployment on international performance.

The firm level factors of firm capabilities, management characteristics and institutional capital and internationalisation orientation had a greater and more significant effect on international performance. The firm level factors, being within the control of the firm, provide an opportunity for businesses to develop strategies that lead to growth and successful international expansion in the most effective and efficient manner.

6.4 Implications of study

The main implications and contributions of this study are to theory, knowledge, to policy makers and management. By identifying the effect that firm level factors have on the international performance of organisations, this study was able to clarify what aspects of firm level factors studied contribute to international performance. This information contributes to the existing body of empirical evidence within the Kenyan context.

6.4.1 Theoretical Contributions

The results of the research contributed to existing theory by providing empirical evidence of an international performance framework within a developing economy context. The research also illustrated the important role that capability deployment plays in the international performance framework. Additionally, the current study revealed the effect that institutional capital, organisation demographics and management characteristics have on firm capabilities. This study identifies firm capabilities as a key aspect consistent in enabling firms to be successful in the international market place however, also to the extent or level of internationalisation orientation that a firm exhibits. The study also support the social network aspect of

internationalization, confirming the important role that networks and relationships play in internationalization, especially for developing economy firms (Rutashobya and Jaenson, 2004; Johanson and Vahlne, 2009). Institutional theory also reiterates the importance of relationships with businesses and government agencies in enabling firms to utilize frameworks that support internationalization and enhance performance (Bresser and Millonig, 2003).

The current study was founded on an integrated theoretical framework. It built on existing theory to generate a predictive conceptual model that demonstrated strong explanatory and predictive power. Consequently, this research has opened up our understanding about what internal aspects of the firm influence international performance within the context of Kenyan companies. Previous international business research highlighted the factors promoting or inhibiting international expansion activities and resultant performance implications (Tseng et al., 2007; Aaby & Slater, 1989). By examining the role of the firm level factors, this study contributed to our understanding of what aspects of the firm level factors that Kenyan firms possess and how they affect the international performance of these firms.

This study contributes to internationalization literature and the RBV and more specifically in the context of the international performance of developing country firm literature. By identifying factors that may promote or hinder international growth and performance, it clarifies for us what aspects of institutional capital, management characteristics, organisation demographics, firm capabilities and internationalisation orientation contribute to international performance.

In relation to the role of firm capabilities, based on prior study's findings, this study highlights the role of organisational innovation intensity, knowledge capability and adaptive capability play in international performance. The adaptability of an organisation and its ability to respond to information from foreign markets and be innovative serves as a facilitating factor to international expansion and subsequently to the enhancement of international performance. Therefore, the researcher can conclude that the more firm capabilities a firm has, the more likely they are to pursue international opportunities and be successful. This can be attributed to experience gained during a firm's international expansion as well as their domestic success.

This study contributes to the empirical support for further conceptualization and measurement of international performance. The measures developed in this study pertaining to international performance included perceptual measures looking at three aspects of performance, namely, financial, customer and innovative. The perceptual measures of international performance consider not just financial aspects of performance but also success in market and customer growth, efficiency and firm innovative performance. Therefore, within the context of international business of Kenyan firms, the success and future of the organisation can be assessed through quantitative and qualitative aspects. This supports Hult et al. (2008) view of having multiple measures of performance to provide a more holistic approach to performance measurement. This study has contributed to theory building and body of existing knowledge by assessing an international performance framework that integrates objective and perceptual measures in financial and operation terms. Finally, the study has contributed to the growth of developing country firm literature in international business.

6.4.2 Contribution of the Study to Knowledge

The study made a number of contributions to international business research. This study makes a number of contributions to theory, methodology and practice. Most significantly, in the statistical ground, the developed theoretical model under a new empirical research setting drawn from extant theories satisfies all conditions with a desired level of fit of the data. This confirms the contributions in all respects. Details are outlined in Table 6.34.

Regarding knowledge and theory, the current study has used three basic theories and their causal arguments as a framework to gain a better understanding of the relative effect of particular firm level factors on the international performance of publicly quoted firms in Kenya. The review of the literature appears to indicate inconsistencies, and lack of consensus among researchers on the relative effect of firm level factors on international performance. The study strived to fill the contextual gap in the extant literature.

As outlined, the theoretical development and empirical testing of the theories in this field has been based mostly on the developed country context. Nevertheless, understanding the international performance of companies from less developed and developing countries is equally important for a clear comprehension of the phenomena for academicians, managers and policy makers. Therefore, the study has contributed to the literature by incorporating developing country data in the wider empirical generalisations of the findings from an analytical perspective.

6.4.3 Recommendations for Policy

The present research provides information to both national and international policy makers. From a national government perspective, encouraging firms to go global is an attractive option given that international business has a positive effect on a nation's balance of payments and will therefore contribute to the economy's growth and development. The competitive nature of the national and global marketplace requires firms to be more proactive and seek out opportunities that contribute to firm survival and growth. It is essential for policy makers to provide mechanisms that provide support of firms as they engage in international business. The findings will be of particular interest to some government agencies and industry regulators that can provide information on foreign markets and assistance in international trade fairs so as to improve Kenyan firms' knowledge capabilities, management ties and external institutional capital.

In terms of policy implications, policy studies can be conducted on how to foster international performance of Kenyan firms. The economic development of any country in the long term, depends on how firms succeed both locally and internationally. Therefore, it would be important to understand how firms can be encouraged to participate in international trade and what role existing relationships at a business and local level with government and regulatory agencies can positively facilitate internationalisation of Kenyan firms. Previous studies suggest that policy measures, in order to be effective, need to focus on issues and solutions that result in the most effective and efficient avenues for international growth and development.

International business courses can be facilitated by trade agencies and information on foreign markets and Kenya's trading partners can enhance an organisational knowledge capability. Those who seek outward and inward orientations opportunities can be provided assistance from the government in terms of capital allowances and tax breaks so as to foster investment and growth.

Due to the increased importance of public policy for international business and trade, there is a need to develop more international business policy oriented research. This is expected to assist policy makers develop and implement policies that enhance international trade and the skills necessary for Kenyan firms to compete effectively in the global market place. More specifically, regionalisation of markets through the East Africa Community (EAC) and the Common Market for East and Southern Africa (COMESA) has made a major contribution to the development of the internationalisation of Kenyan firms. Policy should be driven towards assisting firms to gain the relevant knowledge, relationships and networks that will assist them to be more successful.

6.4.4 Recommendations for Management Practice

The central research question was to what extent do firm specific factors influence and account for variations in firm international performance of publicly quoted companies in Kenya. Managerial implications stemmed from findings in terms of what factors are significant in international performance and how best firms can maximise these findings into business advantage.

Institutional capital was found to have the strongest positive and significant effect on international performance. This implies that management should ensure that levels of institutional capital are enhanced so as to improve the international performance of firms. Regarding the effect of firm capabilities on the relationship of specific firm level factors of institutional capital, management characteristics and international entrepreneurship with international performance was explored in this study.

In organisations, the management characteristics were key determinants of the decision to internationalise (Peng and Luo, 2000; Chetty, 1999; White et al., 1998; Bloodgood et al., 1996; Reid, 1981). The study established that, the management characteristics are positively related to all firm capabilities studied. However, there was an insignificant relationship between management characteristics and firm capabilities of organisational innovation intensity, knowledge and adaptive capability. Management play a key role in how effectively and efficiently firm resources and capabilities are utilised.

The other question considered in this research that would be of interest to management was, "What is the effect of the degree of internationalisation of a firm on the relationship between firm capabilities and international performance?" It was found that the DOI has a mediating effect on the organisational innovation intensity and international performance relationship. This implies that international expansion impacts on the effect of capability deployment on the international performance of the firm. Management is able to control decisions on how firm level factors are utilised by the firm and how best the available resources can be deployed across the firm both locally and globally. The findings have established that there are relative differences

in the effect of firm level factors on the internationalisation and international performance of firms. Strategic decisions can be made to ensure the most effective and efficient utilisation of resources across different markets.

The results also indicated that the level of internationalisation orientation has a moderating effect on the relationship between firm capability deployment and DOI and firm capabilities and international performance. This means the management should consider how their internationalisation orientation will impact the effect of the level of capability acquisition and deployment on international expansion activities and performance.

Table 6.35: Summary of Contributions of the Study

Contribution	Use of the Variables	Comments
To		
Theoretical Contribution		
Internationalisation Process	<ul style="list-style-type: none"> • Internationalisation Orientation. • International Performance. • Degree of Internationalisation • Knowledge capability. 	Extending the use of internationalisation theory in examining the firm level factor effects on international performance within the context of Kenyan firms.
Resource Based View of the Firm	<ul style="list-style-type: none"> • Firm Resources, • Firm Capabilities • Management Characteristics 	These are integral variables in resource based view. The use of these variables within the theoretical background and its application in international performance studies in Kenya contributes to the existing body of empirical research.
Institutional Based Theory	Institutional Capital – Individual, intra-organisational and external.	These are integral variables in institution and resource based view. The use of these variables within the theoretical background and its application in international performance studies in Kenya contributes to the existing body of empirical research. The

Contribution To	Use of the Variables	Comments
		adoption and adaption of measurement scales within the Kenyan firm context is to my knowledge not been done in prior research
Contribution of body of Knowledge		
Relationships between Firm level factors and international performance.		Validates the extant findings from different research setting in a new international business context towards generalisation.
Firm resources, firm capabilities and international performance.		The research provides additional empirical affirmation in the literature from a different context.
Moderating effect of Internationalisation Orientation.		The research provides empirical results in the literature from a different context.
Construct Measures		
Institutional Capital – individual and intra-organisational.		Construct measures developed for these variables for this particular research. Validated in CFA as reliable as well as converged into the respective constructs.
Management Characteristics, firm capabilities, organisational demographics, Internationalisation Orientation, international performance.		Validation of constructs through operationalisation within a new context of study that could be verified in future research contexts.
Contextual Contributions		
Developing Country Data		Research contributed to literature by incorporating a developing country perspective in theoretically valid aspects of research. Most research has been based on developed country firms.
Other		With respect to methodology, this study demonstrated that use of Structural equation modelling Partial Least squares as an approach to data analysis. PLS is a component based SEM approach.

6.5 Limitations of the Study

Inevitably, there are a number of limitations of the research. This study is based on cross-sectional data. This may limit the possibility of deriving strong claims about the direction of the effects. It should be noted that the model supports theoretical

perspectives and empirical results from previous studies (Lu et al., 2010; O’Cass & Weerawardena, 2009). The findings of this study are potentially generalizable to other similar contexts such as other developing economies. The main purpose of this research was to assess the relative effect of firm level factors on the international performance of Kenyan firms by testing hypothesized relationships. The population size (n=50) for this study is recognized to be acceptable. This was a census of 58 publicly quoted companies and the response rate was adequate to draw conclusions about the population.

The data has been collected from a single country, Kenya. This facilitated data collection and controlling diversity but also limited the generalisability of results. The findings rely on respondents self-reported cross sectional data, rather than longitudinal data. This may not reflect changing situations and the series of relationship phenomena between firm level factors and international performance. The cross sectional data may have been affected by the respondents' predisposition of any events that have happened in the past or conditions at the time of filling in the questionnaire. Acknowledging these limitations, the research authenticates the developed framework and these limitations did not affect the quality of this study and recommendations addressing these issues are discussed in the section below.

6.6 Suggestions for Further Research

From the above limitations, it is possible to group for future research recommendations into three main types, namely, to address the shortcomings of the current study, to extend this work to other applications and to identify new areas of research of relevance to those in academics and industry. This study provides a

number of future research possibilities. Although the research looked at a number of firm level factors, it is an opportunity to review the effect of other firm level factors on firm international performance that was not covered in the research. These studies will guide and contribute to the growth of empirical research into international performance studies and help us understand the relative effects of a firm's level factors on the international performance of an organisation.

Another opportunity is to perform a cross-cultural research covering a number of countries as this study was performed only within the context of Kenyan firms. It is reasonable to assume that firms in other developing and emerging markets studies would be of great interest to study firms. The findings of both longitudinal and cross-sectional studies would help to establish whether the scales were generalisable for different times and cultural settings. Based on the existence of limitations, it is recommended that future research directions be discussed so as to build on the study. Future research is recommended to examine the relationships between variables studied, validate further the measurements applied and apply the methodology and examine the relationship within different national contexts and over a period of time. In summary, a strong foundation for future research is provided given the implications of the study's findings for managers, policy makers, researchers and academics.

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APPENDICES

APPENDIX I: Questionnaire

INTRODUCTION

The purpose of this questionnaire is to perform an assessment on the firm level factors that influence international performance within your organization. Data and information obtained through this exercise will be used for academic purposes only. Your individual responses will be completely confidential. You are therefore encouraged to answer each question honestly.

What is the survey about?

This is a survey for a Ph.D. research that seeks to establish the firm level factors that influence the international performance of companies. This is not a test. There is no right or wrong answer, it is your views that are important.

Who will see my answers?

The information you provide is totally confidential. The information will be made available to all participants but in such a way that it is not possible for individuals to be identified. Nobody in the organisation will at any time have access to any of the questionnaires completed by individuals and all the information will be analysed and reported as group data.

How do I complete the questionnaire?

Please read each question carefully and ensure that you answer all questions. For each question, please circle or tick appropriately the number or box that best fits your views or write your responses in the spaces provided.

Please answer all questions below as openly and honestly as possible. Do not spend too long on one question. For example the question below asks whether your organisation has established decision support systems.

	Strongly Disagree	Disagree	Neither agree nor	Agree	Strongly agree
Our organisation has decision support systems that encourage resource innovations	1	2	3	4	5

Alternatively tick the appropriate response if the question is presented in the following manner.

- Does your organisation engage in international business?
Yes () No ()

THANK YOU!

Reference Number.....

Part I: General Company Information

1. What sector does the firm operate in?

- | | | | |
|-----------------------------|-----|----------------------------------|-----|
| Agriculture | () | Energy and Petroleum | () |
| Automobiles and Accessories | () | Insurance | () |
| Commercial and Services | () | Investment | () |
| Banking | () | Manufacturing and Allied | () |
| Construction and Allied | () | Telecommunication and Technology | () |
| Others (Please Specify) | () | | |

2. What type of products/services does your organisation trade in?

.....

3. Year of incorporation

4. Number of employees in the organisation in 2010.....

5. Does your organisation engage in international business?

Yes () No ()

6. How many years has your organisation engaged in international business?.....

7. What mode of international business does your organisation engage in?

Outward Modes	Inward Modes	Cooperation Modes
Exporting ()	Export, indirect, direct, own/self export ()	Cooperation on manufacturing ()
Licensing, selling ()	Servicing foreign clients locally ()	Cooperation on Purchasing ()
Knowhow agreement ()	Importing	Cooperation on Research and Development ()
Franchising ()	Licensing, selling ()	
Subcontracting ()	Knowhow agreement ()	
Contract Manufacturing ()	Franchising ()	
Project exporting ()	Subcontracting ()	
Joint/Mixed Ventures ()	Contract Manufacturing ()	
Outward Foreign Direct Investment ()	Project exporting ()	
	Joint/Mixed Ventures ()	
	Inward Foreign Direct Investment ()	

8. Please indicate the extent to which the following statements refer to your organisation

	Not at all	Little extent	Moderate Extent	Great Extent	Very Great Extent
a) It is difficult to forecast the sales quotas of products or turnover generated from services in overseas markets	1	2	3	4	5
b) The product/services exported or imported was greatly influenced by changes in the trade policies of overseas markets	1	2	3	4	5
c) It is difficult to forecast the competitive advantage of our products/services in overseas markets	1	2	3	4	5

Part II: Firm Resources

Institutional Capital

9. The following questions are concerned with the level of institutional capital within your capital. Please indicate the extent to which the following statements refer to your organisation

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a) All employees are committed to the goals of our organization	1	2	3	4	5
b) Employees view themselves as partners in charting the direction of the organization	1	2	3	4	5
c) There is a commonality of purpose in my organisation	1	2	3	4	5
d) There is a total agreement on our organizational vision across all levels, functions, and divisions	1	2	3	4	5
e) Management do not make decisions that are habitual and unreflective and embedded in norms and traditions	1	2	3	4	5
f) We are not afraid to reflect critically on the shared assumptions we have made about our customers	1	2	3	4	5
g) Our organisation has management development programmes that promote continuous resource improvement	1	2	3	4	5
h) Our organisation has firm incentive systems tied to competency sharing and resource innovations	1	2	3	4	5
i) Our organisation has Decision support systems that encourage resource innovations	1	2	3	4	5

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
j) Our organisation has information technology systems that accelerate the diffusion and use of resource capital	1	2	3	4	5
k) Our organisation has Training programmes that accelerate the adoption of new capabilities within the firms operations	1	2	3	4	5
l) Our firm has Formal resource monitoring and evaluation systems that are used regularly	1	2	3	4	5
m) Our organisation makes the use of decentralised cross-functional team based structures to facilitate continuous resource improvement and reduce conformity to taken for granted resource routines.	1	2	3	4	5
n) Our firm participates in inter-firm alliances within our industry that facilitates new resource learning and knowledge sharing	1	2	3	4	5
o) Our firm participates in Inter-firm alliances across different industries that facilitates new resource learning and knowledge sharing	1	2	3	4	5
p) Our firm has received favourable treatment from government for exports and other forms of international business	1	2	3	4	5
q) Our firm has been helped by government to participate in international trade fairs in the local area	1	2	3	4	5
r) Our firm has been supported by government to participate in international trade fairs across domestic regions or in overseas markets	1	2	3	4	5

Part III: Management Characteristics

10. a) Do you send employees to work and train abroad?
 Yes No

b)

How would you rate the level of internationally acquired knowledge and skills of your employees to that of other organisations within the same industry?

Better – above industry standard	Average – at the same level	Less than average	Below standard
1	2	3	4

11. Please identify the extent to which the organisation has cultivated relationships and established ties with the following parties ;

Our organisation has a strong and beneficial relationship with.....

- a) Foreign Customers
- b) Foreign suppliers
- c) Foreign competitors

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Our organisation

- d) Cultivates ties with Local government agencies
- e) Utilises local social networks
- f) Has Strengthened ties with local communities

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

12. Please circle the number best describing the extent to which top managers at your organisation have utilised personal ties, networks and connections over the past three years with;

- a) Top managers at buyer firms
- b) Top managers at supplier firms
- c) Top managers at competitor firms

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

13. Please circle the number best describing the extent to which top manager at your organisation have utilised personal ties, networks and connections during the past three years with;

- a) Political leaders at various levels of government
- b) Officials in industrial bureaus
- c) Officials in regulatory and supporting organisations such as tax bureaus, state banks, commercial administrations bureaus or the like.

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

14. Please circle the number best describing the extent to which the following statements refer to your organisation;

- a) My firm is capable of exporting its service offerings
- b) My firm's top management has a favourable attitude towards operating internationally
- c) My firm's top management is supportive of offering our agreed services internationally

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Part IV: International Entrepreneurship

International Entrepreneurship (also known as entrepreneurial orientation) refers to the organisation's ability to be innovative, proactive and take risks.. Please think about the entrepreneurial characteristics of your firm. Please circle the number in the scale which corresponds to the degree of entrepreneurial orientation for each of the following statements.

15. International Entrepreneurship

In dealing with international markets, Top managers in my firm favour;

- | | | | | | | |
|---|---|---|---|---|---|---|
| a) ...an emphasis on marketing tries and true products avoiding heavy R&D expenditure | 1 | 2 | 3 | 4 | 5 | ...a strong emphasis on R&D expenditure, technological leadership and innovation. |
|---|---|---|---|---|---|---|

In the past five years;

- | | | | | | | |
|---|---|---|---|---|---|---|
| b) ... my firm has marketed no new products/services. | 1 | 2 | 3 | 4 | 5 | ...my firm has marketed many new products and services. |
| c) ... Changes in products/services have been minor. | 1 | 2 | 3 | 4 | 5 | ...changes in products and services have been dramatic. |

In dealing with its competitors, my firm;

- | | | | | | | |
|---|---|---|---|---|---|---|
| d) ... typically responds to actions which competitors initiate. | 1 | 2 | 3 | 4 | 5 | ... typically initiates actions to which competitors respond. |
| e) ... is seldom the first business to introduce new products, administrative techniques. | 1 | 2 | 3 | 4 | 5 | ... is often the first business to introduce new products, administrative techniques. |

In dealing with its competitors, my firm;

- | | | | | | | |
|--|---|---|---|---|---|---|
| f) ... seeks to avoid competitive clashes and prefers a "live and let live" posture. | 1 | 2 | 3 | 4 | 5 | ... has a very competitive "beat the competitors" posture |
|--|---|---|---|---|---|---|

Top managers of my firm have;							
g)	...a strong tendency for low risk projects (with normal rates of return).	1	2	3	4	5	... a strong tendency for high risk investments (with chances for very high rates of return)
h)	... a policy of growth primarily financed through internally generate funds.	1	2	3	4	5	... a policy primarily financed through external sources such as borrowing.
Top managers in my firm believe that;							
i)	...it is best to explore new opportunities cautiously via “one step at a time adjustments”.	1	2	3	4	5	... bold and wide ranging changes are necessary to achieve the firm’s objectives.
When confronted with external uncertainty, my firm;							
j)	... adopts a cautious “wait and see” posture in order to minimise costly mistakes.	1	2	3	4	5	... adopts a “bold and aggressive” posture to maximise potential opportunities.

Part V: Firm Capabilities

Organisational Innovation Intensity

Innovation refers to any new idea that your firm adopts for its products, production processes, managerial/administrative and marketing activities which directly or indirectly adds value to the firm. Please think about the innovative activities your firm has undertaken during the past five years. Please circle the number in the scale which corresponds to the degree of innovation for each of the following statements.

16. Please indicate below the level of firm capabilities at your organisation

Product innovations

(Some examples : (a) improving existing products (b) creating entirely new products)

Product innovations introduced by our firm during the last five years have been

a) Limited 1 2 3 4 5 Extensive

Product improvement have been mainly ...;

b) Incremental: (marginal improvements to existing products) 1 2 3 4 5 Radical (radically new products; changes in technology)

Production Process Innovations

(Some examples: (a) introducing computer based production application, (b) automated material-handling (c) introducing manufacturing information systems)

a) Process innovations introduced by our firm during the last five years have been

Limited 1 2 3 4 5 Extensive

- b) Process innovations have been mainly...
- | | | | | | | |
|---|---|---|---|---|---|--|
| Incremental (marginal improvements to existing production process. No change in technology) | 1 | 2 | 3 | 4 | 5 | Radical (radical changes to production process. Changes in technology) |
|---|---|---|---|---|---|--|

Managerial Innovations

(Some examples: (a) introducing computer based administrative application (b) developing new employee reward/training schemes (c) obtaining new financing sources (d) introducing new departments or project teams.)

- a) Managerial innovations introduced by our firm during the last five years have been...
- | | | | | | | |
|--------------|---|---|---|---|---|-----------|
| Very limited | 1 | 2 | 3 | 4 | 5 | Extensive |
|--------------|---|---|---|---|---|-----------|
- b) Managerial innovations have been mainly ...
- | | | | | | | |
|--|---|---|---|---|---|--|
| Incremental (marginal improvements to existing managerial practices) | 1 | 2 | 3 | 4 | 5 | Radical (totally new managerial practices) |
|--|---|---|---|---|---|--|

Marketing Innovations

(Some examples: (a) introducing new pricing methods (b) new distribution methods (c) new sales approaches or leasing arrangements (d) entering a new market)

- a) Marketing innovations introduced by your firm during the last five years have been ...
- | | | | | | | |
|--------------|---|---|---|---|---|-----------|
| Very Limited | 1 | 2 | 3 | 4 | 5 | Extensive |
|--------------|---|---|---|---|---|-----------|
- b) Marketing innovations have been mainly...
- | | | | | | | |
|---|---|---|---|---|---|---|
| Incremental (marginal improvements to existing marketing methods) | 1 | 2 | 3 | 4 | 5 | Radical (totally new marketing methods) |
|---|---|---|---|---|---|---|

Knowledge Capability

A learning organization is one “skilled in creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights” Learning orientation is the ability of a firm to learn from its experiences. Please think about the learning and knowledge practices and activities your firm has undertaken during the past five years. Please circle the number which corresponds to the degree knowledge capability for each of the following statements

17. Please indicate the extent to which your organisation could acquire the following:

- a) The information required to understand foreign customer needs
- b) The information necessary to identify overseas market opportunities
- c) The information needed to comply with the requirements and expectations of foreign trading partners

	Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
a)	1	2	3	4	5
b)	1	2	3	4	5
c)	1	2	3	4	5

Adaptive Capability

18. Please indicate the extent to which your organisation could accomplish the following::

- a) Meet a foreign customer’s demand in terms of product and service specifications
- b) Tailor products and services according to foreign customer’s request
- c) Respond quickly to the demand for a product price change from a foreign customer

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Part VI: Internationalisation Orientation

19. Which statement best describes your organisation’s internationalisation orientation?
Our Organization

Inward Orientation

- a) Utilises advanced management skills with foreign countries
- b) Utilises advanced and new technology from foreign countries
- c) Utilises foreign direct investment

Outward Orientation

- d) Aggressively seeks foreign markets
- e) Develops alliances with foreign partners

Not at all	Little extent	Moderate Extent	Great Extent	Very Great Extent
------------	---------------	-----------------	--------------	-------------------

1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

1	2	3	4	5
1	2	3	4	5

Part VII: Degree of Internationalisation

20. What percentage of your firm’s turnover relates to international or foreign generated sales in

2009?

2010?

21. What estimated percentage of your organisation’s business partners are foreign?
.....

22. How many countries, in addition to Kenya, does your firm operate?

23. Please indicate the percentage of your customer base that comprises of foreign customers.....

Part VIII: International Performance

24. Please indicate the extent to which the following statements relate to your organisation's international performance.

- a) Our organisation has met our international market share objectives
- b) Our organisation has achieved the turnover objectives we set for internationalisation
- c) In general, we are satisfied with our success in the international markets
- d) Internationalisation has had a positive effect on our firms profitability

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

25. To what extent has your firm to achieved success in the following?

- a) Entering New markets
- b) Increased Market share
- c) Increased Customer Satisfaction

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

26. Firm Innovative Performance

Please indicate the extent to which the following statements relate to your organisation over the past year.

- a) The company's competency base was enlarged
- b) The average development costs of new products/services/processes has reduced
- c) The time to market of new products / processes was reduced
- d) The level of innovativeness of new products / processes was improved
- e) Sales volume and market acceptance of new products was improved

Not at all	Little extent	Moderate extent	Great Extent	Very Great extent
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5

Additional Information Required: Please provide a copy of your Annual Report and Financial Statements for the year 2010.

**APPENDIX II: Authority Letter from National Council of Science and
Technology**

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RRI/12/1/SS-011/1522/4**

Date:
14th November, 2011

Angela Mwendu Musuva
University of Nairobi
P. O. Box 30197
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Firm level factors that influence the international performance of publicly quoted companies in Kenya*" I am pleased to inform you that you have been authorized to undertake research **countrywide** for a period ending **30th June, 2012**.

You are advised to report to the **Chief Executive Officers of the selected companies listed on the Nairobi Stock Exchange** before embarking on the research project.

On completion of the research, you are expected to submit **one hard copy and one soft copy** of the research report/thesis to our office.

A handwritten signature in black ink, appearing to read 'P. N. Nyakundi'.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The Chief Executive Officers
Selected Companies listed on the Nairobi Stock Exchange
COUNTRYWIDE

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice

RESEARCH CLEARANCE PERMIT

GPK60553mt10/20115 (CONDITIONS--- see back page)



REPUBLIC OF KENYA

PAGE 2

THIS IS TO CERTIFY THAT

Prof./Dr./Mr./Mrs./Miss/Institution **Angela Mwendu Musuva** of (Address) **University of Nairobi, P.O. BOX 30197, Nairobi** has been permitted to conduct research in **Location District Province** on the topic; **Firm level factors that influence the international performance of companies listed on the Nairobi stock exchange** for a period ending **30th June 2012**

Research Permit No. **NCST/RR/12/1/SS01/1522**
Date of issue **14th November 2011**
Fee received **KSHS. 2,000**


 Applicant's Signature
 Secretary
 National Council for Science and Technology

**APPENDIX III: University of Nairobi Letter of Authorization to Conduct
Research**



UNIVERSITY OF NAIROBI
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
SCHOOL OF BUSINESS
DOCTORAL STUDIES PROGRAMME

Telephone: 4184160/1-5 Ext. 225
Email: commerce@uonbi.ca.ke

P.O. Box 30197
Nairobi, Kenya

24th October, 2011

To WHOM IT MAY CONCERN

RE: MUSUVA ANGELA MWENDE – D80/8300/2003


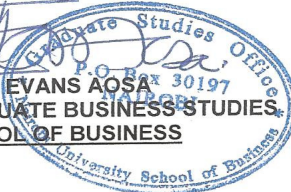
This is to certify that, **Musuva Angela Mwendé – D80/8300/2003** is a Ph.D. candidate at the School of Business, University of Nairobi. The title of her study is **"Firm level factors that influence the international performance of publicly quoted companies in Kenya."**

The purpose of this letter therefore, is to kindly request you to assist and facilitate in carrying out the survey in your organization. A questionnaire is herewith attached for your kind consideration and necessary action.

Data and information obtained through this exercise will be used for academic purposes only. Hence, the respondents are requested not to indicate their names anywhere on the questionnaire.

We look forward to your cooperation.

Thank you.


PROF. EVANS AOSA
GRADUATE BUSINESS STUDIES,
SCHOOL OF BUSINESS


APPENDIX IV: Cross Loadings and Data Analysis Results

Table A4. 36: Cross Loadings

	AC	DOI	FA	FS	IC	IE	INGP	IO	IP	KC	MA	MC	MGTIO	MGTT	OII	PEU
AC1	0.9131	-0.2398	0.2403	-0.2036	0.4724	0.4002	0.1008	0.5355	0.35	0.3859	0.1735	0.3009	0.178	0.304	0.4928	0.0214
AC2	0.8774	-0.1311	-0.0431	-0.1258	0.3587	0.301	0.0644	0.2827	0.1747	0.2434	0.2669	0.3363	0.1255	0.2752	0.3117	0.0118
AC3	0.6786	-0.1107	-0.0977	-0.0374	0.3544	0.1369	0.1391	0.2257	0.1272	0.3505	-0.0248	0.1236	0.062	0.2487	0.2278	0.0101
FCB	-0.1738	0.9683	0.0302	0.0785	-0.2949	-0.3173	-0.3424	-0.1905	-0.5099	-0.1018	0.169	-0.0288	-0.1927	-0.1851	-0.3858	0.2642
FCOII1	0.3222	-0.3994	0.1274	0.3219	0.6398	0.7247	0.1432	0.4636	0.5105	0.435	0.2538	0.4761	0.2432	0.5596	0.8552	0.1477
FCOII2	0.3502	-0.4351	0.1599	0.2437	0.5942	0.5542	0.108	0.4938	0.5608	0.3974	0.2458	0.4776	0.3372	0.5307	0.9052	0.0249
FCOII3	0.3898	-0.2587	0.0278	0.1309	0.5977	0.5708	0.183	0.5327	0.4525	0.4869	0.1171	0.3294	0.1809	0.454	0.861	0.0309
FCOII4	0.4858	-0.2478	-0.0169	0.0205	0.6206	0.4964	0.1738	0.3735	0.4521	0.4803	0.1978	0.33	0.2314	0.317	0.7764	0.0268
FirmAge1	0.0902	-0.1019	0.7707	0.1406	-0.0838	-0.0654	0.1313	0.0138	-0.1057	0.1625	-0.1214	-0.073	0.1899	-0.0805	0.1052	0.1963
FirmAge2	0.064	0.1343	0.811	-0.0748	-0.1263	0.0191	-0.0855	0.0424	-0.2177	-0.0804	-0.2622	-0.2289	-0.1057	-0.093	0.0491	0.1533
FirmSize	-0.1696	0.0796	0.0358	1	0.1238	-0.0604	0.0295	0.1824	-0.1729	0.0817	0.2611	0.2488	0.044	0.1763	0.2228	0.2158
IC1	0.4974	-0.2893	-0.1615	0.0941	0.8774	0.5351	0.0934	0.3629	0.4543	0.419	0.2138	0.3797	0.2318	0.3838	0.6009	0.1306
IC2	0.2784	-0.2717	0.0236	0.0683	0.892	0.6254	0.1225	0.3275	0.5817	0.3439	0.2425	0.4431	0.3008	0.4616	0.7376	-0.137
IC3	0.3996	-0.0694	-0.2289	0.1553	0.5602	0.1404	0.1026	0.3325	0.4376	0.1976	0.4244	0.5176	0.1056	0.4883	0.3005	0.3071
IEO1	0.3136	-0.2677	-0.0554	0.0206	0.5799	0.9197	0.1125	0.3995	0.5909	0.4178	0.374	0.5689	0.3549	0.5216	0.6472	0.1621
IEO2	0.3557	-0.4855	0.0786	-0.1908	0.4459	0.7844	0.2398	0.3616	0.5473	0.4405	0.1069	0.3151	0.4217	0.3132	0.6046	-0.06
IEO3	0.273	-0.1049	-0.0603	-0.0427	0.4113	0.7911	0.0794	0.4279	0.3436	0.4021	0.1462	0.3606	0.0894	0.5214	0.4821	0.2889
IGP	0.115	-0.3362	0.0231	0.0295	0.1329	0.1593	1	0.1683	0.3843	0.129	0.0952	0.219	0.442	0.1339	0.175	0.2339
II	-0.2343	0.9661	0.0216	0.0754	-0.2524	-0.3113	-0.3074	-0.1628	-0.4778	-0.1651	0.0599	-0.118	-0.2676	-0.1947	-0.3942	0.1881
IOI	0.3966	-0.2522	0.0477	0.1972	0.4409	0.4713	0.1438	0.9659	0.4253	0.4606	0.3324	0.5327	0.2519	0.5765	0.5448	0.1992
IOO	0.4505	0.0909	-0.0115	0.0637	0.202	0.2669	0.1673	0.6772	0.228	0.4437	0.2903	0.3618	0.0878	0.3527	0.3277	0.1335
KC1	0.4512	-0.0463	0.0565	0.0387	0.389	0.4134	0.075	0.4881	0.2465	0.9458	0.2037	0.2799	0.1159	0.2629	0.4583	0.0477
KC2	0.2679	-0.106	0.0486	0.0248	0.4078	0.5677	0.0658	0.4297	0.3447	0.9261	0.2318	0.3409	0.174	0.3335	0.4753	0.0987

	AC	DOI	FA	FS	IC	IE	INGP	IO	IP	KC	MA	MC	MGTIO	MGTT	OII	PEU
KC3	0.3831	-0.23	0.0184	0.171	0.3471	0.3578	0.2245	0.5012	0.2631	0.882	0.0944	0.2045	0.1361	0.2437	0.5095	0.0344
MA1	0.0894	0.1504	-0.0861	0.2396	0.2021	0.1252	0.156	0.2886	0.1848	0.1877	0.8533	0.7295	0.3148	0.2802	0.1307	0.0112
MA1	0.0894	0.1504	-0.0861	0.2396	0.2021	0.1252	0.156	0.2886	0.1848	0.1877	0.8533	0.7295	0.3148	0.2802	0.1307	0.0112
MA2	0.1596	0.0635	-0.2854	0.2161	0.3562	0.3016	0.0733	0.2907	0.2285	0.1353	0.9601	0.8331	0.3466	0.3241	0.2479	0.1265
MA2	0.1596	0.0635	-0.2854	0.2161	0.3562	0.3016	0.0733	0.2907	0.2285	0.1353	0.9601	0.8331	0.3466	0.3241	0.2479	0.1265
MA3	0.2594	0.1191	-0.2907	0.2626	0.3781	0.3393	0.0377	0.411	0.2082	0.2182	0.9247	0.7829	0.2241	0.3161	0.2841	0.0386
MA3	0.2594	0.1191	-0.2907	0.2626	0.3781	0.3393	0.0377	0.411	0.2082	0.2182	0.9247	0.7829	0.2241	0.3161	0.2841	0.0386
MGTT1	0.4468	-0.0841	-0.0216	0.0788	0.5066	0.558	0.2092	0.5941	0.461	0.4248	0.4624	0.6988	0.2568	0.7511	0.4639	0.3869
MGTT1	0.4468	-0.0841	-0.0216	0.0788	0.5066	0.558	0.2092	0.5941	0.461	0.4248	0.4624	0.6988	0.2568	0.7511	0.4639	0.3869
MGTT2	0.1294	-0.1941	-0.0296	0.2265	0.4766	0.3802	-0.0591	0.1907	0.3386	0.0151	0.088	0.3704	0.1511	0.5935	0.416	-0.063
MGTT2	0.1294	-0.1941	-0.0296	0.2265	0.4766	0.3802	-0.0591	0.1907	0.3386	0.0151	0.088	0.3704	0.1511	0.5935	0.416	-0.063
MGTT3	0.2107	-0.233	-0.1787	-0.0804	0.2245	0.2359	0.0014	0.2532	0.2948	0.1234	0.0078	0.2976	0.0733	0.6024	0.228	0.4247
MGTT3	0.2107	-0.233	-0.1787	-0.0804	0.2245	0.2359	0.0014	0.2532	0.2948	0.1234	0.0078	0.2976	0.0733	0.6024	0.228	0.4247
MGTT4	-0.192	-0.0543	-0.1409	0.2671	0.0151	0.025	0.0764	0.2678	0.1772	0.0012	0.0412	0.2958	0.0707	0.5973	0.2206	0.3623
MGTT4	-0.192	-0.0543	-0.1409	0.2671	0.0151	0.025	0.0764	0.2678	0.1772	0.0012	0.0412	0.2958	0.0707	0.5973	0.2206	0.3623
MIO	0.1612	-0.2373	0.0452	0.044	0.282	0.3476	0.442	0.2348	0.4233	0.1568	0.3233	0.5498	1	0.2527	0.2962	0.0462
MIO	0.1612	-0.2373	0.0452	0.044	0.282	0.3476	0.442	0.2348	0.4233	0.1568	0.3233	0.5498	1	0.2527	0.2962	0.0462
PEU1	-0.1482	0.0696	-0.1036	-0.2147	-0.3496	-0.2712	-0.1144	-0.1623	-0.0372	-0.1581	-0.0733	-0.134	0.0539	-0.1972	-0.1729	0.3299
PEU2	-0.0776	-0.0139	-0.1902	-0.2069	0.0111	-0.0044	0.0204	0.0545	0.2454	-0.0924	-0.0076	0.1859	0.0423	0.4183	-0.0502	0.7437
PEU3	-0.084	0.334	0.0579	0.0521	-0.2445	-0.2646	-0.3108	-0.0692	-0.1459	-0.1722	-0.1013	-0.0836	-0.0165	-0.0126	-0.1049	0.265
PIPCM	0.3306	-0.316	-0.1626	-0.1486	0.62	0.5118	0.3594	0.4499	0.8911	0.3207	0.3539	0.5573	0.3973	0.5162	0.492	0.2687
PIPF	0.1157	0.36	0.0923	0.0472	0.0743	-0.0946	0.0154	0.1459	-0.0942	0.0778	0.3312	0.2516	0.049	0.0625	-0.1101	0.1171
PIPI	0.0758	-0.2483	0.0482	0.0338	0.2175	0.3863	0.2937	0.3341	0.5235	0.276	0.2321	0.4567	0.5153	0.4333	0.3633	0.3318

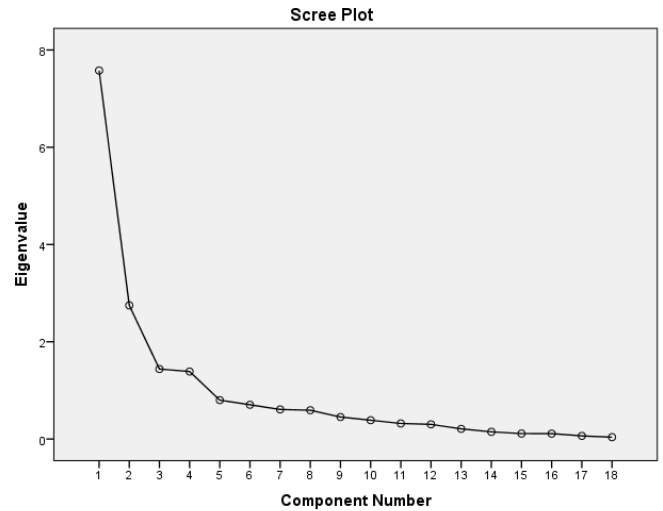
Bootstrapping results for Mediation of Organisational innovation intensity on the relationship between institutional capital and International performance

Direct Path	Direct without mediation β	Direct with Mediation β	Mediated Path	β	T statistics	Indirect Effect	Significance of indirect effect	Total Effect (Direct+ Indirect Effect)	VAF
IC – IP	0.374	0.667	IC-OII OII – IP	0.4548 0.2303	9.784 1.656	0.1047	2.2085	0.7717	13.57%

EFA Results Institutional Capital

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
IIC1	4.24	.687	50
IIC2	4.04	.856	50
IIC3	4.24	.625	50
IIC4	4.26	.694	50
IIC5	3.85	.808	50
IIC6	3.90	.931	50
IOIC1	4.22	.840	50
IOIC2	3.98	.915	50
IOIC3	3.92	.944	50
IOIC4	4.22	.864	50
IOIC5	4.08	.877	50
IOIC6	4.10	.886	50
IOIC7	3.90	.839	50
EIC1	3.45	1.126	50
EIC2	3.44	1.198	50
EIC3	3.31	1.198	50
EIC4	2.85	1.262	50
EIC5	2.90	1.233	50



KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.717
Approx. Chi-Square		667.374
Bartlett's Test of Sphericity	Df	153
	Sig.	.000

Total Variance Explained

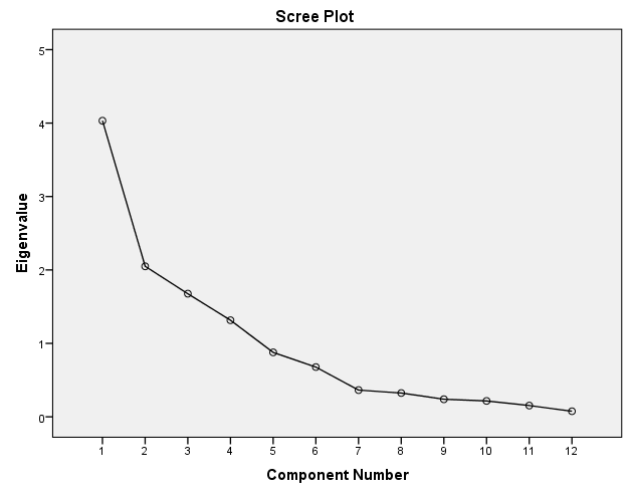
Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
	Total	% of Variance	Cumulative %	Loadings			Loadings		
				Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.578	42.100	42.100	7.578	42.100	42.100	4.935	27.416	27.416
2	2.749	15.270	57.370	2.749	15.270	57.370	3.401	18.894	46.310
3	2.388	14.610	73.079	2.388	14.610	73.079	2.927	16.593	70.904

Extraction Method: Principal Component Analysis.

PCA Management Characteristics

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
MI1	.88	.328	50
MI2	3.51	.646	50
MGTBTA1	3.70	.902	50
MGTBTA2	3.71	1.068	50
MGTBTA3	2.65	1.073	50
MGTBTB1	4.04	.856	50
MGTBTB2	3.82	1.063	50
MGTBTB3	4.28	.784	50
MGTNTA1	3.63	1.101	50
MGTNTA2	3.69	1.092	50
MGTNTA3	2.69	1.072	50
MGTNTB1	2.69	1.358	50
MGTNTB2	3.31	1.146	50
MGTNTB3	3.57	1.107	50
MA1	4.02	.915	50
MA2	4.29	.756	50
MA3	4.16	.841	50



Management Characteristics KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.636
Approx. Chi-Square		468.790
Bartlett's Test of Sphericity	df	136
	Sig.	.000

Management Ties KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.637
Approx. Chi-Square		316.766
Bartlett's Test of Sphericity	df	66
	Sig.	.000

Management Ties Total Variance Explained

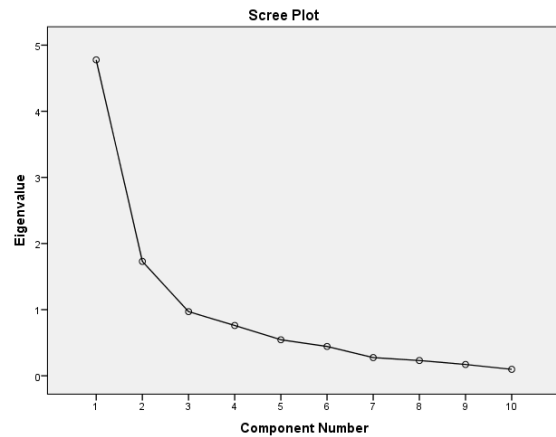
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.032	33.600	33.600	4.032	33.600	33.600	2.948	24.570	24.570
2	2.049	17.079	50.679	2.049	17.079	50.679	2.091	17.424	41.994
3	1.676	13.971	64.649	1.676	13.971	64.649	2.086	17.383	59.377
4	1.315	10.959	75.609	1.315	10.959	75.609	1.948	16.232	75.609

Extraction Method: Principal Component Analysis.

PCA International Entrepreneurship

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
IE1	3.23	1.297	50
IE2	3.96	1.177	50
IE3	3.30	1.067	50
IE4	3.62	1.135	50
IE5	3.64	1.096	50
IE6	3.43	1.258	50
IE7	3.31	1.092	50
IE8	2.98	1.317	50
IE9	3.27	1.208	50
IE10	3.22	1.111	50



International Entrepreneurship KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.730
Approx. Chi-Square	289.845
Bartlett's Test of Sphericity	df
	45
Sig.	.000

Total Variance Explained

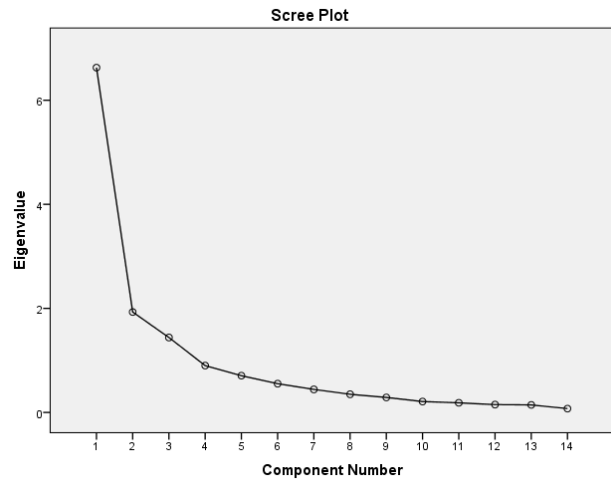
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.778	47.775	47.775	4.778	47.775	47.775
2	1.729	17.295	65.070	1.729	17.295	65.070
3	.970	9.701	74.771	.970	9.701	74.771

Extraction Method: Principal Component Analysis.

EFA Firm Capabilities

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
AC1	3.81	.825	50
AC2	3.63	1.042	50
AC3	3.44	.878	50
OII1	3.71	1.124	50
OII2	3.31	1.072	50
OII3	3.91	1.027	50
OII4	3.60	1.003	50
OII5	3.65	1.078	50
OII6	3.35	.958	50
OII7	3.88	.961	50
OII8	3.49	1.090	50
KC1	3.63	.895	50
KC2	3.80	.903	50
KC3	3.92	.900	50



Firm Capabilities KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.799
Approx. Chi-Square	475.599
Bartlett's Test of Sphericity	Df
	91
	Sig.
	.000

Firm Capabilities Total Variance Explained

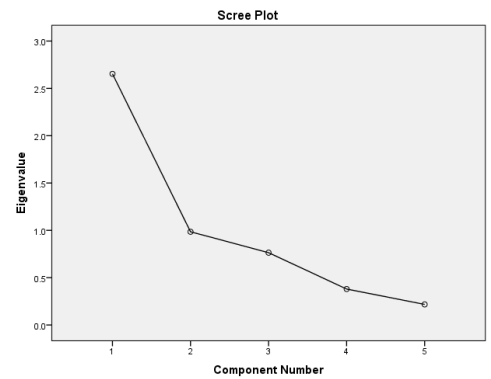
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.628	47.340	47.340	6.628	47.340	47.340	4.715	33.680	33.680
2	1.930	13.786	61.126	1.930	13.786	61.126	2.672	19.089	52.769
3	1.441	10.290	71.416	1.441	10.290	71.416	2.611	18.647	71.416

Extraction Method: Principal Component Analysis.

EFA Internationalisation Orientation

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
IOINWARD1	3.32	.978	50
IOINWARD2	3.56	1.053	50
IOINWARD3	2.80	1.195	50
IOOUTWARD1	3.52	1.199	50
IOOUTWARD2	3.38	1.159	50



Internationalisation Orientation KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.639
	Approx. Chi-Square	83.805
Bartlett's Test of Sphericity	df	10
	Sig.	.000

APPENDIX V: Companies Listed on the Nairobi Stock Exchange

PUBLICLY QUOTED COMPANIES IN KENYA

Industry	Industry Sub Group	Company Name	
Agriculture	Agriculture	Eaagads Ltd	
		Kapchorua Tea Co. Ltd	
		Kakuzi	
		Limuru Tea Co. Ltd	
		Rea Vipingo Plantations Ltd	
Sasini Ltd			
Commercial and services	Commercial and Services	Express Ltd	
		Kenya Airways Ltd	
		Nation Media Group	
		Standard Group Ltd	
		TPS Eastern Africa (Serena) Ltd	
		Scangroup Ltd	
		Uchumi Supermarket Ltd	
		Hutchings Biemer Ltd	
		Express Ltd	
		Kenya Airways Ltd	
	Telecommunication and Technology	Access Kenya Group Ltd	
		Safaricom Ltd	
	Automobile and Accessories	Car and General (K) Ltd	
		CMC Holdings Ltd	
Sameer Africa Ltd			
Marshalls (E.A.) Ltd			
Car and General (K) Ltd			
CMC Holdings Ltd			
Sameer Africa Ltd			
Financial and Investment	Banking	Barclays Bank Ltd	
		CFC Stanbic Holdings Ltd	
		Diamond Trust Bank Kenya Ltd	
		Housing Finance Co Ltd	
		Kenya Commercial Bank Ltd	
		National Bank of Kenya Ltd	
		NIC Bank Ltd	
		Standard Chartered Bank Ltd	
		Equity Bank Ltd	
		The Co-operative Bank of Kenya Ltd	
		Barclays Bank Ltd	
		CFC Stanbic Holdings Ltd	
		Insurance	Jubilee Holdings Ltd
			Pan Africa Insurance Holdings Ltd
			Kenya Re-Insurance Corporation Ltd
	CFC Insurance Holdings		
	Jubilee Holdings Ltd		
	Investments	Pan Africa Insurance Holdings Ltd	
		Kenya Re-Insurance Corporation Ltd	
		City Trust Ltd	
		Olympia Capital Holdings Ltd	
		Centum Investment Co Ltd	
	Trans-Century Ltd		
	City Trust Ltd		
	Olympia Capital Holdings Ltd		
Centum Investment Co Ltd			
Trans-Century Ltd			
City Trust Ltd			

Industry	Industry Sub Group	Company Name
Industrial and Allied	Manufacturing and Allied	B.O.C Kenya Ltd
		British American Tobacco Kenya Ltd
		Carbacid Investments Ltd
		East African Breweries Ltd
		Mumias Sugar Co. Ltd
		Unga Group Ltd
		Eveready East Africa Ltd
		Kenya Orchards Ltd
		A. Baumann CO Ltd
		B.O.C Kenya Ltd
	British American Tobacco Kenya Ltd	
	Carbacid Investments Ltd	
	Construction and Allied	Athi River Mining
		Bamburi Cement Ltd
		Crown Berger Ltd
		E.A. Cables Ltd
		E.A. Portland Cement Ltd
	Energy and Petroleum	Kenol Kobil Ltd
		Total Kenya Ltd
		KenGen Ltd
		Kenya Power & Lighting Co Ltd
Total Kenya Ltd		

Source: Nairobi Stock Exchange, 2011