

**MARKET ORIENTATION AND BUSINESS PERFORMANCE: AN
EMPIRICAL STUDY OF THE BANKING SECTOR IN ETHIOPIA**

by

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Declaration

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I, Mulugeta Gebre-Medhin Kassie, declare that *Market orientation and business performance: An empirical study of the banking sector in Ethiopia* is my own work and the sources that I have used or quoted have been indicated and acknowledged by means of complete reference.



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September 07, 2015

Dedication

This thesis is dedicated to my supportive and beloved family: Tihuye, Gebre-Medhin, Huliye, Markos, Kidane-Kale, Simrete-Abe, Yoseph, and Yohannes.

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Acronyms

AMOS	Analysis of Moment Structure
ANOVA	Analysis of variance
CFA	Confirmatory factor analysis
CFI	Comparative fit index
GFI	Goodness-of-fit index
IFI	Incremental fit index
MLE	Maximum likelihood estimation
NFI	Normed fit index
OLS	Ordinary least square
PCFI	Parsimonious comparative fit index
PNFI	Parsimonious normed fit index
RFI	Relative fit index
RMSEA	The root mean squared error of approximation
RMSR	The root mean squared residual
ROI	Return on investment
SEM	Structural equation modeling
SPSS	Statistical Package for Social Sciences

Abbreviations

BP	Business performance
CI_centered	Mean centered competitive intensity
CI	Competitive intensity
CS	Customer satisfaction
Delinkage	Delivery linkage capabilities
Inteldis	Intelligence dissemination
Intelgen	Intelligence generation
Intelres	Intelligence responsiveness
Marcom	Market communication capabilities
MD_centered	Mean centered market dynamism
MD	Market dynamism
MO_centered	Mean centered market orientation
MO	Market orientation
MOXCI	The interaction effect of market orientation and competitive intensity
MOXMD	The interaction effect of market orientation and market dynamism
MOXREG	The interaction effect of market orientation and government regulation
MS	Market share
Prodcap	Product management capabilities
REG_centered	Mean centered government regulation
REG	Government regulation
Relasset	Relational assets
Repasset	Reputational assets

Abstract

The purpose of this study was to examine the relationship between market orientation and business performance mediated by marketing resources and moderated by contextual factors. The study also examined the extent to which the conceptual model was a good fit to the sample data. A quantitative approach was used to test if there was a significant relationship between market orientation, marketing resources, and business performance. For the purpose, a cross-sectional survey was carried out to obtain data pertaining to market orientation, marketing resources, contextual factors and business performance. The unit of analysis of the study was banks consisting of 3 public and 15 private banks. A sample size of 507 consisting of 492 branch managers and 15 top level marketing managers was used in the survey. With a response rate of 87.97%, 446 questionnaires were collected of which 377 were used for data analysis.

A SEM was used to test the extent to which the theoretical model fits the sample data. Mediation analysis was used to test the indirect effect of market orientation on business performance and hierarchical regression analysis was used to test whether the relationship was moderated by market dynamism, competitive intensity, and government regulation. Finally, an independent t – test was used to examine the statistical variations between public and private banks in terms of market orientation, marketing resources, and business performance.

The confirmatory factor analysis revealed that the modified model was fit with the observed data in terms of chi-square and the individual indices. The total effect of market orientation on business performance was moderate with a 0.36 regression coefficient. The indirect effect was high with a 0.91 regression coefficient where complete and inconsistent mediation was found due to suppression effect. The moderation analysis revealed that the interaction effect of market dynamism, competitive intensity, and government regulation was not statistically significant. Finally the result showed that there was a statistically meaningful difference between public and private banks in terms of market orientation, marketing resources, and business performance.

Banks in Ethiopia shall strive to segment the market, differentiate their services, and build a strong brand with clear identity. Banks in Ethiopia shall also build on their marketing resources to enhance their business performance.

Key words: *Market orientation, marketing resources, business performance, market dynamism, competitive intensity, government regulation, SEM, CFA, mediation analysis, and moderation analysis.*

CHAPTER 1 INTRODUCTION AND BACKGROUND

1.1 Introduction

This chapter provides a brief overview of the history of banking in Ethiopia. The chapter also presents the research problem, the research questions, and objectives. The chapter further addresses the significance of the study, justification of the study, and delimitations or the scope of the study.

1.2 Background of the Banking Sector in Ethiopia

Based on the historical accounts provided by Giday (1987), Schaefer (1992), Kiyota et al. (2007) and Pankhrust (1962), the critical stages that the banking sector of Ethiopia has passed through can be classified into five phases. Phase I covered the period from the establishment of Bank of Abyssinia (1906) to the establishment of Bank of Ethiopia (1931). Phase II covered the period from 1931 to 1963 which represent the period after the establishment of Bank of Ethiopia to the dissolution of the State Bank of Ethiopia. Phase III spanned the period from the establishment of National Bank of Ethiopia (NBE) and Commercial Bank of Ethiopia (CBE) from 1963 to 1973, in which nationalization and merger of banks took place. While phase IV covered the period from 1974 to 1991, the recent phase covered the post 1991 period. The major developments experienced by the banking sector during these five phases are presented in the following section.

The history of modern banking in Ethiopia was first sought by Emperor Menelik II. Perre Arnoux in 1875 and Leon Chefneux in 1890 advised the Emperor to introduce a national currency and set up a bank that would serve as central bank and the only lending financial institution in the country (Schaefer, 1992). Following this on March 10, 1905, Emperor Menelik granted a fifty year concession to the British owned National Bank of Egypt to establish Bank of Abyssinia with the right to hold government funds, issue government loans, print bank notes, and mint coins (Schaefer, 1992). It took a year to formally inaugurate the Bank of Abyssinia on February 16, 1906 (Giday, 1987).

Additionally, permission was granted by Emperor Menelik to set up a French bank called 'The Societe Nationale d'Ethiopie pour le Developpement de l'Agriculture du Commerce' in 1909 (Schaefer, 1992). After its establishment the French bank attempted to attract depositors and reduced interest rate from 15% to 10% (Schaefer, 1992). In parallel, the Bank of Abyssinia expanded its operation by opening up branches in Harar (1906), Dire Dawa (1908), Dessie (1912), Djibouti (1920), and two other branches in Gore and Gambella (between 1924 and 1931) (Giday, 1987). After the death of Empress Zawditu and the coronation of Ras Tafari as Emperor Haile Sellassie, there remained a growing interest and pressure to liquidate Bank of Abyssinia to assure Ethiopia's economic and political independence. Eventually an agreement was reached to buy-out Bank of Abyssinia and Bank of Ethiopia which was purely an Ethiopian institution and the first indigenous bank in Africa was established on August 29, 1931 (Giday, 1987).

Following its establishment, the Bank of Ethiopia was engaged in issuing notes and minting coins and providing services like loans and deposits through its seven branches and offices at

Dire Dawa, Harar, Dessie, Debre Tabor, Gore, Gambella, and Djibouti until the Italian invasion in 1935 (Giday, 1987). During the five years Italian occupation, Italy established five banks, namely Banca d'Italia, Banco di Roma, Banco di Napoli and Banca nazionale del lavoro in the main parts of Ethiopia to advance its political control and economic supremacy (Giday, 1987).

After the expulsion of Italy, Barclays Bank was opened in Ethiopia in 1941 and its operation was disrupted in 1943. The State Bank of Ethiopia was established and became operational on April 15, 1943 with the objective to carry out commercial banking services, to issue currency, and to handle exchange of foreign currencies (Giday, 1987). Twenty years later the State Bank of Ethiopia was legally dissolved by the 1963 proclamation. Proclamation No. 207/1955 was promulgated to separate the functions and power of the commercial bank from that of the national bank. Proclamation No. 207/1955 marked the birth of the National Bank of Ethiopia and the Commercial Bank of Ethiopia.

Permission was granted for the opening up of foreign banks with a restriction of foreigners' ownership right to the maximum of forty nine percent. Subsequently with the regulatory support provided by the government, Addis Ababa Bank, the first private bank, was established in 1964. As accounted by Giday (1987), there were also two banks called the Imperial Savings and Home Ownership Public Association (ISHOPA) and the Saving and Mortgage Corporation of Ethiopia which provided specialized banking services of construction loans. Besides there was another bank called the Agricultural Bank which provided a specialized service of loans to agricultural and related activities.

The shift to Marxist orientation by the military junta resulted in nationalization and merger of the three private banks, namely Addis Ababa Bank and the other two banks in Eritrea called Banco Di Roma and Banco di Napoli to form Addis Bank. The restructuring of the financial sector continued with a merger of Commercial Bank of Ethiopia and Addis Bank by proclamation No. 184/1973. By proclamation No. 60/1975, ISHOPA was merged with the Saving and Mortgage Corporation to establish the Housing and Saving Bank. Bank of Agriculture and Industry was then formed by proclamation No. 99/1976 which was restructured as bank of Agricultural and Industrial Development Bank (AIDB). As a result from 1974 to 1991, the following three wholly state owned banks were the only once operating in Ethiopia.

1. The National Bank of Ethiopia
2. The Commercial Bank of Ethiopia
3. The Agricultural and Industrial Development Bank (AIDB)

During the period of 1974-1991, the banking sector was basically the organ of the socialist state for implementation of its central economic plan. Banks were financing public projects without proper scrutiny of their feasibility and less emphasis was given to regulation and supervision of financial institutions (Geda, 2006).

The same structure and functioning of the banking sector continued until the demise of the 'Derg' regime in 1991. Since 1992 Ethiopia has started liberalizing the financial sector with a gradualist strategy although the process has been criticized for being slow (Geda, 2006). Proclamations No. 83/1994 and 592/2008 provided the legal basis for licensing and supervision of banking business in Ethiopia. These proclamations allowed for establishment of private

owned banks though owners have to be only Ethiopians. After the promulgation of proclamations No. 83/1994 and 592/2008, 15 private banks were established.

The 15 private banks compete with the three dominant government banks namely Commercial Bank of Ethiopia, Development Bank of Ethiopia, and Construction and Business Bank. As of December 31, 2012, the three state banks' dominance has been evident in their large branch operation and capital. Commercial Bank of Ethiopia is the most dominant bank with the largest asset, deposit mobilization and loan disbursement in the country. Kiyota et al. (2007) stressed that the banking sector of Ethiopia is closed as foreign banks are not allowed to operate and the market structure is non-competitive as the state owned banks are the dominant players.

Although the financial liberalization process in Ethiopia has been underway since 1992, it is subject to strong criticism partly due to the slow pace of the process and partly due to the prohibition of foreign citizens and foreign banks to carry out banking operation in Ethiopia. Regardless of the dominance of the three state owned banks, however, the landscape of Ethiopia's banking sector has shown marked improvement as evidenced by the 1226 branches operating under private banks in 2013/14 as compared to the totally non-existence of one before 1994. As per the National Bank of Ethiopia report, in 2013/2014 the number of bank branches operating in Ethiopia has been 2039 of which 1013 are operated by public banks and 1226 branches operated by private banks.

Generally Ethiopia is lagging in terms of development of advanced payment systems, credits, saving, and financial tools (Kiyota et al., 2007). The successive growth of the economy requires

a robust banking sector capable of mobilizing deposits and providing sufficient credit to support business organizations. Improvement of the banking sector requires expediting the financial reform on the one hand and improving the effectiveness of the marketing system of banks on the other hand. This study will examine the extent to which private and public banks in Ethiopia effectively adopt and implement market orientation for improving their business performance.

Marketing plays a meaningful role in the economic development of countries in a free market economy. In the pre-1991 period, Ethiopia had a centrally planned economy that marketing applicability was reduced to a mere distribution function. Although the state still plays a significant role in the Ethiopian economy, the post-1991 government encourages a free market economy (Kiyota et al., 2007).

Given the context of the Ethiopian banking sector this study, therefore, examined the relationship between market orientation and business performance mediated by marketing resources and moderated by market dynamism, competitive intensity, and government regulation in the Ethiopian banking sector. The study examined the market orientation of bank managers toward the market and the extent to which banks in Ethiopia have developed the required marketing resources to positively influence business performance. Besides, the study tested if the relationship between marketing orientation and business performance was moderated by market dynamism, competitive intensity, technological turbulence, and government regulation.

1.3 Statement of the Problem

Ethiopia was the first independent African country to introduce its own currency and a banking system in the beginning of the 20th century (Pankhrust, 1962; Giday, 1987; and Schaefer, 1992). As contemplated by Kiyota et al. (2007), unlike its long standing history of banking; Ethiopia still lags behind in terms of advanced payment systems and innovative financial instruments.

There has not been any empirical study conducted in Ethiopia which examined the relationship between market orientation and business performance. The various market orientation models which have been explored and tested in the developed world and the emerging economies (Jaworski and Kohli, 1993; Narver and Slater, 1990, Hooley et al., 2005; Morgan et al., 2009; Ngo and O’Cass, 2012, Olavarrita and Friedmann, 2008, Dwairi et al., 2007) have not been empirically tested in Ethiopia for their reliability and validity. Besides, studies that examined the relationship between market orientation and business performance are rare in sub-Saharan Africa (Aphiah-Adu, 1998; Osuagwu, 2006; Mahmoud et al., 2010) and virtually non-existent in Ethiopia.

Generally, there has been a gap in the literature in terms of providing a comprehensive and empirically valid model to enable managers to transform their firms into market orientated entities (Pulendran et al., 2003). The extent of adoption and implementation of market orientation by business organizations is inhibited by incomplete understanding of the marketing concept manifested through the philosophical belief of management regarding the role that customers play in the operation of the organization (Webster, 1988; Kaynak and Kara, 2002). Eliis (2005) also postulates that the implementation of market orientation in developing

economies is constrained by lack of free flow of information which impedes companies' effort to obtain market information on the changing needs of customers and competitors offerings in the market.

On the other hand, empirical researches in the Sub-Saharan Africa showed mixed findings. While Appiah-Adu (1998) found no significant relationship between market orientation and business performance among manufacturing and service firms in Ghana, Mahmoud et al., (2010) reported a positive relationship between market orientation and business performance in the Ghanaian public sector. Although Osuagwu (2006) found a positive relationship between market orientation and business performance in the small and large manufacturing and service companies in Nigeria. However, limited market orientation was reported in Ivorian firms where organizations collect some market information without taking marketing actions based on market intelligence (Chelariu et al., 2002). Therefore, this study would make a contribution to the literature by providing additional empirical evidence in the Sub-Saharan Africa setting in explaining the relationship between market orientation and business performance.

There is also a gap in the literature in addressing the mediating effect of marketing resources in explaining the relationship between market orientation and business performance. Unlike other studies (Ngo and O'Cass, 2012; Hooley et al., 2005; Morgan et al., 2009) which separately address the mediator effect of either marketing assets or marketing capabilities, this study attempted to fill the gap by treating the mediating effect of marketing resources capturing both marketing assets and marketing capabilities in explaining the market orientation-business performance relationship.

Besides, the role of government regulation in moderating the market orientation-business performance relationship is not prevalent in the literature. Thus an effort is made to fill this gap by empirically testing the moderating role that government regulation plays in explaining the relationship between market orientation and business performance along with other moderating variables like market dynamism, competitive intensity, and technological turbulence.

1.4 Research Questions

This study addressed the following main research question and the subsequent sub-questions.

Main Research Question

How does market orientation influence the business performance of public and private banks in Ethiopia and how do contextual factors moderate the relationship between market orientation and business performance?

Specific Research Questions

- (1) To what extent does market orientation directly and positively influence the business performance of banks in Ethiopia?
- (2) How do marketing resources mediate the market orientation-business performance relationship of Ethiopian banks?
- (3) How do market dynamism, competitive intensity, technological turbulence, and government regulation moderate the relationship between market orientation and business performance of banks in Ethiopia?

- (4) To what extent do public and private banks in Ethiopia differ in terms of their market orientation, marketing resources and business performance?

1.5 Aim and Objectives of the Study

1.5.1 The Aim of the Study

The aim of the study was to examine the effect of market orientation on business performance mediated by marketing resources and moderated by contextual factors. The study was also intended to examine the extent to which the adapted market orientation model was a good fit to the sample data collected in the Ethiopian banking environment.

1.5.2 Specific Objectives of the Study

The specific objectives of the study were:

- (1) To test if market orientation directly and positively influences the business performance of banks in Ethiopia.
- (2) To examine if market orientation indirectly influences the business performance of banks in Ethiopia through the mediation effect of marketing resources.
- (3) To determine the moderating effect of market dynamism, competitive intensity, technological turbulence, and government regulation in the market orientation-business performance relationship.
- (4) To examine if there is a meaningful difference between public and private banks in Ethiopia in terms of market orientation, marketing resources and business performance.
- (5) To test if the hypothesized market orientation model was a good fit to the empirical data of the banking sector in Ethiopia.

1.6 Justification of the Study

The financial sector plays a pivotal role for the economic development of any nation. Although many studies have been carried out in the west examining the relationship between market orientation and business performance, little empirical evidence is available in the sub-Saharan African countries in general and in Ethiopia in particular. This study applied theories, models, and measurement instruments pertaining to market orientation and business performance in the context of the Ethiopian banking sector.

As this empirical study was conducted for the first time in Ethiopia, the findings remained useful to identify gaps that require policy intervention and appropriate marketing strategies by the public and private banks in Ethiopia. Government policy makers and bank managers are expected gain insights that have strategic importance in order to improve the performance of banks and thereby contributing to the overall development of the Ethiopian economy.

The banking sector was selected for two major reasons. First, it is unique in terms of the nature of the competition. While the industry has witnessed a remarkable growth rate in the past 20 years with an increasing level of competition among the local banks, still foreign banks are not allowed to operate in Ethiopia. Thus, the study provides an insight about the effect of market orientation on business performance in a unique type of industry where competition from overseas banks is banned by law. Second, conducting the research in a single industry would help to design question items with common themes that appeal to the survey participants.

1.7 Significance of the Study

This research study made a significant contribution to the banking sector through critical analysis and evaluation of the current state of market orientation of public and private banks in Ethiopia. The adapted market orientation model was tested through a measurement approach applied in other parts of the world. The study, therefore, helped to identify gaps that both state and private banks should fill in order to improve their competitiveness and performance. The adapted model in this study is comprehensive enough for replication and further testing of the level of adoption and implementation of market orientation of banks in the sub-Saharan African countries by other researchers.

This study made a contribution to the existing knowledge by providing additional empirical evidence on the relationship between market orientation and business performance in the sub-Saharan Africa in general and in Ethiopia in particular. Besides, the study tested the mediating effect of marketing resources and the effect of contextual factors such as competitive intensity, market dynamism, and government regulation in moderating the relationship between market orientation and business performance in an industry where competition is witnessed among domestic banks alone.

1.8 Delimitations

This research examined the relationship between market orientation and business performance of banks in Ethiopia from managers' perspective. The study also covered branch managers' and marketing managers' of public and private banks in Addis Ababa. This study was conducted in the banking sector to overcome the limitation of confounding associated with with-in industry

and between-industry performance variation related to the sample drawn from different industries or sectors (Osuagwu, 2006).

1.9 Scope of the Study

The scope of this study was limited to the effect of market orientation on business performance mediated by marketing resources and moderated by situational factors. Therefore, other factors which may have an influence on business performance are outside the scope of this study. Finally, this study was quantitative which tested the fit of the structural and measurement model of the market orientation – business performance relationship in the Ethiopian context. Therefore, issues related to the implementation aspect of market orientation which may require an in-depth qualitative study fall outside the scope of the study.

1.10 Operational Definition of Terms

- **Market orientation** refers to organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it.
- **Marketing resources** refer to a firm's marketing assets, marketing competencies, marketing knowledge, and marketing capabilities that create value to customers in the market place.
- **Business performance** refers to a measure of market based and financial performance of an organization in terms of customer satisfaction, market share, profitability, and return on investment.

1.11 Organization of the Thesis

This thesis is organized into five chapters. Chapter 1 provides an overview of the banking sector in Ethiopia and the research problem identifying the gaps to be addressed. The introductory chapter also outlines the research questions, research objectives, justification of the study, significance of the study, and scope of the study.

Chapter 2 provides a review of the literature on the conceptualization, dimensions, and effects of market orientation on business performance. The chapter also highlights the resource based view and the dynamic capability view in relation to the mediating effect of marketing resources on the market orientation - business performance relationship. Moreover, the chapter provides evidences from the literature as to how contextual factors moderate the relationship between market orientation and business performance.

Chapter 3 outlines the research methodology used to collect and analyze the data to address the research questions and associated hypotheses. Specifically the chapter further presents the research approach, sampling method, sample size, measures of the research variables, data collection methods, and data analysis techniques. Finally, the chapter presents the reliability and validity tests as well.

Chapter 4 presents the research findings. The first section of the chapter addresses issues related to preparation for analysis purpose which include data screening, outlier identification, and normality test. Following the preparation activities, the chapter presents fit indices to test the SEM model fit along with statistical results that measure the direct and indirect relationships

between market orientation and business performance. Besides, the chapter presents the hierarchical regression analysis to test the moderating effect of market dynamism, competitive intensity, and government regulation on market orientation – business performance relationship. Finally, the chapter presents findings on statistical variations between public and private banks in Ethiopia in terms of market orientation, marketing resources, and business performance.

Finally, chapter 5 draws discussion on the statistical findings in relation to the research questions and the associated hypotheses. The chapter also presents conclusions and forwards recommendations based on the research results.

1.12 Summary of the Chapter

Although the financial liberalization process in Ethiopia has been underway since 1992, the banking sector is not yet open to foreign banks. This in general causes weak competition among domestic banks. State owned banks in Ethiopia are generally the dominant players whereby Commercial Bank of Ethiopia is the single most dominant bank with the largest asset, deposit mobilization and loan disbursement in the country.

Furthermore, there remains a gap in the literature regarding the effect of market orientation on the business performance of firms in developing economies in general and Sub-Saharan Africa in particular. Mixed findings are reported pertaining to the effect of market orientation on business performance from Sub-Saharan African countries. While Appiah-Adu (1998) found no significant relationship between market orientation and business performance, Mahmoud et al., (2010) reported a positive relationship between the two variables in Ghana. Similarly Osuagwu

(2006) found a positive relationship between the two constructs in Nigera. This study, therefore, made an attempt to provide additional empirical evidence on the relationship between market orientation and business performance from the context of the banking sector of Ethiopia.

The primary objective of the study was to examine the influence of market orientation on business performance mediated by marketing resources. Besides, the study tested how market dynamism, competitive intensity, and government regulation moderate the relationship between market orientation and business performance.

The following chapter presents review of the literature pertaining to market orientation, marketing resources, and business performance. The chapter further presents the conceptual model that specifies the relationship among the variables of the study.

CHAPTER 2 THEORY AND LITERATURE REVIEW

2.1 Introduction

This chapter reviews theories and empirical studies that help to conceptualize and explain the relationship between market orientation and business performance. The chapter describes intelligence generation, intelligence dissemination and responsiveness as the building blocks of the notion of market orientation. The chapter further outlines the resource based view and the dynamic capability view to explain the mediation effect of marketing resources on business performance. Finally, the chapter presents how contextual factors such as market dynamism, competitive intensity, technological turbulence and government regulation moderate the relationship between market orientation and business performance.

2.2 Theoretical Framework

This section presents the theoretical foundation of market orientation. The theoretical framework draws the conceptual link between the marketing concept and market orientation and further explains the notion of market orientation drawing on the pioneer works of Kohli and Jaworski and Narver and Slater. Furthermore, the resource based view and the dynamic capability view illuminate how and why market orientation can be a source of sustainable competitive advantage.

2.2.1 The Marketing Concept and Market Orientation

Since its introduction in the 1950s, the marketing concept has gained popularity as a driver of marketing strategy and performance. The interchangeable use of the term marketing concept and

marketing orientation, market orientation and marketing orientation, customer orientation and market orientation has led to ambiguities.

According to Kohli and Jaworski (1990) the marketing concept represents the business philosophy of the organization and market orientation represents the implementation aspect of the marketing concept. The implementation aspect of the marketing concept is embedded in the routine marketing activities which are facilitated by intelligence generation, intelligence dissemination, and responsiveness to the market. Deshpande et al., (1993) claim that market orientation and customer orientation are similar constructs which can be used interchangeably. However, Narver and Slater (1990) distinguish the two concepts proposing that market orientation is a broader concept with three dimensions of customer orientation, competitor orientation, and inter-functional coordination. Therefore, they suggest that customer orientation is only one of the dimensions of market orientation.

The other two terminologies that are often used interchangeably are market orientation and marketing orientation. Although market orientation and marketing orientation have been used synonymously in the literature, market orientation has gained popularity for two major reasons. First, marketing orientation restricts the concept only to a single marketing department unlike market orientation which is pervasive and integrative of the effort of all business functions and second, the term market orientation is less politically charged as it does not over magnify the role of marketing in the organization (Webb et al., 2000).

2.2.2 Conceptualization of Market Orientation

Market orientation has attracted a great deal of research attention since the works of Kohli and Jaworski (1990) and Narver and Slater (1990). The majority of the studies on market orientation follow either the behavioral approach propounded by Kohli and Jaworski (1990) or the cultural approach advocated by Narver and Slater (1990). According to Kohli and Jaworski (1990), market oriented organizations are actively engaged in intelligence generation, intelligence dissemination, and responsiveness to market intelligence. Narver and Slater (1990), on the other hand posited that a market oriented organization focuses on customer orientation, competitor orientation, and interfunctional coordination.

Market orientation is defined as “organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it” (Jaworski and Kohli, 1993, p.53). They claimed that a business organization’s market orientation is a function of three interrelated components: (1) intelligence generation, (2) intelligence dissemination, and (3) intelligence responsiveness.

Inherent to intelligence generation is market research meant to identify actual and potential needs and preferences of customers and analysis of the major environmental factors that influence the underlying customers’ needs and preferences. Intelligence dissemination requires communication of the information generated to all internal departments to establish a shared view on customers’ expectations. Intelligence responsiveness is the acid test to measure the extent to which a company is market oriented or otherwise. Intelligence responsiveness

constitutes all the critical marketing decisions related to market targeting, new service development, designing delivery channels, and marketing communication efforts.

Although Narver and Slater (1990) defined market orientation from cultural perspective, the dimensions they identified are behavior oriented. They postulated that market orientation consists of three interrelated elements: (1) customer orientation – understanding customers in the channel to create superior value; (2) competitor orientation – understanding the limitations and resource capabilities of competitors and (3) inter-functional coordination - the concerted effort of all departments and individuals to create superior value to customers.

The definition of market orientation provided by Kohli and Jaworski (1990) and Narver and Slater (1990) are complementary. The customer orientation and competitor orientation aspects of market orientation (Narver and Slater's, 1990) are captured by the intelligence generation component of Kohli and Jaworski's (1990) definition. Intelligence generation involves organizational activities meant to gather accurate and relevant market information related to customers and competitors (Jaworski and Kohli, 1993).

The positive effect of market orientation on organization performance has been well accounted in the literature. Empirical evidences on researches conducted globally over the last three decades reveal that there is a positive relationship between market orientation and business performance (Kohli and Jaworski, 1990; Narver and Slater, 1990; and Matsuno and Mentzer, 2000). In their meta-analysis review of studies conducted over two decades, Cano et al. (2004) reported that market orientation augments a positive effect on business performance consistently

worldwide. They further postulated that regional integration, technological advances and globalization contribute to the positive relationship between market orientation and business performance across countries. Besides, Hunt and Morgan (1995) and Menguc and Auh (2006) argued that market orientation is a rare, inimitable, valuable, and non-substitutable resource which is a source of competitive advantage for better and improved organizational performance.

Theodosiou et al., (2012) challenge the view that market orientation is a source of sustainable competitive advantage as it emphasizes on identifying and responding to expressed needs rather than latent needs. These authors question the sustainability of product-market strategies which respond to customers' revealed preferences at the cost of introducing new products through innovation driven research and development strategies. Kumar et al. (2011) also revealed their concern on the sustainability of market orientation as a source of competitive advantage once competitors adopt and implement market orientation. They further challenged the positive relationship between market orientation and firm performance in an industry where most firms are market oriented since market orientation may become a cost driver rather than a source of competitive advantage. They claim that under such circumstances market orientation inclines to be failure preventer rather than a source of competitive advantage. These limitations lead to the need for integrating the literature in market orientation with the resource based view and dynamic capability view.

Market orientation as an organization wide philosophy indicates the outlook of the management toward the market with a view that implementation of the marketing concept is the key for success in the market. From behavioral perspective, market orientation emphasized on the

vitality of information processing and decision making with the customer as the focal point of the whole process. Effective implementation of market orientation, however, requires possession, development, or acquisition of marketing resources which comprised of marketing assets, marketing capabilities, or marketing related knowledge.

The resource-based view (RBV) and the dynamic capability view (DCV) are the theoretical foundations that explain how marketing resources mediate the market orientation – performance relationships. Hooley et al. (1998) shed light on the theoretical nexus between market orientation and the resource based view. They claim that while market orientation focuses on external market considerations, the RBV addresses internal organizational resources and capabilities in conceiving and implementing strategies to enhance firm performance. Hooley et al. (1998) proposed the need to integrate the market orientation and RBV streams as the building blocks for strategy formulation and execution to enhance firm performance. They claim that resources can advance firm performance on sustainable basis if they are integrated with distinctive and dynamic capabilities.

Finally, Luo et al. (2005) reflected their observation on the limited attention given by marketing scholars in applying the resource based theory as a frame of reference to advance marketing theory and practice. Srivastava et al. (2001) shared the same view and argue that the marketing literature is not robust enough to apply the RBV. These authors investigated why little attention has been paid to the role that marketing can play as a source of sustainable competitive advantage (SCA) in conceiving and implementing strategies to enhance business performance. This study, therefore, attempted to integrate marketing and the RBV and DCV approaches

testing the mediated effect of marketing resources on the market orientation – business performance relationship.

2.2.3 The Resource-Based View (RBV) of the Firm

The RBV holds that heterogeneous resources would be a source of sustainable competitive advantage if they are valuable, rare, inimitable, and non-substitutable resources (Barney, 1991, Hooley, et al., 1998). Barney (1991) proposed that heterogeneity and imperfect mobility of resources are the major sources of competitive advantage. The RBV of the firm is an extension of the Ricardian perspective which holds the view that resource picking is the primary mechanism for creation of economic rent (Makadok, 2001).

Resources can be classified into physical, human, marketing, financial, legal, informational, and relational (Barney, 1991; Hunt and Morgan, 1995). Resources can also be classified into tangible and intangible components. Although both tangible and intangible resources are necessary for improving firm performance, intangible resources are primary drivers of competitive advantage (Luo, et al., 2005). Drawing from Barney's (1991, 2001) RBV, these authors posit that intangible assets are hard and costly-to-copy and idiosyncratic resources that lead to sustainable competitive advantage.

The RBV contends that the sustainability of a firm's competitive advantage depends on the deployment of heterogeneous and immobile resources. Barney (1991) defined resources as a set of assets, capabilities, organizational process, firm attributes, information, and knowledge controlled and deployed by a firm in the process of formulating and executing strategies for gaining competitive advantage and improving firm performance on sustainable basis.

Amit and Schoemaker (1993) defined resources as a bundle of factors which will be converted into final products; and capabilities represent organizational capacity to deploy resources often embedded in organizational processes. A related definition of resources was provided by Hooley et al. (1998) and Fahy et al. (2006) who posit that resource is a generic concept that comprises both assets and capabilities. In this definition, assets and capabilities are identified as the two building blocks of resources. Since resources are scarce, organizations may acquire them through purchase (transactional exchange), acquisition of firms possessing resources (vertical integration), and nurturing or developing the resources internally or through alliances with other firms (relational exchange) (Morgan and Hunt, 1999).

Although the RBV is a popular theory that explains the link between heterogeneity and immobility of resources and rent creation, it falls short of explaining the mechanism by which resources contribute to competitive advantage (Makadok, 2001). Ambrosini and Bowman (2009) argue that the RBV does not explain how future valuable, rare, inimitable, and non-substitutable (VRIN) resources are created and how the existing set of resources can be adapted to deal with the rapidly changing market situations. Teece et al. (1997) argue that the RBV has not provided a convincing explanation as to how and why certain firms sustain their competitive advantage in rapidly changing or dynamic market situations. Morgan et al. (2009) echoed the same view and criticized the RBV for its inability to explain how resources are developed and deployed in the market place to achieve competitive advantage.

2.2.4 The Dynamic-Capability View (DCV) of the Firm

The Ricardian view of rent creation has been challenged by the Schumpeterian creative destruction perspective of an alternative rent creation mechanism called the dynamic-capability view (Amit and Schoemaker, 1993). The dynamic-capability view holds that capability building is an alternative source of rent creation by enhancing the productivity of other resources that the firm possesses (Amit and Schoemaker, 1993). Related to this, Makadok (2001) defined capability as an organizationally embedded nontransferable firm-specific resource which enhances the productivity of other resources. Since capabilities are firm-specific and embedded in organizational routines, Teece et al. (1997) elucidate that they are built internally, not acquired from the market.

Capability is defined as the firm's ability to deploy resources or inputs to achieve the desired objectives or outputs (Dutta et al., 1999; Nath et al., 2010). Similarly Hooley et al. (1998) defined capability as a firm's capacity to deploy assets using organizational processes to attain a desired goal. Amit and Schoemaker (1993) defined capabilities as processes by which resources are utilized. Winter (2003) also defined capabilities as a collection of routines carried out to yield a significant output of a particular type. This view is promoted by Eisenhardt and Martin (2000) who argue that dynamic capabilities are a set of processes or routines related to product development or strategic decision making. They propose that dynamic capabilities are created, nurtured, and developed through a well-known learning mechanism in a dynamic market. Drawing from the resource based view, Day (1994) defined capabilities as a reservoir of skills and accumulated competencies for marshalling resources to gain and maintain competitive advantage in the market.

The DCV is an extension of the RBV as both emphasize on internal resource as a source of competitive advantage for improving firm performance (Ambrosini and Bowman, 2009). The DCV, however, bridges the conceptual gap in the RBV regarding the mechanism by which firms sustain their competitive advantage in a rapidly changing dynamic market situation (Teece et al., 1997). The DCV extends the RBV by addressing how valuable, rare, inimitable, and non-substitutable (VRIN) resources can be created and used to sustain competitive advantage in a fast changing markets (Ambrosini and Bowman, 2009). The DCV explains how firms sustain their competitive advantage in a dynamic market situation by way of integrating, building, and reconfiguring internal and external resources, skills, and competencies (Teece et al., 1997). This view is further accentuated by Teece et al. (1997) and Ambrosini and Bowman (2009) who purport that in a dynamic market situation firms need to renew resources, create new resources, or alter their resource mix. This explains how the DCV could overcome the limitations of the RBV (Ambrossini and Bowman, 2009).

Helfat et al. (2007) argue that having VRIN resources per se cannot warrant sustainable competitive advantage. Dynamic capabilities help firms to protect themselves from becoming vulnerable to core rigidities which inhibit development, stifle innovation and engender inertia (Leonard, 1992; Ambrosini and Bowman, 2009). Firms which cannot renew or reconfigure their resource base will fail to adapt to changes in the market and eventually their VRIN resources will become obsolete. Therefore, firms need to build dynamic capabilities to adapt, upgrade, and restructure their resources in light of the changing environment to sustain their competitive advantage and enhance their performance (Ambrosini and Bowman, 2009).

What are the elements or dimensions that constitute capabilities? Winter (2003) classified capabilities into zero level, first level, and higher order capabilities. Zero level capabilities are operational level or ordinary capabilities that define the current state of the firm. First level capabilities bring change, and higher level capabilities enable the firm to be adaptive. Hooley et al. (1998) classify capabilities into individual, group, and corporate capabilities. Individual capabilities are related to the skills and competencies of employees to carry out their assigned tasks and deliver a satisfaction to customers; group capabilities refer to departmental competencies to carry out the functional tasks, and corporate capabilities represent competencies to set directions, manage employees, coordinate functional tasks, and utilize resources efficiently and effectively to achieve organizational objectives.

Hooley et al. (1998) also used another typology for classification of capabilities into strategic, functional, and operational types. The strategic competencies are related to the management's ability to set clear vision and mission, monitor the environment, facilitate organizational learning, and build dynamic capabilities. The functional capabilities identified by Hooley et al. (1998) are similar to Day's (1994) classification of capabilities. Day (1994) classified functional capabilities into outside-in capabilities, inside-out capabilities, and spanning capabilities. Outside-in capabilities refer to market sensing skills and competencies needed to identify changing customers' preferences and competitors' actions. Inside-out capabilities represent the internal competencies of the firm and its employees which have to be deployed to the market place to provide products or services to customers. These capabilities include financial management, cost control, human resource, technological and logistics skills. Finally, spanning capabilities integrate outside-in capabilities and inside-out capabilities for effective delivery of

goods and services to customers. These include order filling, delivery, and new product launching skills.

2.3 Literature Review

This section presents review of the literature on the relationship between market orientation and business performance drawing empirical evidences from studies conducted in the west and Sub-Saharan Africa. The review also attempts to provide additional empirical evidences regarding the mediated relationship between market orientation and business performance. Finally, the literature review presents empirical evidences how market dynamism, competitive intensity, technological turbulence, and government regulation moderate the market orientation – business performance relationship.

2.3.1 The Influence of Market Orientation on Business Performance

Market orientation has gained prominence in the literature as a major predictor of business performance (Cano et al., 2004). There is no agreement in the literature, however, on the direction of the relationship between the two constructs. Few studies indicate a negative relationship between market orientation and business performance (Grewal and Tansuhaj, 2001). Voss and Voss (2000) also reported a negative effect of customer orientation on sales, total income, and net profit. Besides, Apiah-Adu (1998) found no significant relationship between market orientation and business performance.

Similar anomalies on the relationship between market orientation and business performance were reported by Greenley (1995) and Langerak (2003). However, the overwhelming majority of the

literature provides support for the positive relationship between market orientation and business performance (Narver and Slater, 1990; Jaworski and Kohli, 1993; Ellis, 2005; Hooley et al., 2005; Morgan et al., 2009; Olavarrita and Friedmann, 2008; Dwairi et al., 2007; Ngo and O’Cass, 2012; Protcko and Dornberger, 2014; Hilman and Kaliappen, 2014).

The contribution of market orientation to improve business performance in a mature economy has been supported by the findings of studies conducted in the USA, Germany, and the Netherlands (Ellis, 2005). However, Ellis argued that in developing economies which are characterized by scarcity of supply, excess demand, and high level of regulation; it is sufficient for firms to perform well through delivery of what they have without paying much attention to changing customer needs and competitors offerings.

A meta-analysis of the relationship between market orientation and business performance conducted by Cano et al., (2004) across the five continents provides evidences that support the existence of positive relationship consistently in the globe. There are mixed findings, however, in the Sub-Saharan Africa on the influence of market orientation on firm performance. While Appiah-Adu (1998) finds no significant relationship between market orientation and business performance, Mahmoud et al., (2010) report a positive relationship between market orientation and business performance in Ghana. Whereas Osuagwu (2006) finds a positive relationship between market orientation and business performance in Nigeria, Chelariu et al., (2002) rate Ivorian firms into second level with limited market orientation where organizations collect some market information without taking marketing actions based on the intelligence.

Objective and subjective performance measures are the two prevalent approaches used by researchers in the literature. Subjective measures are extensively employed in the literature (Jaworski and Kohli, 1993; Narver and Slater, 1990, Hooley et al., 2005; Morgan et al., 2009; Ngo and O’Cass, 2012, Olavarrita and Friedmann, 2008, Dwairi et al., 2007). Objective measures rely on financial data with restricted applicability to sales growth, ROI, and market share (Cano, 2004) as compared to subjective measures with a wider scope of evaluation of the overall performance using variety of performance elements. Objective measures application is not as extensive as the subjective measures due to the difficulty of obtaining readymade financial data. However, subjective measures run the risk of systematic bias and random error (Cano, 2004) unlike objective measures which are free from the stated flaws. Another limitation of subjective measures is related to the tendency of respondents to inflate the performance of their company as compared to their competitors which in turn causes a higher correlation between market orientation and business performance in self-reported measures than objective measures (Cano, 2004). However, it is also worth mentioning that subjective measures are as valid indicators as do objective measures (Cano, 2004).

2.3.2 The Mediating Effect of Marketing Resources

Mediating variables that enhance the link between market orientation and business performance are not well established in the literature. Kirca et al. (2005) proposed that customer loyalty, customer satisfaction, quality, and innovativeness mediate the relationship between market orientation and business performance. The existence of an indirect relationship between market orientation and business performance was presented by Olavarrita and Friedmann (2007). Effective implementation of market orientation requires availing the necessary tangible and

intangible marketing resources (Hooley et al., 2005) and deploying marketing capabilities (Morgan et al., 2009).

Moreover, assets and capabilities have been identified as separate but interrelated concepts in the literature. Amit and Schoemaker (1993) and Greenley et al. (2005) defined assets as endowments accumulated over time which can be deployed by a firm as a source of competitive advantage. Day (1994) defined capabilities as skills and knowledge needed for deploying assets to create competitive advantage. The conceptual distinction between assets and capabilities is further accentuated by Hooley et al. (1998). They explicated that assets are resource endowments the business has accumulated and capabilities are the glue that bind assets together and make them deployable for gaining competitive advantage. The mediator role of marketing assets and marketing capabilities in the market orientation-business performance relationship is discussed in the following sub-sections.

Hooley et al. (2005) posit that any resource that creates value to customers in the market place is a marketing resource. Srivastava et al. (1998, 2001) further provide a robust classification of marketing specific resources into market-based assets, market-based processes, and market-based capabilities. They illuminate that market based assets emanate from the commingling of the firm with market actors in the broader environment and they are classified into relational and intellectual types. Relational assets are based on trust and reputation developed by a firm which can be used for establishing a long lasting and mutually benefiting relationship with customers. Intellectual assets on the other hand are based on market linking competencies or knowledge possessed by a firm for generating information about the competition and customers preferences which can be used for strategy formulation and execution (Srivastava et al., 1998, 2001).

Hooley et al. (1998) proposed another schema for classification of marketing assets into four categories: customer-based assets, internal assets, supply chain assets, and alliance-based assets. They expounded that customer based assets are related to building good reputation and strong brand in the market; internal assets are related to having a robust cost control and information systems; supply chain assets are related to developing mutually benefiting relationships with middlemen, and alliance based assets are related to having dependable partners for market access and shared technology. In this study, reputational assets (Hooley et al., 2005) and relational assets (Srivastava et al., 1998, 2001) will constitute the intangible marketing assets that fit in the context of a service giving organization.

The role of reputational assets such as brand equity, corporate reputation, and corporate image on firm performance has been accounted in the literature (Olavarrita and Friedman, 2008). Wang (2013) defined corporate reputation as the prestige maintained over time based on a set of strategies. He posits that reputation is a source of competitive advantage which helps to improve firm performance. Drawing from the RBV, Wang (2013) argued that the intangible reputational assets will be a source of sustainable competitive advantage if it is rare, valuable, and inimitable. It is rare when it is meaningfully different from all other firms; it is valuable when it adds value to the firm; and it is imperfectly imitable when it is conferred to the firm by stakeholders.

Relational asset is defined by Wang (2013) as an organization's ongoing relationship implemented through interactions among potential exchange partners. Related to this definition, Cullen et al. (2000) and Liu et al. (2010) conceptualized relational asset as the pattern of interaction between partners that facilitates the positive atmosphere and functional cooperation.

Relational asset is an intangible marketing asset that helps organizations to establish a long term and mutually benefiting relationships. Srivastava et al. (1998) clearly stipulated that relational assets are built on trust to nurture a long lasting and mutually benefiting relationship with customers. Morgan and Hunt (1999) further illuminated that relationships with customers will be long lasting when the relationship is based on trust, commitment, and loyalty.

Marketing resources also include marketing capabilities in addition to marketing assets. There is no a unanimously agreed definition of marketing capability in the literature. Marketing capabilities are defined as a set of intangible and inimitable knowledge, skills, and competencies of employees used for effective and efficient execution of marketing activities (Fahy, et al, 2000). Vorhies (1998) proposed that marketing capabilities are deep rooted in the set of skill and competency clusters of marketing employees to creatively orchestrate resources for creating, communicating, and delivering marketing offers that add value to customers in the market.

A more clear and comprehensive definition of marketing capabilities was provided by Vorhies and Morgan (2005). They defined marketing capabilities as a firm's ability to perform marketing routines or marketing mix activities through which the firm transforms available resources into valuable outputs. In related terms, Nath et al. (2010) emphasized that marketing capability involves integration of all marketing related activities of a firm in a manner to satisfy the changing preferences of customers and to deal with competitors actions. Day (1994) shed light on the nature and scope of marketing capabilities. He articulated that marketing capabilities are embedded in employees' competency, technical systems, management system, and values and norms that guide the behavior of people in organizations.

Vorhies and Morgan (2005) postulate that marketing capabilities help to harness marketing resources and marketing mix to enhance customer satisfaction, market effectiveness and profitability. Marketing capabilities have been found a critical source of sustainable competitive advantage that influences organizational performance (Day, 1994). Business organizations have to create and maintain unique marketing capabilities to synchronize resources so that firms can offer superior value to customers more than competitors. This requires a firm to be market oriented to identify the actual and potential needs of customers, disseminate the information across all departments, and use the information to design and execute marketing strategies. The intangible capability of a firm to identify unmet needs prior to the competition provides a first mover advantage for introduction of new to the market products that deliver superior value to customers.

Hooley et al. (1999) expounded a hierarchical marketing capability schema drawing on the resource based view related to Day's (1994) framework. According to Hooley et al. (1999), marketing capabilities can be broadly classified into higher level capabilities that comprise cultural capabilities and strategic capabilities, and lower order capabilities embedded in operational or functional capabilities. Cultural capabilities comprise the marketing philosophy of the firm which defines the firm's market orientation, market position, and behavior. Strategic capabilities constitute product quality, service quality, and pricing which determine the long term and short term emphasis of the firm. Operational marketing capabilities, on the other hand, relate to the Day's schema of outside-in, inside-out, and spanning capabilities.

Marketing capabilities are believed to help marketing employees to execute marketing strategies and deliver superior value to customers than competitors. In this regard, Morgan et al., (2009)

use marketing mix as the basis for classifying marketing capabilities into product development, pricing, channel management, marketing communications, selling, marketing information management, marketing planning, and marketing implementation. Similarly, Weerawardena (2003) purported that marketing capabilities are embedded in the firms' marketing process such as customer service, promotion, quality of sales people, distribution networks, advertising, marketing research, product differentiation, and speed of product introduction.

Firms with better marketing capabilities have higher propensity to collect market information, identify unmet needs, introduce new products, promote and make the product accessible to customers than their competitors (Fahy, et al, 2000). Morgan et al. further explicate that these marketing capabilities will contribute to the effective execution of marketing strategies where customers are satisfied, market share improves, sales increases, and profitability grows. Hogan and Armstrong (2001) purport that a firm's competitive position and financial performance depends on the extent to which the firm builds key capabilities that are critical to produce, distribute, or market its products.

Morgan et al. (2009) associate marketing capabilities with marketing functions as a mechanism to deploy marketing resources to the market place. These authors postulate that marketing capabilities constitute capabilities related to the marketing mix process and capabilities related to formulation and execution of marketing strategies. In this study, marketing capabilities related to marketing mix process constitute product management capability or innovation capability, delivery channel capability, and marketing communications capabilities. Capabilities related to

marketing strategy formulation and execution constitute marketing planning capabilities, and marketing implementation capabilities.

These empirical reviews support the notion that firms which have the capability to launch new products that deliver value to customers will be successful in the market. The capability to innovate and introduce new bank products and services will improve business performance. Distribution capability in the banking sector represents the delivery channel capacity of the bank to make its services easily available and accessible to customers. Banks which have the capability to deploy electronic banking points or expand their branch operations can attract new customers, retain the existing customers and improve their market share and profitability. Finally, firms which have a marketing communication capabilities can inform, persuade, and remind their customers about their services. Effective marketing communication through advertising and public relations helps to attract new customers, manage customers' expectations, and enhance the image of the bank.

Marketing planning capabilities are related to competencies to craft attainable and realistic marketing plans, ability to segment and target the market effectively, and design creative strategies. Market implementation capabilities comprise of skills needed for effective allocation of resources, translation of marketing strategies into action, and effective execution of marketing strategies.

Finally, Menguc and Auh (2006) echoed the contribution of mediating variables such as marketing resources to enhance the effect of market orientation on business performance. They

postulated that market orientation needs to be complemented by other internal resources such as marketing resources to lift its competitive value. This indicates that the influence of market orientation on business performance would be further strengthened when complemented by the necessary skills, capabilities or assets. Therefore, in the words of Menguc and Auh (2006), the effect of market orientation on business performance is enhanced when it is bundled together with internal complementary resources such as marketing resources.

2.3.3 Moderated Relationship between Market Orientation and Business Performance

Bennett (2000) defined a moderator as an independent variable that influences the degree of association between another predictor variable and a dependent variable. The moderation model examines if the influence of the independent variable on the dependent variable varies across the levels of the moderating variable (Fairchild and MacKinnon, 2008). Moderation takes place where the influence of a predictor variable on the criterion variable varies according to the level of variation observed in the third variable (Edwards, 2007; Fairchild and MacKinnon, 2008). The third variable which is called a moderator variable is an independent variable which explains situations that cause inconsistent or weak relationship between the independent and dependent variables where the association is expected to be stronger (Bennett, 2000).

Raaij et al., (2008) identified market dynamism and competitive intensity as the two dominant factors that moderate the relationship between market orientation and business performance. In an environment where customers' preferences are fast changing and competition is tense, market

oriented firms monitor those changes to make timely response via a valued market offering and outperform nonmarket oriented firms (Olavarrieta and Friedmann, 2008).

According to Qu et al. (2005), government regulation and ownership structure influence the relationship between market orientation and business performance. Qu et al. (2005) expound that government regulation stipulates the rule of the game which may be an enabler or barrier to the development of market orientation. In a sector where competition is highly regulated, firms will be reluctant to be market oriented and less interested to possess and deploy resources and capabilities associated with market orientation.

Kohli and Jaworski (1990) posited that market turbulence, competitive intensity, and technological turbulence moderate the relationship between market orientation and business performance. They claimed that market oriented firms performance improves under circumstances where the market is fast changing, competition is fierce, and technological breakthroughs are less frequent.

2.4 Conceptual Framework and Hypotheses

A conceptual model of market orientation has been developed to explicate the relationship between market orientation and business performance based on the RBV and dynamic capabilities theory. The model depicted in Figure 2.1 sheds light on the role of market orientation and marketing resources as a source of competitive advantage to enhance business performance. First, the model presents the direct effect of market orientation on business performance. Second, the model shows the mediating effect of marketing resources in explaining the relationship between market orientation and business performance.

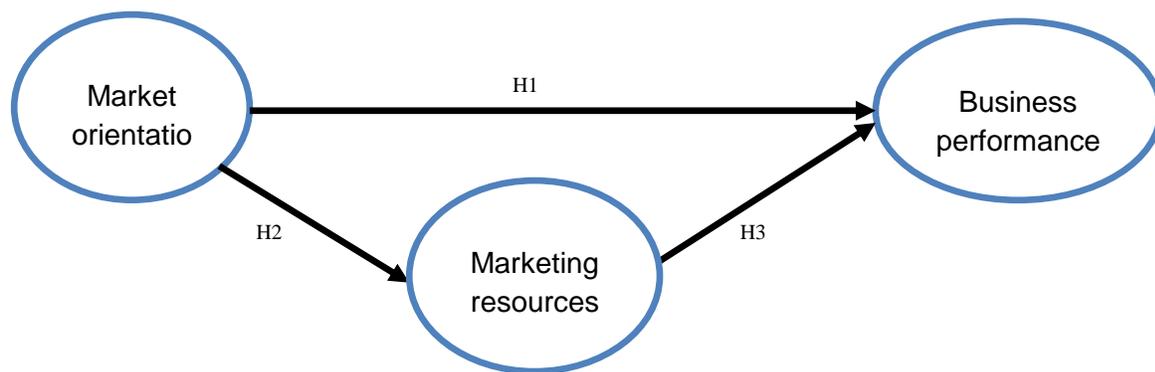


Figure 2.1: Market orientation and business performance

Source: Adapted from Ngo and O’Cass, 2012; Hooley et al., 2005; Srivastava et al., 1998; Vorhies and Morgan, 2009.

Part of the model deals with the mediation effect of marketing resources in the relationship between market orientation and business performance. Mediation represents the indirect effect of a predictor variable on a criterion variable where the mediating variable intermediates the influence of the independent variable on a dependent variable (Edwards, 2007; Fairchild and MacKinnon, 2008). According to Edwards (2007), the third variable that transmits the effect of the independent variable on the dependent variable is the mediator variable. A mediator variable

explains the relationship between an independent variable and a dependent variable addressing how or why the predictor variable accounts for the variance in the criterion variable (Bennett, 2000; Baron and Kenny, 1986; Fairchild and MacKinnon, 2008).

According to Baron and Kenny (1986) and Bennett (2000), a variable shall meet the following three properties to be taken as a mediator variable. (1) variation in independent variable significantly accounts for variation in the dependent variable, (2) variation in the independent variable significantly accounts for variation in the mediator variable, (3) when the effect of the independent variable on the mediator and the influence of the mediator on the dependent variable are controlled, the relationship between the independent variable and dependent variable is no more significant.

The basic tenet of this model is that the indirect relationship (Edwards, 2007) between market orientation and business performance when mediated by marketing resources is stronger than the direct relationship between the two variables. The proposition in this model is that market orientation significantly influences firm performance if organizations deploy the necessary marketing resources which consist of relational assets, reputational assets, product management capabilities, delivery channel linkage capabilities, market communication capabilities, marketing planning and execution capabilities for effective and efficient implementation of marketing strategies and marketing routines. Business performance is the dependent variable that comprises market based performance and financial performances. While customer satisfaction and market share define market based performance, profit and return on investment measure financial performance.

From an extensive synthesis and review of the literature on the underlying relationship between market orientation and business performance, the full SEM model that captures the latent variables and the respective indicator variables is presented in Figure 2.2.

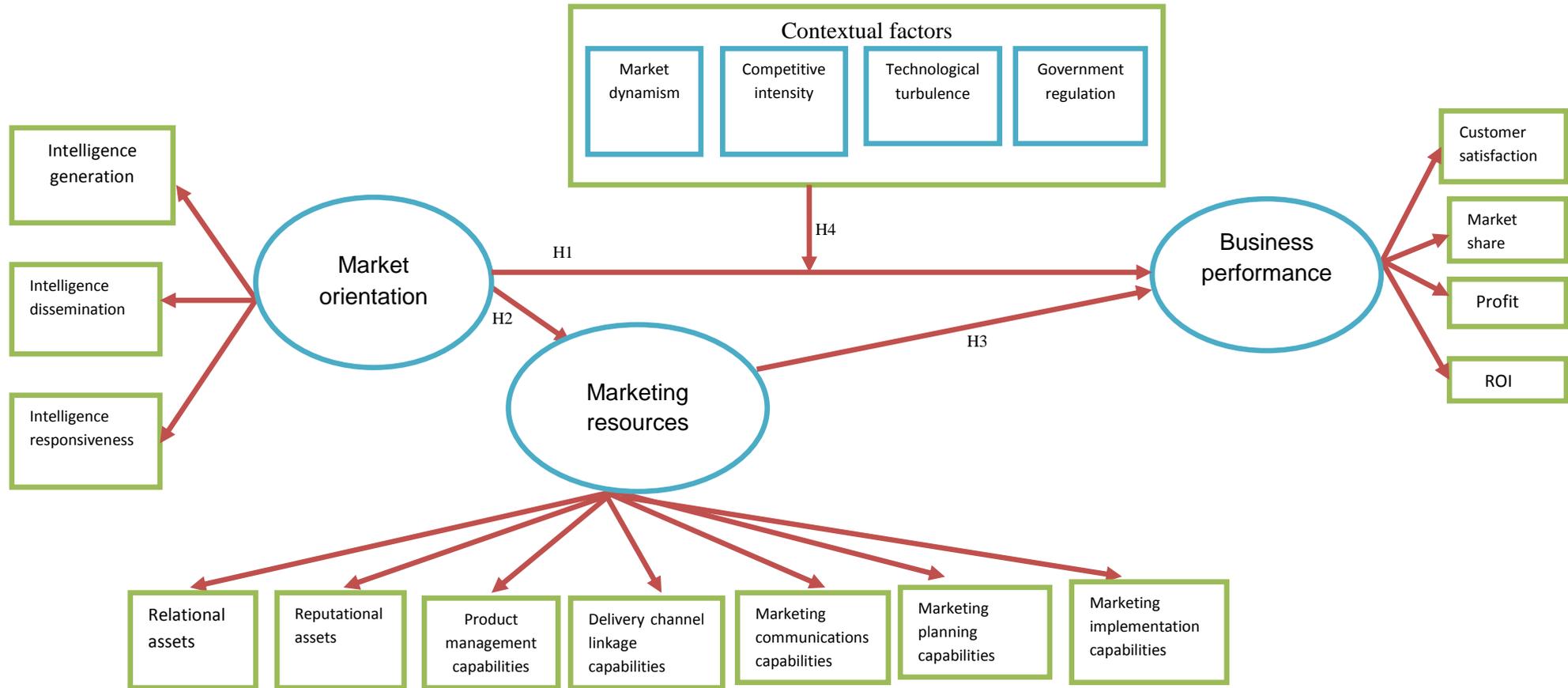


Figure 2.2: Market orientation and business performance relationship model

Source: Adapted from Ngo and O’Cass, 2012; Srivastava et al., 1998; Hooley et al., 2003; Vorhies and Morgan, 2009; Raaij et al., 2008; Kohli and Jaworski, 1990.

The exogenous variable in the model is market orientation which is expected to cause variations in the value of marketing resources and business performance. Thus, market orientation serves as an independent variable which is hypothesized to influence business performance either directly or indirectly through marketing resources. The other exogenous variable in the model was situational or contextual factors that were hypothesized to moderate the relationship between market orientation and business performance.

In other words, business performance which is the endogenous variable in the model is postulated to be directly influenced by market orientation. Besides, business performance was hypothesized to be influenced indirectly by market orientation through the mediating effect of marketing resources. As suggested by Byrne (2010), variations in the values of the endogenous variables of business performance and marketing resources can be estimated by the structure model. The model also presented empirical evidences that substantiate the positive impact of market orientation on business performance both in the short run and in the long run (Jaworski and Kohli, 1993; Narver and Slater, Tse et al., 2003). The positive effect of market orientation as a source of competitive advantage for a sustainable superior performance is also prominent in the literature (Kumar et al., 2011).

Business performance measures comprise both market based metrics and financial performance metrics. Top managers in market oriented firms prefer to use marketing metrics such as awareness, customer satisfaction, and market share (Mintz and Currim, 2013). Top management's inclination toward the use of marketing metrics in a market oriented firm is justifiable because the whole intent of adopting and implementing the marketing concept through generation of market intelligence, dissemination of market intelligence, and use of the market information for decision making is to deliver a satisfactory service with superior customer value.

Thus, customer satisfaction and market share are appropriate metrics to test the contribution of market orientation on performance. Market based performance metrics; however, do not fully reflect the monetary effect of market orientation on the firm performance. Financial performance metrics show the monetary outcomes of market orientation in terms of net profit, return on investment (ROI), and target volume (Mintz and Currim, 2013). Kumar et al., (2011) argue that market orientation should have a prominent effect on profit than sales due to the focus of market orientation on retention than attraction of customers. Superior market orientation enhances business performance as market oriented firms can generate market intelligence about customers' preferences, competitors and other market actors in the broader environment. Thus:

H₁: Market orientation directly and positively influences the business performance of banks in Ethiopia.

Effective implementation of market orientation requires availing the necessary tangible and intangible marketing resources for effective generation, dissemination and use of marketing intelligence. Morgan et al. (2009) argued that market orientation requires complementary organizational resources to significantly enhance customer value and firm performance. Ngo and O'ca ss (2012) further postulated that market orientation directs the possession and deployment of the necessary resources for the creation and maintenance of superior customer value. In this study, marketing resources comprise marketing assets and marketing capabilities. Firms should also develop marketing capabilities for effective execution of marketing routines and marketing strategies in order to satisfy customers' needs and wants profitably (Morgan et al., 2009; Hooley et al., 2005).

Market oriented firms can build a highly valued and credible brand image and reputation among their customers. Besides, market oriented firms are better positioned to possess higher level

marketing resources so that they will be able to establish long lasting and mutually benefiting relationship with their customers. Thus:

H₂: There is a direct and positive relationship between market orientation and marketing resources in the Ethiopian banking sector.

A bulk of the literature in marketing provides evidences on the existences of an indirect relationship between market orientation and business performance (Olavarrita and Friedmann, 2007) as much as the existence of a direct relationship between market orientation and business performance (Narver and Slater, 1990). A mediator is a third variable that explains how or why a dependent variable is related to an independent variable (Fairchild and McQuillin, 2009). The mediation effect that explains the relationship between two variables can be either a partial mediation or a complete mediation. According to Shrout and Bolger (2002), complete mediation occurs when the indirect effect of the third variable on the dependent variable is the same as the direct effect of the independent variable on the dependent variable.

In this study, complete mediation is said to take place if the indirect effect of marketing resources on business performance will be fully the same as the direct effect of market orientation on business performance. On the other hand, partial mediation (Olavarrita and Friedmann, 2008) is a situation where the indirect effect of the third variable partially accounts for the total effect of the independent variable on the dependent variable. In this study, partial effect is said to take place if the indirect effect of marketing resources on business performance is not totally the same as the direct effect of market orientation on business performance.

The effect of market orientation on business performance is expected to improve when banks' market orientation is complemented by or bonded together with marketing resources. Thus:

H₃: Market orientation indirectly influences the business performance of banks in Ethiopia through the mediator effect of marketing resources.

Finally, the model shows how the relationship between market orientation and business performance is moderated by market dynamism, competitive intensity, technological turbulence, and government regulation. There are empirical evidences that support the claim that market dynamism and competitive intensity (Raaij et al., 2008; Kohli and Jaworski, 1990), and technological turbulence (Jaworski, 1990) moderate the relationship between market orientation and business performance. Thus, the relationship between market orientation and business performance is expected to vary for different levels of the moderating variables. If the relationship between market orientation and business performance is significantly dependent on the moderating variables, then it will be appropriate to take the level of market dynamism, competitive intensity, technological turbulence, and government regulation into consideration in explaining the relationship between market orientation and business performance. Hence:

H₄: Market dynamism, competitive intensity, technological turbulence and government regulation moderate the relationship between market orientation and business performance.

Finally, the last hypothesis is intended to test if there is a statistically significant difference between public and private banks in terms of their market orientation, marketing resources and business performance. Thus:

H₅: There is no significant difference between public and private banks in Ethiopia in terms of market orientation, marketing resources, and business performance.

2.5 Summary of the Chapter

Market orientation is defined by Kohli and Jaworski (1990) as an organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the

intelligence across departments, and an organization wide responsiveness. Researches carried out in mature economies in general provide empirical evidences supporting the positive relationship between market orientation and business performance. Furthermore, RBV and DCV address the indirect effect of market orientation on business performance when mediated by the marketing resources.

With this background, the chapter presents a conceptual model to test the hypothesized relationship among the variables of the study using the research methodology and analysis techniques as presented in the following chapter.

CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter outlines the research approach used in the study along with the justifications for the selection of research design and methodology for data collection and analysis. Besides, the chapter presents design issues related to the population of the study, the sample unit, the sampling method and the sample size. The chapter also addresses the data analysis techniques used in the study to answer the research questions and hypotheses.

3.2 Research Approach

In this study, a quantitative approach was used for testing objective theories (Creswell, 2003) by examining the relationship among variables. A survey research design was used to measure the research variables namely market orientation, marketing resources, market dynamism, competitive intensity, government regulation and business performance. For the purpose of data collection, a structured questionnaire was used.

A successful study requires careful planning. The two most important issues in research design are a study's time dimension and its unit(s) of analysis (Ruane, 2005). Regarding the time dimension, this research was cross-sectional where information was obtained from a single group of respondents at a single point in time. As defined by Ruane (2005), the unit of analysis refers to the level of social life (the individual, the group, the organization, the geographical location, and the social artifact) that is the planned focus of a study.

The units of analysis used in this study were banks including the 3 public and the 15 private banks which have a service life of at least three years in the industry. The unit of analysis for

measuring market orientation has often been at a strategic business unit level where the key informants are top level managers (Jaworski and Kohli, 1993). However, in related previous studies, divisions and units were taken as a unit of analysis where lower level managers also become key informants (Uncles, 2011). It is believed that managers at various organizational echelons shall be the key informants so that top level managers address the broader view of the organization and lower level managers who are near to the market operation provide more candid information related to customers and the competition facing the bank. In this study, therefore, bank managers at various levels in the hierarchy including top level marketing managers and branch managers participated as respondents in the survey.

3.3 Population and Sampling Method

The population of the study covered top level marketing managers and branch managers of public and private banks which are geographically spread throughout Ethiopia. However, time and cost constraints hinder the possibility of selection of bank branches on random basis throughout Ethiopia. As a result, area sampling which is an extension of cluster sampling was used in this study. The cluster sample covered all the three public banks and fifteen private banks in Addis Ababa. Since all the banking operations provided in regions are provided by the banks based in Addis Ababa, the sample was considered to be representative.

The target population for this study covered branch managers and top level marketing managers in Addis Ababa, the capital city of Ethiopia. The 3 public and 12 private bank branch managers and top level marketing managers in Addis Ababa were the target respondents. A sample size of 507 consisting of 492 branch managers and 15 top level marketing managers participated in the survey.

On the other hand, the appropriate sample size for a study involving Structure Equation Modeling (SEM) is not well established in the literature. Meyers, Gamst, and Guarino (2006) suggest that a study that uses SEM shall be at least 50 more than 8 times the number of variables in the model. With this rule of thumb and the 18 indicator variables captured in the model, the sample size required for this study would be 194. Kline (2011), however, suggests that a typical sample size for studies where SEM is used shall be about 20 times the number of variables involved in the SEM which makes the sample size 360. Finally, according to Krejcie and Morgan's (1970) sample size determination model, when the size of the population is between 1500 and 1600, the sample size would be 310. Therefore, the sample size of 507 branch managers and top level managers was adequate for the purpose of this study.

3.4 Data Collection Method

A self administered survey was used to collect data from bank managers who represent different banks in Addis Ababa. Since the survey was self administered, the participants were requested to return the questionnaire within three weeks time. However, in reality the data collection took about 16 weeks. Later on all the questionnaires were checked to confirm that all the items were responded by the participants. Finally, 446 questionnaires were collected back of which 418 were found to be completely filled. However, out of the collected 418 questionnaires, 41 cases were found outliers so that only 377 questionnaires were used for data analysis.

The response rate of each participating bank and the overall response rate are presented below in Table 3.1.

Table 3.1 Response rate of participants

No.	Name of the bank	Number of questionnaires distributed	Number of questionnaires collected	Response rate
1	Commercial Bank of Ethiopia	133	121	90.98
2	Development Bank of Ethiopia	2	2	100.00
3	Construction and Business Bank	35	30	85.71
4	Awash International Bank	57	49	85.96
5	Dashen Bank	50	44	88.00
6	Bank of Abyssinia	33	25	75.76
7	Wegagen Bank	34	33	97.06
8	United Bank	41	37	90.24
9	Nib International Bank	41	34	82.93
10	Cooperative Bank of Oromia	16	16	100.00
11	Lion International Bank	21	18	85.71
12	Oromia International Bank	16	12	75.00
13	Zemen Bank	5	4	80.00
14	Bunna International Bank	13	11	84.62
15	Berhan International Bank	10	10	100.00
	Total	507	446	87.97

Source: Survey result, 2014

Regarding the data collection instrument, close ended questions were used in the survey questionnaire which consisted of five parts. Part one consisted of questions related to the market orientation construct, part two covered items related to marketing resources. Part three comprised of items related to the moderating variables followed by items related to business performance. Part five covered items related to the demographic profile of respondents along with the profile of the bank.

The first part of the questionnaire addressed the three dimensions of market orientation identified by Jaworski and Kohli (1993) and later adapted by kaynak and Kara (2002). The three

dimensions of market orientation covered in the questionnaire include intelligence generation, intelligence dissemination and responsiveness with 21 items. The second part of the questionnaire covered 29 items related to marketing resources that mediate the relationship between market orientation and business performance. Those items related to marketing resources were adopted from Theoharakis et al. (2009), Hooley et al. (2005), Morgan et al., (2009) and Hooley et al. (2005) and Morgan et al., (2009) were used to examine the delivery channel linkage capabilities of banks.

The third part of the questionnaire covered 16 items related to contextual factors that moderate the relationship between market orientation and business performance. The measurement scale developed by Jaworski and Kohli (1993) was adopted to measure market dynamism, competitive intensity, and technological turbulence. However, in order to capture data pertaining to government regulation, the items developed by Qu et al. (2005) were modified and included in the questionnaire.

The fourth part of the questionnaire covered scale items developed by Hooley et al., (2005) in order to measure business performance of banks in terms of market and financial performances. The measurement dimensions included in the questionnaire were customer satisfaction, market share, profit, and return on investment. The fifth and the last part of the questionnaire consisted of questionnaire items related to the bank's profile and the profile of the responding managers. The items covered in this section include the name of the bank and branch along with the position, education, and service years of the respondent. Additional information such as ownership type was accessed from secondary sources.

3.5 Measurement Instrument

The measures used in the survey instrument were drawn from literature that suits the context of the banking sector in a developing economy. The market orientation dimensions were measured by the scales developed by Jaworski and Kohli (1993). Marketing resources which represent the mediating variable in the model were measured by the scales developed by Hooley et al., (2005), Theoharakis et al. (2009), and Morgan et al., (2009) and Hooley et al., (2005). Finally the market based performance and the financial performance were measured by the self assessment scale developed by Hooley et al., (2005).

The level of measurement scales employed in this study was dominantly a summative response scale. A summative response scale was used to capture data on market orientation dimensions, marketing resources, situational factors, and business performance. According to Meyers, Gamst, and Guarino (2006, p. 20), “a summative response scale requires respondents to assign values to entities based on the underlying continuum defined by the anchors on the scale. The numbers were ordered in an ascending way to reflect more of the property being rated. Most common are 5-point and 7-point scales”. Cooper and Schindler (2003) elaborate that summated rating scales are used to measure the respondents’ favorable and unfavorable attitude or the degree of agreement or disagreement of the respondent with the questionnaire items. Aaker et al., (1999) explicate that a Likert scale is also called summated scale for the simple reason that scores on each item can be summed to arrive at the total score of respondents. They further suggest that the evaluative component of summative scales ranges from “strongly agree” to “strongly disagree”. Thus the summative response scales represent “assumed interval” or seemingly Likert scale because each designation in the continuum defined by the anchors is one unit away from the preceding scale (Burns and Bush, 1998).

Since a mean can be computed on data captured through a summative response scale and the average derived from a summative response scale is meaningful (Meyers, Gamst, and Guarino, 2006), parametric statistical procedures can be used in the analysis. The levels of measurement scales used for capturing data on respondent's position, education, and service years were coded with nominal scales to which non-parametric tests can be used.

3.5.1 Market Orientation Measures

The two extensively used measures of market orientation in the literature are the MARKOR scale developed by Jaworski and Kohli (1993) and the MKTOR scale developed by Narver and Slater (1990). Even though the two measures have been found theoretically valid and consistent, there are divergent views on the superiority of either of the two scales with better predictor power on firm performance. Oczkowski and Farrell (1998) reported that MKTOR has higher level of reliability than MARKOR. However, their finding was challenged in the meta-analysis conducted by Cano et al., (2004) in explaining the relationship between market orientation and business performance across the 5 continents, where a stronger relationship of (r) 0.42 was recorded when MARKOR was used as compared to a weaker relationship of (r) 0.28 when MKTOR was used and a relationship of (r) 0.33 when a mixed scale was used.

Therefore, as the MARKOR scale accounts for a significant proportion of variance in explaining the effect of market orientation on business performance, the same scale as modified by Kaynak and Kara (2002) was used by this study with a five point scale ranging from strongly disagree to strongly agree. A five point scale was chosen over a seven point scale because respondents in developing countries articulated fewer scale points better than that of larger scales (Kaynak and Kara, 2002; Malhotra, 1999).

The scale items used in this study to measure market orientation are presented below in table 3.2.

Table 3.2 MARKOR items

Intelligence generation

- 1 In our bank, we meet with customers at least once a year to find out what banking products they will need in the future.
- 2 Employees from our bank interact directly with customers to learn how to serve customers needs better.
- 3 In our bank, we do a lot of in-house market research.
- 4 Our bank is fast enough to detect changes in our customers' product/service preferences.
- 5 Our bank surveys end-users at least once a year to assess the quality of financial service offerings.
- 6 Our bank periodically reviews the likely effect of changes on the banking environment such as competition, regulations and technology on customers.

Intelligence dissemination

- 1 Our bank holds interdepartmental meetings at least once a quarter to discuss market trends and developments.
- 2 Marketing personnel in our bank take time to discuss customers' future needs with other functional departments.
- 3 Our bank periodically circulates documents (e.g., reports, and newsletters) that provide information on our customers.
- 4 Data on customer satisfaction are disseminated at all levels in our bank on a regular basis.

Responsiveness

- 1 In our bank, principles of market segmentation drive new banking product development efforts.
 - 2 Our bank tends to pay attention to changes in the customer's product/service needs.
 - 3 Our bank periodically reviews the product development efforts to ensure that they are in line with what customers want.
 - 4 Our bank plans are driven more by technological advances than by market research.
 - 5 Several departments of the bank get together periodically to plan a response to changes in our business environment.
 - 6 If a major competitor were to launch an intensive campaign targeted at our customers, the bank responded immediately.
 - 7 The activities of the different departments in this bank are well coordinated.
 - 8 Customer complaints are properly handled in our bank.
 - 9 When our bank comes up with a great marketing plan, we can implement it in a timely fashion.
 - 10 When our bank finds out that customers are unhappy with the quality of the service, we take corrective actions immediately.
 - 11 When the bank finds that customers would like to modify a product or service, the departments involved make concerted efforts to do so.
-

3.5.2 Marketing Resources Measures

The extent to which banks possess relational assets and reputational assets was captured via items developed by Hooley et al. (2005) and Theoharakis et al. (2009). The instrument developed by Morgan et al. (2009) was used to measure the marketing capabilities of banks including product management capabilities as a proxy measure of innovation, delivery channel linkage capabilities, marketing communication capabilities, marketing planning capabilities, and marketing implementation capabilities. A five point Likert-type scale anchored at 1 being strongly disagree to 5 being strongly agree was used. The measurement items employed in this study to capture marketing resources are presented below in Table 3.3.

Table 3.3 Marketing resources items

Relational assets

- 1 The level of customers' satisfaction in our bank is better than that of competitors.
- 2 The level of customers' attraction of our bank is better than that of competitors.
- 3 The level of customers' retention of this bank is better than that of competitors.
- 4 This bank has a centralized customer data base system for better usage of customer information in comparison with other banks.
- 5 The level of employees' job satisfaction in this bank is better than that of competitors.
- 6 The level of employees' retention of this bank is better than that of competitors.

Reputational assets

- 1 Our bank has a strong brand name and reputation compared to other competitive banks.
- 2 Our bank commands more credibility with customers than other competitive banks as it is well established in the market.

Product capabilities

- 1 Our bank has the capability to develop new banking products.
- 2 Our bank ensures that product development efforts are responsive to customer needs.

Delivery channel linkage capabilities

- 1 Our bank has the ability to open up as many new branches as possible to make the banking services conveniently available to customers.
- 2 Our bank has the ability to use automated banking services such as ATM or telephone banking to reach out as many customers as possible.
- 3 Our bank has the capability to develop safe and secure systems so that our customers develop confidence in using electronic banking services.
- 4 Our bank delivers superior levels of customer service and support to its customers.
- 5 Our bank is good at understanding customer needs and requirements.
- 6 Our bank has effective relationships with key target customers.
- 7 Our bank is good at creating relationships with customers.
- 8 Our bank is good at maintaining and enhancing relationships with our customers.

Marketing communication capabilities

- 1 Our bank has the ability to successfully develop and execute advertising campaigns.
- 2 Our bank has effective Public Relation (PR) capabilities.
- 3 Our bank has the capability to build strong and valued brand image.
- 4 Our bank has a user friendly/interactive website.

Marketing planning capabilities

- 1 This bank has the capability to develop a thorough marketing plan.
- 2 This bank has the ability to effectively segment and target its market.
- 3 This bank has the ability to develop creative marketing strategies.

Marketing implementation capabilities

- 1 Our bank has the ability to allocate marketing resources effectively.
 - 2 Our bank has the organizational ability to effectively execute marketing programs.
 - 3 Our bank has the ability to translate marketing strategies into action.
 - 4 Our bank has the ability to execute marketing strategies in a timely manner.
-

3.5.3 Moderating variables measures

How the relationship between market orientation and business performance would be moderated by market dynamism, competitive intensity, technological turbulence, and government regulation was tested based on the items developed by Jaworski and Kohli (1993) and Qu et al. (2005). The scale items used in this study to measure moderating variables are presented below in Table 3.4 below.

Table 3.4 Moderating variables items

Market dynamism

- 1 Over time in the banking sector, customers' product preferences have changed quite a bit.
- 2 Our customers tend to look for new banking products all the time.
- 3 New customers tend to have product-related needs that are different from those of our existing customers
- 4 We cater to many of the same customers that we used to in the past.

Competitive intensity

- 1 Competition in the banking sector is intensive.
- 2 There are many aggressive promotion campaigns in the banking sector.
- 3 Anything that one bank can offer, other banks can match readily.
- 4 Our competitors are relatively weak.

Technological turbulence

- 1 The technology in the banking sector is changing rapidly.
- 2 Technological changes provide big opportunities in the banking sector.
- 3 It is difficult to forecast where the technology in the banking sector will be in the next 2 to 3 years.
- 4 Technological developments in the banking sector are rather minor.

Regulations

- 1 The government is making too many decisions on behalf of the banking sector.
 - 2 The government has very restrictive rules on the business scope of banks.
 - 3 Many more new banks would enter the banking sector if there were fewer government regulations to comply with.
 - 4 There are adequate laws and regulations to ensure fair competition in the banking sector.
-

3.5.4 Performance Measures

Business performance was measured through various metrics including cost based performance (profit) and revenue based performance (market share). In this study, business performance represents market based measures (customer satisfaction and market share) and financial based measures (profit and ROI). Performance measures used by Hooley et al. (2005) were employed in this study. The subjective or self assessment measures presented in Table 3.5 anchored at a 5 point scale ranging from 1 being “worse than” to 5 being “better than” competitors were used in this study.

Table 3.5 Business performance measurement items

Market performance

- 1 Please rate the customer satisfaction of this bank in comparison to competitive banks.
- 2 Please rate the market share of this bank in comparison to competitive banks.

Financial performance

- 1 Please rate the profit of this bank in comparison to competitive banks.
 - 2 Please rate the return on investment of this bank in comparison to competitive banks.
-

3.6 Reliability of the Measurement Scales

Reliability and validity are the two pillars of scientific research methods. According to Cooper and Schindler (2003, p. 236), “a measure is reliable to the extent that it supplies consistent results”. The reliability of the measuring instrument shall be ensured even before considering the validity of the measurement instrument. From a measurement perspective, reliability is defined as the degree to which the measures are free from error so that the consistency of the results is assured (Fuchs and Diamantopoulos, 2009). Similarly, Leary (2014, p.67) provided a concise

definition of reliability as “the consistency or dependability of a measuring technique”. Generally, it is believed that reliability tests help to evaluate the quality of the data.

In this study, Cronbach alpha coefficient was used to examine the internal consistency of the items. According to Nunnally (1978) and Churchill (1979), the measurement scale would be considered as reliable if the Cronbach alpha is 0.70 or higher. In order to ensure the reliability of the measurement instrument, a pilot test was conducted among 30 branch managers. Based on the feedback of the pilot test, the necessary corrections were made on the content of the items, wording of the items, and instructions to further improve the reliability and validity of the measures.

3.7 Measurement Validity

Aaker et al., (1999) purport that a measure has validity if it measures what it is supposed to measure. Cooper and Schindler (2003) share the same view and define validity as “the extent to which a test measures what we actually wish to measure”. Cooper and Schindler (2003) emphasized that “reliability is a necessary contributor to validity but is not a sufficient condition for validity.”

In this study, the content validity of the measuring instrument was determined through careful definition of the constructs and their relationship based on thorough analysis of the literature. Confirmatory Factor Analysis (CFA) was used to test the convergent validity of the measuring instrument. As suggested by Kline (2011), if all the indicator variables that measure a common latent variable have a loading of 0.70 or higher, it indicates convergent validity.

All the necessary precautions were taken to ensure the validity of the data collection instrument. A systematic and exhaustive literature review was conducted to identify the valid measures of

the variables involved in the model. The content validity of the data collection instrument was ensured through evaluation of the quality of the reported findings on those measures using systematic literature review. Besides, seven bank experts and five marketing experts were requested for their opinion on the relevance, appropriateness, and adequacy of the questionnaire before conducting the pilot test. The feedback obtained from the senior and highly experienced bank professionals and experts was considered to modify the content, layout, and presentation of the questionnaire. Later on, appropriate corrections were made on the data collection instrument based on the feedback obtained from the pilot study.

The construct validity of the measurement instrument helps to examine the degree to which the instrument measures the relevance of the theoretical constructs. In this study, the construct validity was evaluated through CFA. Construct validity involves convergence validity and discriminant validity. Since there was only a single exogenous variable in this study, it was realized to be impossible to evaluate discriminant validity. The convergence validity of the model, however, was evaluated by assessing the degree to which the indicator variables represented their respective latent variables.

3.8 Data Analysis Techniques

3.8.1 Structural Equation Modeling

Structural equation modeling (SEM) was used to test the extent to which measurement model and the structural model fits the sample data. Confirmatory factor analysis (CFA) was employed to test the degree to which the respective indicator variables capture the domain of each of the four latent constructs: market orientation, marketing resources, situational/contextual factors, and

business performance. The structural model was used to examine the relationships between the stated latent variables.

Structural Equation Modeling (SEM) has become the most popular and widely used methodology in studies on market orientation (Ngo and O’Cass, 2012); Hooley et al., 2005; Vorhies and Morgan, 2009). As outlined by Byrne (2010), SEM has preferential characteristics. First, SEM helps to analyze data for inferential purposes including hypotheses testing. Second, SEM helps to estimate measurement errors related to the measured variables and residual errors related to the endogenous variables. Unlike SEM, however, most multivariate procedures cannot estimate measurement errors. Third, SEM comprises both latent and measured or observed variables in the model unlike the traditional multivariate statistical procedures.

Therefore, SEM was considered to be an appropriate analytical tool for this study due to the following three major reasons.

- (1) The study was primarily deductive in nature with a theoretical model that exhibited the direct and indirect relationship between market orientation and business performance a priori. SEM was used for this study because it was appropriate to confirm or reject the proposed model based on the observed data.
- (2) The study was intended to examine the direct relationship between market orientation and business performance and the indirect relationship between the two variables through the mediated effect of marketing resources. The structural model would be appropriate to test the stated hypothetical relationship among the latent variables.
- (3) The study examined the extent to which the adapted measurement instruments related to each of the indicator variables represented the theoretical constructs: market orientation,

marketing resources, and business performance. The measurement model in the CFA was appropriate to test the construct validity of the measures examining how well the observed variables represented each of the latent variables: market orientation, marketing resources, and business performance.

As suggested by Meyers, Gamst, and Guarino (2006), the relationship of the variables in the model was computed using the Maximum Likelihood Estimation (MLE) procedure which estimated the values of the parameters that would result in the highest likelihood of the actual data to the proposed model. The hypothesized structural equation model consisted of one exogenous variable, two endogenous variables, fourteen indicator variables, fourteen unique error terms, and two residual error terms as exhibited below in Figure 3.1. The model also specified the hypothetical relationships between the latent variables: market orientation, marketing resources, and business performance.

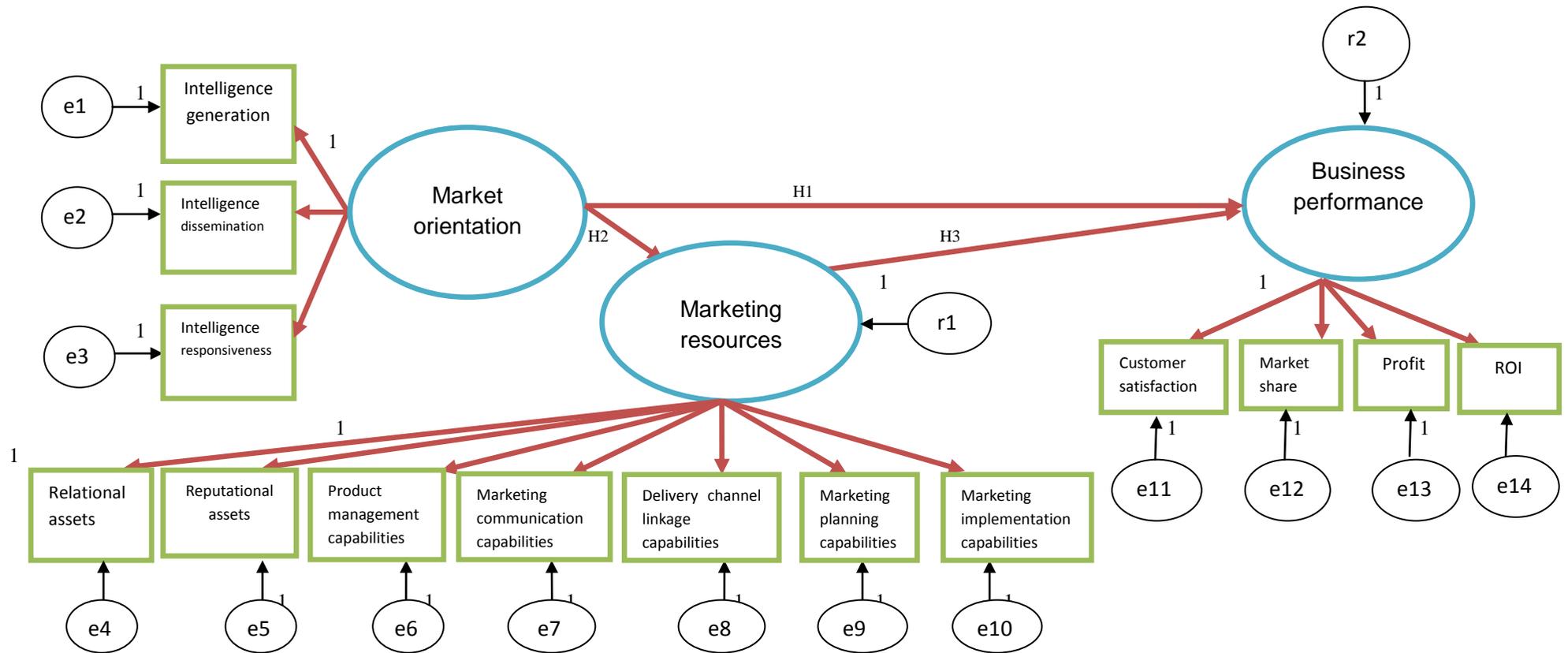


Figure 3.1: The full structural model of market orientation and business performance

Source: Adapted from Ngo and O’Cass (2012); Hooley et al. (2003); Srivastava et al. (1998) Vorhies and Morgan; (2009) Raaij et al., (2008); and Kohli and Jaworski (1990).

The model presented above in figure 3.1 above was the full structural equation model because it represented both the measurement model and the structural model. As discussed by Byrne (2010), the measurement model or the CFA model shows the link between the latent variables and their indicator variables. Therefore, the model depicted the relationship between the latent variables: market orientation, marketing resources and business performance on the one hand and all the respective observed measures of each unobserved variable on the other hand. This model was a recursive model as it depicted the relationship between latent variables: market orientation, marketing assets, marketing capabilities, and business performance from one direction only.

The full SEM has three latent variables: ξ_1 , ξ_2 , and ξ_3 in circles that are manifested by fourteen indicator variables x_1 through x_{14} in rectangles. In the measurement model, the single headed arrows pointing away from the circles show a direction of causal influence between the latent variables and the respective observed variables. In the structural model, the single headed arrows pointing away from the circles to another circle showed a direction of causal effect between a latent variable and another latent variable.

The notation for the latent variables was ξ which represented common factors. While ξ_1 represented market orientation, ξ_2 represented marketing resources and ξ_3 represented business performance. ξ_1 influenced three indicator variables: x_1 (intelligence generation), x_2 (intelligence dissemination), and x_3 (responsiveness). Therefore ξ_1 caused x_1 , x_2 , and x_3 . ξ_2 influenced seven observed variables: x_4 (relational assets), x_5 (reputational assets), x_6 (product management capabilities), x_7 (delivery channel linkage capabilities), x_8 (marketing communication

capabilities), x_9 (marketing planning capabilities), and x_{10} (marketing implementation capabilities). Similarly ξ_3 influenced four indicator variables: x_{11} (customer satisfaction), x_{12} (market share), x_{13} (profit), and x_{14} (return on investment).

Factor loadings were represented by λ_{ij} where i represented observed variable and j represented latent variable. λ_{11} represented the regression slope or the effect of market orientation on intelligence generation, λ_{21} represented the regression slope of market orientation on intelligence dissemination, and λ_{31} represented the regression coefficient of market orientation on responsiveness. λ_{12} represented the regression slope of marketing resources on relational assets, λ_{22} represented the regression coefficient of marketing resources on reputational assets, λ_{32} represented the effect of marketing resources on product management capabilities, λ_{42} represented the regression slope of marketing resources on delivery channel linkage capabilities, λ_{52} represented the regression coefficient of marketing resources on marketing communication, λ_{62} represented the regression slope of marketing resources on marketing planning, and λ_{72} represented the effect of marketing resources on marketing implementation. λ_{13} represented the regression coefficient of business performance on customer satisfaction, λ_{23} represented the regression slope of business performance on market share, λ_{33} represented the effect of business performance on profit, and λ_{43} represented the regression coefficient of business performance on return on investment.

The squared factor loading λ^2_{ij} represented the proportion of variance in the i th observed variable that is explained by the j th latent variable. The circles labeled e represented the unique error variance in each x_i which was not captured by the latent variable. Error variances e_1 to e_3

represented the unique error variance of intelligence generation, intelligence dissemination, responsiveness respectively. Similarly, error variances related to relational assets, reputational assets, product management capabilities, delivery channel linkage capabilities, marketing communication, marketing planning, and marketing implementation are captured e_4 to e_{10} . Besides, e_{11} to e_{14} represented error variances related to customer satisfaction, market share, profit, and return on investment.

r_j represented residual error variance related to each of the latent variables in the structural model. r_j showed the proportion of variance of the endogenous variable which is not captured by the exogenous variable or an independent endogenous variable. Therefore, r_1 represented the residual error variance of marketing resources and r_2 represented the residual error variance of business performance.

The confirmatory factor model or the measurement model has been summarized in the following equation.

$$X = \Lambda\xi + e$$

X represented the vector of the observed variables, Λ (lambda) represented the matrix of the factor loadings connecting ξ_j to the x_i , ξ represented the vector of the latent variables and e represented the unique variance. It was assumed that the sum of the error terms would be zero and the error terms and the latent variables were uncorrelated. The above equation, therefore, has been rewritten as follows.

$$x_1 = \lambda_{11}\xi_1 + e_1$$

$$x_2 = \lambda_{21}\xi_1 + e_2$$

$$x_3 = \lambda_{31}\xi_1 + e_3$$

$$x_4 = \lambda_{12}\xi_2 + e_4$$

$$x_5 = \lambda_{22}\xi_2 + e_5$$

$$x_6 = \lambda_{32}\xi_2 + e_6$$

$$x_7 = \lambda_{42}\xi_2 + e_7$$

$$x_8 = \lambda_{52}\xi_2 + e_8$$

$$x_9 = \lambda_{62}\xi_2 + e_9$$

$$x_{10} = \lambda_{72}\xi_2 + e_{10}$$

$$x_{11} = \lambda_{13}\xi_3 + e_{11}$$

$$x_{12} = \lambda_{23}\xi_3 + e_{12}$$

$$x_{13} = \lambda_{33}\xi_3 + e_{13}$$

$$x_{14} = \lambda_{43}\xi_3 + e_{14}$$

According to Meyer, Gamst, and Guarino (2006), once a model was specified it is essential to check if the model was identified. Model identification involves determination of the degree of freedom by subtracting the number of non-redundant or known variables specified in the model from the number of parameters or unknown variables to be estimated by the model. The number of known variables comprised of the number of elements in a matrix that represents the covariances or correlations of the indicator variables.

The number of non-redundant variables was computed by using the following formula as specified by Meyer, Gamst, and Guarino (2006)

$$\text{Number of non-redundant elements} = [V (V + 1)] / 2$$

Where V is the number of indicator variables captured in the measurement model.

Therefore, the pairing of the 14 indicator variables which represent the non-redundant elements in the correlation matrix has been 105.

$$\text{Number of non-redundant elements} = [14 \times (14 + 1)] / 2 = 105$$

In order to determine the number of parameters to be estimated by the model, the latent variables have to be scaled by constraining one of the paths from the unobserved construct to one of its measured (reference) variable by assigning 1 to the selected pattern or structure coefficient (Meyer, Gamst, and Guarino, 2006). These authors further explained that although one of pattern coefficients linking the latent variable to one of the indicator variables is specified to run the

analysis, SEM uses a maximum likelihood estimation procedure which would finally generate an estimated loading to the chosen indicator.

Therefore, as depicted above in figure 3.1, while intelligence generation was identified as an indicator to initially scale market orientation, relational assets was identified to scale marketing assets; product management capabilities was identified to scale marketing capabilities; and customer satisfaction was identified as an indicator to scale business performance.

The next task was to determine the number of unknown parameters by identifying the number of variances and the number of pattern and structure coefficients that would be estimated by the statistical procedure. The number of variance to be estimated by the statistical procedure included (a) 1 exogenous variable, (b) 14 unique error terms related to the indicator variables, and (c) 2 residual error terms related to the endogenous variables. The number of pattern or structure coefficients to be estimated included: (a) 11 structural coefficients linking latent variables to measured variables where three of them were constrained, and (b) 3 structure coefficients measuring the link between the latent variables.

The total number of the unknown parameters to be estimated by the statistical procedure was 31. The degree of freedom which represented the difference between the number of known or non-redundant variables in the analysis and the number of unknown parameters to be estimated was 74. Therefore, the model was over identified as the degree of freedom was positive.

Once the model was over-identified, estimation of the factor loadings, factor correlations, and measurement error variances took place (Stevens, 2009). Assessment of the fit of the model or the fit statistics was divided in to two categories: i) measures of the overall fit of the model and ii) individual model parameters such as factor loading or correlation (Stevens, 2009). The AMOS program was used to estimate the relationship between the variables in the model based on the maximum likelihood estimation procedure. As stated by Kline (2011, p. 93), model estimation would help to evaluate if the model was fit and to determine how well the model explained the data.

The chi-square (χ^2) statistic was used in this study to evaluate the overall fit of the model. The chi-square (χ^2) test was used to test the difference between the hypothesized correlation/covariance matrix and the correlation/covariance matrix of the actual data (Meyeres, Gamst, and Guarino, 2006). As noted by these authors, if the proposed and the actual matrices are consistent with one another, then the chi-square (χ^2) will be non-significant ($p > 0.05$), so that the structural equation model would be considered a credible explanation for the hypothesized relationships.

Moreover, as suggested by Meyeres, Gamst, and Guarino (2006), in addition to chi-square (χ^2), specific absolute, relative, and parsimonious fit indexes were used in this study. The absolute fit indexes measured the extent to which the correlation/covariance of the postulated model fits the correlation/covariance of the actual data. Relative fit indexes compared the fit of the postulated model to a baseline or null model (Stevens, 2009). Finally, parsimonious fix indexes were used to measure if additional parameters could be added to the model (Meyeres, Gamst, and Guarino,

2006). As suggested by Meyeres, Gamst, and Guarino (2006), the overall fit of the model was measured by the chi-square statistic and the individual fit indexes were measured by the following statistic with the respective evaluation criteria as shown below in Table 3.6 Meyeres, Gamst, and Guarino (2006).

Table 3.6 Model fit evaluation criteria

Fit indexes	Threshold value
Absolute fit measures	
Chi-square	> 0.05
Goodness-of-fit index (GFI)	> 0.90
The root mean squared residual (RMSR)	< 0.05
The root mean squared error of approximation (RMSEA)	< 0.08
Relative fit measures	
Comparative fit index (CFI)	> 0.95
Normed fit index (NFI)	> 0.90
Incremental fit index (IFI)	> 0.90
Relative fit index (RFI)	> 0.90
Parsimonious fit measures	
Parsimonious normed fit index (PNFI)	> 0.50
Parsimonious comparative fit index (PCFI)	> 0.50

Source: Meyeres, Gamst, and Guarino (2006)

The next stage in the model evaluation was to analyze whether the factor loadings or pattern coefficients were statistically significant and meaningful. According to Meyeres, Gamst, and Guarino (2006, p.563), all the factor loadings or structure coefficients would be statistically significant at a priori alpha level if $p < 0.05$. Besides, the pattern coefficients would be meaningful or practically significant if their value was greater than > 0.30 . In this study, the statistical and practical significance of the factor loadings or pattern structures were assessed to determine whether market orientation was composed of intelligence generation, intelligence dissemination, and intelligence responsiveness. The statistical and practical significance of the factor loadings or pattern structures were checked to evaluate whether marketing resources were represented by relational assets, reputational assets, product management capabilities, delivery channel linkage capabilities, marketing communications capabilities, marketing planning, and marketing implementation capabilities. Finally, the same procedure was used to see if the factor loadings indicate that business performance is composed of customer satisfaction, market share, profit, and return on investment.

3.8.2 Mediation Analysis

It has been clearly stated in the conceptual framework that there are ample theoretical and empirical evidences that support the positive relationship between market orientation and business performance, market orientation and marketing resources, and finally marketing resources and business performance. Therefore, a mediation model would be appropriate to examine the indirect effect since the logical ordering of market orientation, marketing resources, and business performance was well established theoretically and empirically in the literature.

In order to test the mediation effect of marketing resources in the relationship between market orientation and business performance, the regression equations were estimated as follows.

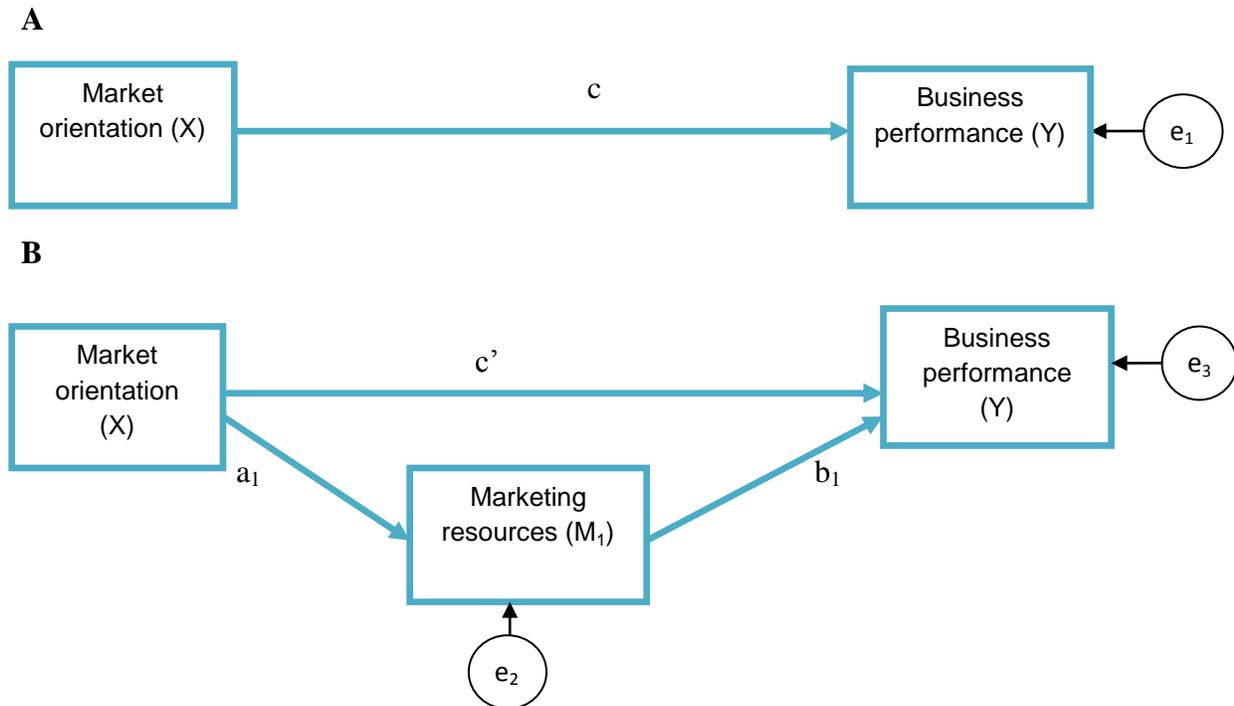


Figure 3.2: The multiple mediator model

$$Y = i_1 + cX + e_1 \quad \dots\dots\dots(1)$$

$$M_1 = i_2 + a_1X + e_2 \quad \dots\dots\dots(2)$$

$$Y = i_3 + c'X + b_1M_1 + e_3 \quad \dots\dots\dots(3)$$

Where, i_1 , i_2 , and i_3 were intercepts, e_1 , e_2 , and e_3 are error terms of residuals, c was the total effect of market orientation on business performance, and c' is the direct mediated effect of market orientation on business performance. The total effect of market orientation on business performance was represented by c and the direct effect of market orientation on business

performance after controlling for the effect of marketing resources was represented by c' . Therefore, the indirect effect of market orientation on business performance would be $c - c'$ which is the product of a_1 and b_1 . The effect of market orientation on marketing resources was represented by a_1 and the effect of marketing resources on business performance was represented by b_1 . Therefore, the total effect as measured by c would be as follows.

$$c = c' + a_1b_1 \dots\dots\dots(4)$$

The first equation regressed business performance (Y) on market orientation (X), the second equation regressed marketing resources (M_1) on market orientation (X), and the last equation regressed business performance (X) on both marketing resources (M_1) and market orientation (X). As suggested by Edwards and Lambert (2007) and Bennett (2000), if the direct relationship between market orientation and business performance reduced when marketing resources was in the model, it would support the hypotheses that marketing resources are mediators of the relationship between market orientation and business performance. Therefore, if a mediation effect exists as shown in the second equation, then market orientation affects marketing resources. Besides, market orientation shall affect business performance as shown in the first equation. Finally, when the mediating variable: marketing resources was controlled, the effect of market orientation on business performance would be low and insignificant.

Mediation analysis can be performed through three methods: (1) the causal steps approach, (2) the product-of-coefficients approach, and (3) the bootstrap method (Fritz et al., 2012; Hayes, 2009; Shrout and Bolger, 2002). The causal step approach estimates the paths of the mediation model through the OLS or SEM methods (Preacher and Hayes, 2008). The causal method

requires several criteria to be met. A variable will be taken as a mediator if the independent variable significantly explains a portion of the variability in the mediator variable, the independent variable significantly accounts for variation in the dependent variable, the mediator variable significantly explains the portion of the variance in the dependent variable when the independent variable is controlled and the effect of the independent variable on the dependent variable decreases when the mediator variable is used with the independent variable as predictor of the outcome variable (preacher and Hayes, 2008). The causal steps approach is found to be poor in terms of statistical power (Fritz et al., 2012) and it cannot quantitatively determine the indirect effect as well.

The product of coefficients approach, which is also known as the Sobel test, estimates the standard error ab and determines the ratio of ab to its standard error to determine the existence of an indirect effect (Hayes, 2009). The result of the difference-in-coefficients tests, which is measured by $c - c'$ is equivalent to the result of the product-of-coefficients test, which is measured by ab , ie., $c - c' = ab$. However, as mentioned by Hayes (2009), the product-of-coefficients approach draws the normal distribution assumption of the sample distribution of the indirect effect where in actuality the sampling distribution is often asymmetric.

In this study a bias-corrected bootstrap method was used for testing the indirect effect of market orientation on business performance mediated by marketing resources. Bootstrapping is a nonparametric re-sampling method which does not require the assumption of normality of the sampling distribution (Preacher and Hayes, 2008). Fritz et al. (2012) found that the bootstrap method has a better statistical power. Fairchild and MacKinnon (2008) also established that the

bootstrap method is the best approach for estimating indirect effect for its power, validity, and control of Type-I error. Furthermore, Hayes (2009) claimed that the bootstrapping method is superior for testing the intervening effect as it does not require the normality of the sampling distribution of the indirect effect.

The bootstrapping method generates re-samples of the sample with replacement so that the newly constructed resample is an empirical representation of the mediated effect with a larger sample taken from the original population (Fritz et al., 2012; Shrout and Bolger, 2002; Hayes, 2009). In this study, at least 2000 bootstrap samples were constructed. As suggested by Fritz et al., (2012), the estimator a_1b_1 was computed and separate significance tests for the mediator were conducted. Finally a_1b_1 estimator was used to determine the total mediated effect. Therefore, total mediated effect = a_1b_1 .

3.8.3 Moderation Analysis

A moderator variable is a third variable (z) that changes the strength and direction of the relationship between an independent variable (x) and a dependent variable (y) (Fairchild et al., 2010). Moderated causal relationship exists when the relationship between the predictor and the outcome variables is moderated by a third variable in such a way that the nature of the relationship between the focal independent variable and the dependent variable changes depending on the values of the moderating variable. Moderated relationship is conceptualized in terms of variation of the effect of the independent variable (x) on the dependent variable (y) depending on the level of the third variable which is called the moderator variable (z) (Jaccard and Turrisi, 2003).

As stated by Allison (1977), the use of a product term that represents the multiplication of the focal independent variable (x) and the moderator variable (z) in a multiple regression is an appropriate way to test the interaction effect of the two predictor variables on the outcome variable (y). The predictor variables are believed to have an interaction effect on the dependent variable (y) if the effect of the independent variable varies due to variation in the level of the moderator variable (z). The presence of interaction effect was tested by incorporating the product of the focal independent variable (x) and the moderator variable (z) as additional variables in a multiple regression model. Allison (1977) stated that the unstandardized coefficients and the t -test for the product term would not be affected by the inclusion of constants to the variables in the model.

In this study, a moderated or hierarchical regression analysis was used to test how variations in the moderator variables: market dynamism, competitive intensity, and government regulation affect the relationship between market orientation and business performance.

For specifying the moderation model, product terms were identified by taking the product of the independent variable and the moderator variables (Henseler and Chin, 2010). In this study, market orientation represented the focal independent variable and market dynamism, competitive intensity, and government regulation constituted the moderating variables. Therefore, the interaction term would have 3 product indicators as shown in figure 3.3.

As depicted in Figure 3.3, x represented market orientation (the independent variable), z_1 represented market dynamism, z_2 represented competitive intensity, and z_3 represented

government regulation. Finally, xz_1 , xz_2 , and xz_3 defined the interaction terms between the independent variable and the three indicators of the three moderating variables. Finally y represented business performance (the dependent variable).

The regression coefficient b_1 showed the effect of market orientation on business performance controlling for the moderating variables and the interaction terms. Similarly, b_2 showed the effect of market dynamism on business performance controlling for market orientation, competitive intensity, government regulation and the interaction terms. While b_3 showed the effect of competitive intensity on business performance controlling for market orientation, market dynamism, government regulation and the interaction terms, b_4 showed the effect of government regulation on business performance controlling for market orientation, market dynamism, competitive intensity and the interaction terms.

Similarly, while b_5 showed the interaction effect of market orientation and market dynamism on business performance controlling for market orientation, market dynamism, competitive intensity, government regulation and the other two interaction terms; b_6 showed the interaction effect of market orientation and competitive intensity on business performance controlling for market orientation, market dynamism, competitive intensity, government regulation and the other two interaction terms. Besides, b_7 showed the interaction effect of market orientation and government regulation on business performance controlling for market orientation, market dynamism, competitive intensity, government regulation and the other two interaction terms.

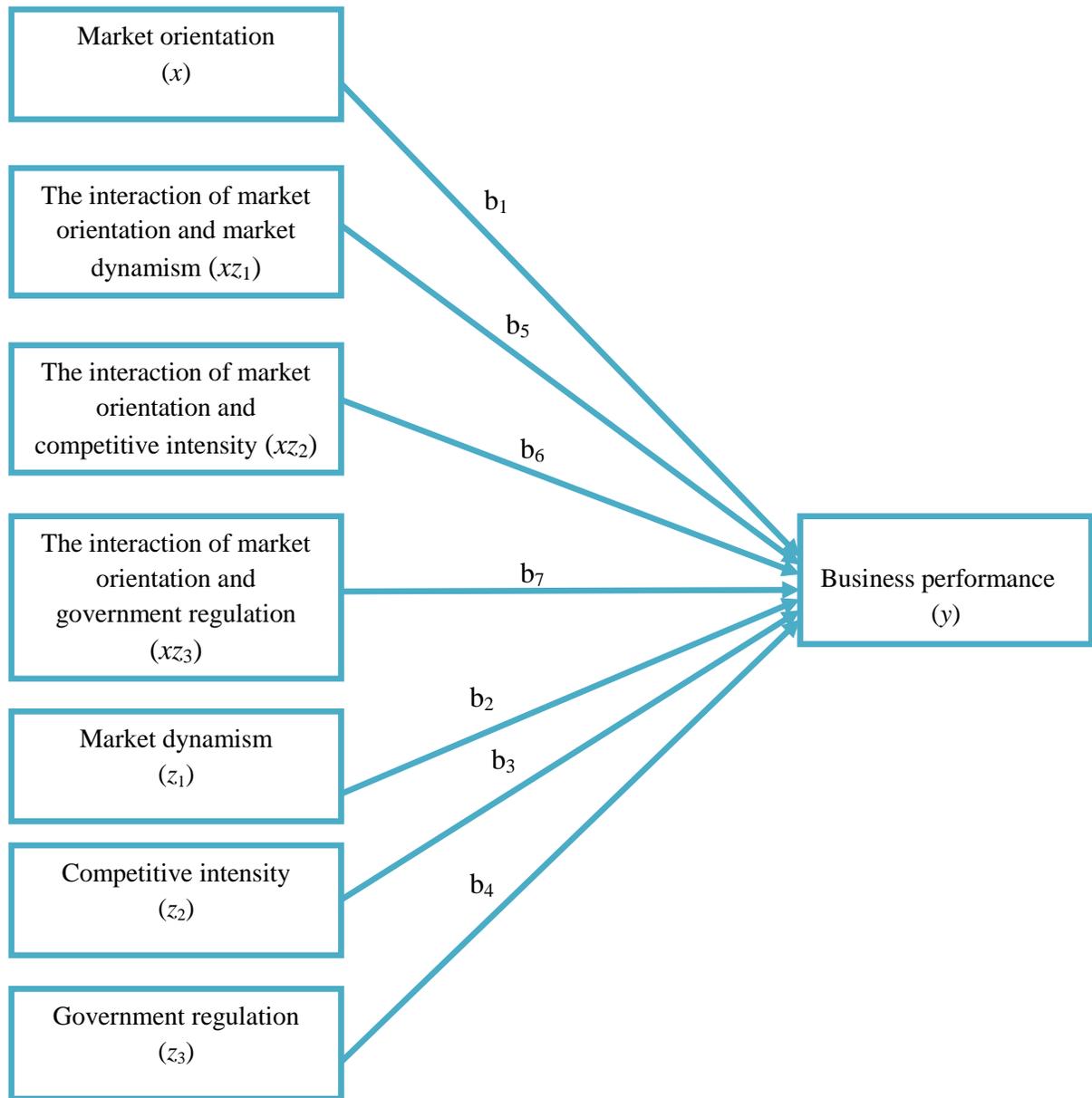


Figure 3.3: Moderation effect model

The hierarchical multiple regression equation has been modelled as follows.

x = Market orientation

zx_1 = The interaction effect of market orientation and market dynamism

zx_2 = The interaction effect of market orientation and competitive intensity

zx_3 = The interaction effect of market orientation and government regulation

z_1 = Market dynamism

z_2 = Competitive intensity

z_3 = Government regulation

$$y = b_0 + b_1x + b_2z_1 + b_3z_2 + b_4z_3 + b_5xz_1 + b_6xz_2 + b_7xz_3 + e$$

The problem with this approach was that the product of x and z (xz) in the moderated multiple regression model may cause multicollinearity if x and z are highly correlated with xz (Fairchild, 2010). Little et al., (2007) elaborated that such multicollinearity may cause instability in the values of the regression weights. Little et al., (2007) suggested using mean centering or residual centering would be helpful to deal with the multicollinearity problem. The mean centering approach transforms the raw score scaling to a deviation score scaling so that the interaction term variables would be minimally correlated or uncorrelated with the first order variables (Henseller and Chin, 2010). Thus, in this study, the mean centering approach was used.

3.8.4 t-test for the Difference of Independent Means

An independent sample t-test was used to examine if there was a statistically significant difference across public and private banks in terms of their market orientation, marketing resources and business performance. Before running the t-test, however, Levene's test was used to check whether variances in the population were equal or different. The hypothesis postulated was whether public and private banks have the same level of market orientation, marketing resources and business performance.

The degree of freedom would be n_1 (number of public banks) + n_2 (number of private banks) - 2 = 3 + 15 - 2 = 16. A two tailed test was conducted at a 5% level of significance.

Finally, in order to ensure the practical importance of the t-statistic result, an effect size (r) was computed (Field, 2009, p.56). As stated by Cohen (1992), an effect size is a standardized and objective measure of the magnitude of observed effect where the magnitude of the effect size would be small if $r = 0.10$, medium if $r = 0.30$ and large if $r = 0.50$.

All the data were analyzed by using a Statistical Package for Social Sciences (SPSS) and Analysis of Moment Structure (AMOS).

3.9 Summary of the Chapter

The study used a quantitative approach with survey research design for the purpose of data collection pertaining to the research variables namely market orientation, marketing resources,

situational factors and business performance. The study was cross-sectional as data was collected once from the target respondents at a single point in time.

The units of analysis of the study were banks consisting of the 3 public and the 12 private banks. A sample size of 507 consisting of 492 branch managers and 15 top level marketing managers was used in the survey. Out of the distributed questionnaires, 446 were collected with a response rate of 87.97 percent. However, 418 questionnaires were completely filled and entered into the software program (SPSS) with 41 cases found to be outliers so that 377 questionnaires were used for data analysis.

The overall reliability of the measures used in the survey was found to be 0.958 Cronbach's coefficient value. Additionally, the convergent validity was assured as the pattern coefficient of all indicator values was greater than 0.70. SEM was used to test the extent to which the theoretical model fits the sample data. Mediation analysis was used to measure the indirect effect of market orientation on business performance mediated by marketing resources. Hierarchical regression analysis was used to test if the relationship between market orientation and business performance was moderated by market dynamism, competitive intensity, and government regulation. Finally, an independent t – test was used to test the statistical variation between public and private banks in terms of their market orientation, marketing resources, and business performance.

CHAPTER 4 DATA ANALYSIS AND RESEARCH FINDINGS

4.1 Introduction

This chapter presents the data screening and data cleaning processes needed to prepare the dataset for statistical analysis. The chapter addresses the necessary steps taken to deal with outliers in an effort to ensure the normality of the data. The chapter further presents confirmatory factor analysis, mediation analysis, moderation analysis, and comparison of public and private banks in terms of their market orientation, marketing resources, and business performance.

4.2 Data Screening

Once the 418 questionnaires were collected through self administered survey, the data were entered in to SPSS. The quality of the data entered in to SPSS was critically examined to make it ready for statistical analysis. The dataset was rechecked to ensure the accuracy of the data entry. The minimum and maximum data values on each variable related to each case were checked to detect any irregular or unusual data values.

All the data values were accounted for without any missing values in the dataset. During the data collection stage, all the necessary precautions were taken to make sure that the research participants filled in all the items in the questionnaire.

4.2.1 Data Cleaning

The data cleaning process was carried out to ensure the accuracy and appropriateness of the numerical codes related to each variable and case. In the data cleaning process, it was ensured that each variable had code values that range from 1 to 5 in line with the scales used in the questionnaire. With this regard a frequency table was used as a convenient way to summarize the minimum and maximum values for each variable related to the 418 cases. The authenticity of the dataset has been ensured by correcting unusually high data values related to the specific variable and case after making reference to the original questionnaire.

4.2.2 Outliers

It is apparently obvious that outliers which are unusually large or small relative to the data values should be identified before running any statistical analysis. Performing a statistical analysis using a dataset with inconsistent and unusual measurements may distort the statistical result. According to Bowerman, O'Connell and Hand (2001), among other things outliers represent a rare or chance event although the measurement related to the outliers may be recorded correctly and drawn from the same population as the rest of the sample. Since outliers are extreme measurements which stand out from the rest of the sample, they may be misleading and faulty (Bowerman, O'Connell and Hand, 2001).

The two most commonly used methods for detecting outliers are box plots and Z-scores. In this study, box plot and confidence interval were used where 41 cases that fall outside the 99% confidence level or greater than 2.57 Z value were deleted from the dataset.

4.2.3 Normality

According to the central limit theorem, as long as the sample size is 30 or more; the sampling distribution would tend to be normal irrespective of the population distribution. The sample size used in this study was large enough to satisfy the requirement of normality according to the central limit theorem (Field, 2009). Besides, the 418 sample size represented a 27.02% of the entire population. A 27.02% sample ratio was much greater than the 5% threshold requirement for statistical adequacy to make inferences about the population. Meyer et al. (2005) purported that the larger the sample size used in the study, the more precise and stable the estimates of the population parameter would be for statistical inferences.

According to Kline (2011), a skeweness level with absolute values greater than 3 are regarded as extreme and a kurtosis level with absolute values greater than 8 are described as extreme. When the acceptable level of skeweness (3) and that of kurtosis (8) are violated, it suggests a problem that should be addressed before performing any inferential statistical analysis. The result showed that the maximum value for skeweness was -0.861 and the maximum value for kurtosis was -0.647. Since the skeweness values are lower than the acceptable level (3) and kurtosis values were lower than the acceptable level (8), the data appeared to be normal related to each of the indicator variables used in the study.

The skeweness and kurtosis values of the indicator variables are shown below in Table 4.1.

Table 4.1 Assessment of normality

Variable	skew	c.r.	kurtosis	c.r.
Relational assets	-.115	-.912	-.647	-2.564
Delivery channel linkage capabilities	-.463	-3.672	-.177	-.701
Marketing implementation capabilities	-.135	-1.067	-.521	-2.065
Return on investment	-.861	-6.825	.422	1.671
Profit	-.842	-6.675	.045	.180
Market share	-.720	-5.708	-.075	-.297
Intelligence generation	-.195	-1.549	-.410	-1.626
Intelligence dissemination	-.137	-1.083	-.326	-1.291
Responsiveness	-.166	-1.313	-.514	-2.039

Source: Survey result, 2014

4.2.4 Reliability Test

The reliability test revealed that, the Cronbach's alpha of each indicator variable was adequate with a score of 0.70 or above except for technological turbulence. The reliability test summary is presented below in Table 4.2.

Table 4.2 Reliability test summary

Item	Chronbach's alpha
Market orientation	0.917
Intelligence generation	0.793
Intelligence dissemination	0.715
Responsiveness	0.873
Marketing resources	0.946
Relational assets	0.814
Reputational assets	0.787
Product management capabilities	0.801
Delivery channel linkage capabilities	0.865
Marketing communication capabilities	0.749
Marketing planning capabilities	0.887
Marketing implementation capabilities	0.906
Moderating variables or situational factors	0.771
Market dynamism	0.622
Competitive intensity	0.776
Technological turbulence	0.590
Regulations	0.737
Business performance	0.848
Overall scale reliability	0.958

Source: Survey result, 2014

Moreover, all the latent variables and their corresponding indicator variables consisted of multi-item questions. As reported by Gliem and Gliem (2003), a single item question is not reliable to draw conclusions as compared to summated multi-item questions. In this study, market orientation was a latent and exogenous variable which consisted of three indicator variables namely intelligence generation, intelligence dissemination, and responsiveness. Intelligence generation consisted of 6 items, intelligence dissemination consisted of 4 items, and responsiveness consisted of 11 items with an adequate Chronbach's alpha value of 0.793, 0.715 and 0.873 respectively.

Marketing resources was an endogenous mediating variable which consisted of seven indicator variables namely relational assets, reputational assets, product capabilities, delivery channel linkage capabilities, marketing planning capabilities, and marketing implementation capabilities. Relational assets consisted of 6 items, reputational assets consisted of 2 items, product capabilities consist of 2 items, delivery channel linkage capabilities consisted of 8 items, marketing planning capabilities consisted of 3 items, and marketing implementation capabilities consisted of 4 items. The reliability of relational assets, reputational assets, product capabilities, delivery channel linkage capabilities, marketing planning capabilities, and marketing implementation capabilities was found to be adequate with a Chronbach's alpha coefficient value of 0.814, 0.787, 0.801, 0.865, 0.749, 0.887, and 0.906 respectively.

The contextual factors comprised of four variables namely market dynamism, competitive intensity, technological turbulence and regulations. Each of these moderating variables consisted of 4 items. The Chronbach's alpha of market dynamism was computed to be 0.622. None of the items was deleted since deletion of the items did not significantly improve the alpha value of the

dimension. Although an alpha value greater than 0.60 might be questionable, considering that the number of items involved were small, the dimension was used as it was in the analysis. This is reinforced by Gliem and Gliem (2003) who postulated that as the number of question items decreases, the Chronbach's alpha value decreases as well.

The Chronbach's alpha value of competitive intensity was found to be 0.203, though the coefficient value improved to 0.776 if two items were deleted. Therefore, two items that dealt with 'the competitive potential of a bank to match the offer of other banks' and 'the relative strength of competitors' were deleted in order to improve the reliability or internal consistency of the dimension. The Chronbach's alpha value of technological turbulence was found to be 0.311, however, when two items were deleted, it was improved to 0.59. Since an alpha value lower than 0.60 was assumed to be poor, this indicator variable was not considered as adequately reliable as required and thus removed from the analysis. The Chronbach's alpha value of government regulations was 0.446 and when an item was deleted it was improved to 0.737. Therefore, the item that dealt with 'adequacy of government regulations to ensure fair competition in the banking sector' was deleted to improve the reliability of the dimension.

4.2.5 Convergent Validity Test

The convergent validity of the measures was tested by evaluating the extent to which each indicator variable represented its respective latent variable. The pattern coefficients that measure the extent to which the indicator variables define their respective latent variables were presented below in Table 4.3. The factor loading was found to be greater than 0.70 which revealed a strong tie between each latent variable and the respective indicator variables.

Table 4.3 Convergent validity of the indicator variables

Latent variables	Indicator variables	Pattern coefficients
Market orientation	Intelligence generation	0.77
	Intelligence dissemination	0.74
	Intelligence responsiveness	0.92
Marketing resources	Relational assets	0.80
	Delivery channel linkage capabilities	0.88
	Marketing implementation capabilities	0.71
Business Performance	Market share	0.79
	Profit	0.90
	Return on investment	0.85

Source: Survey result, 2014

4.3 Confirmatory Factor Analysis

A confirmatory factor analysis was used to analyze how well the proposed model fits the empirical data. The relationship between the latent variables and the observed variables was deduced from relevant theories including the resource based view, marketing capabilities view, and the market orientation literature a priori. The latent variables captured in the model were market orientation, marketing resources, and business performance. Intelligence generation, intelligence dissemination, and responsiveness represented the market orientation dimension. Relational assets, reputational assets, product management capabilities, delivery channel linkage capabilities, market communication capabilities, market planning capabilities, and market implementation capabilities represented marketing resources. Finally, business performance

comprised of four observed variables namely customer satisfaction, market share, profit, and return on investment (ROI).

The structural equation model that depicted the hypothesized relationship between the three latent variables and the respective indicator variables as well as the proposed relationship between the latent variables has been shown in Figure 4.1 below.

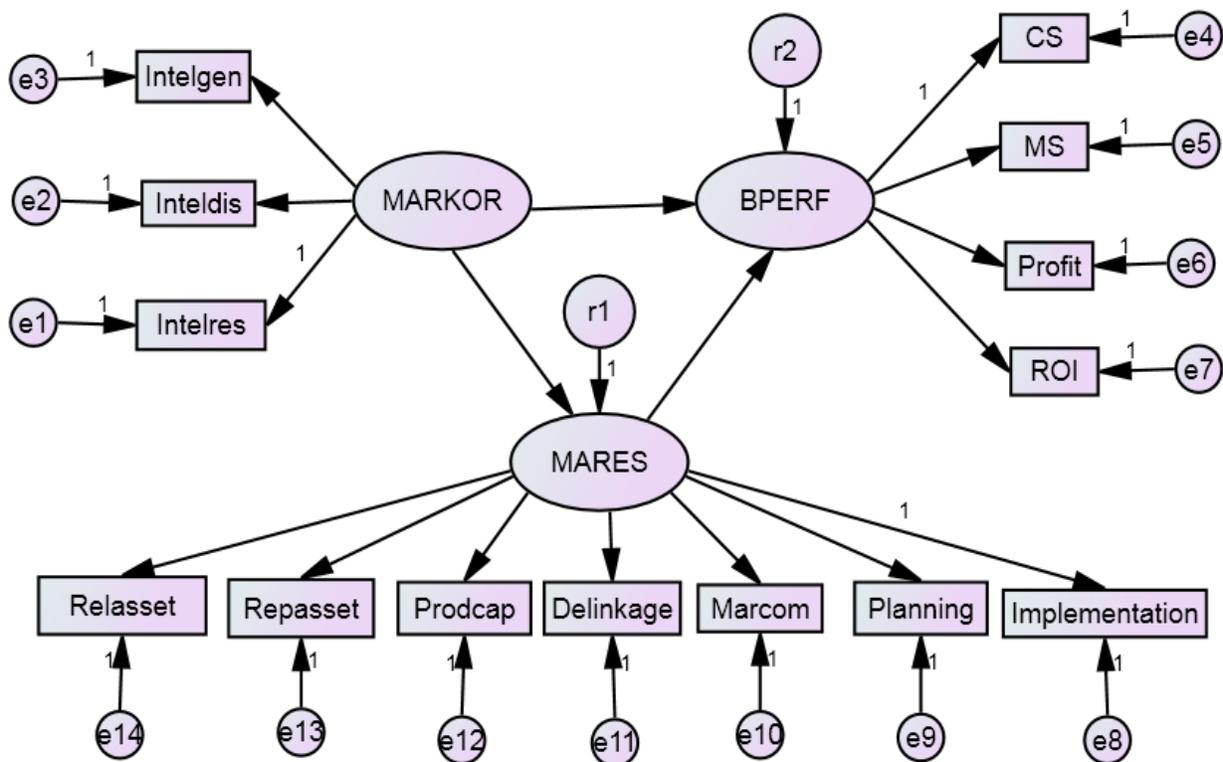


Figure 4.1: The hypothesized measurement and structural model

The model shown above in Figure 4.1 was overidentified with 74 degree of freedom. Since there were 14 indicator variables, the number of known variables would be 105. The number of known variables was the product of $[V(V+1)/2]$ where V was the number of indicator variables that the

measurement model consists of (Meyers, et al., 2006). Therefore, the number of known variables would be 105 which was the product of $[14 (14 + 1)/2]$. The number of unknown parameters was computed by taking the sum of the number of measurement regression paths, structural regression paths, covariances of exogenous variables, factor variances of the exogenous variables, unique error variances, and the residual error variances (Meyers, et al., 2006). The number of known parameters estimated in the model was 31 with 11 measurement regression paths (after constraining one of the paths from the latent variables to the respective indicator items), 3 structural regression paths, 1 factor variance, 14 unique error variances, and 2 residual error variances. Therefore, the degree of freedom was 74 which was the difference between the 105 known elements captured in the model and the 31 unknown parameters to be estimated in the structural equation model.

Since the model was overidentified, the statistical analysis was performed to estimate the measurement and structural relationships of the variables in the model. The 31 unknown parameters were estimated by using the maximum likelihood estimation method which would result in the highest likelihood of the observed data fitting the hypothesized model (Meyers, et al., 2006). As suggested by Stevens (2002), evaluation of the model should measure the overall fit of the model and the individual model parameters.

The estimation of the measurement and structural parameters has been presented below in Figure 4.2.

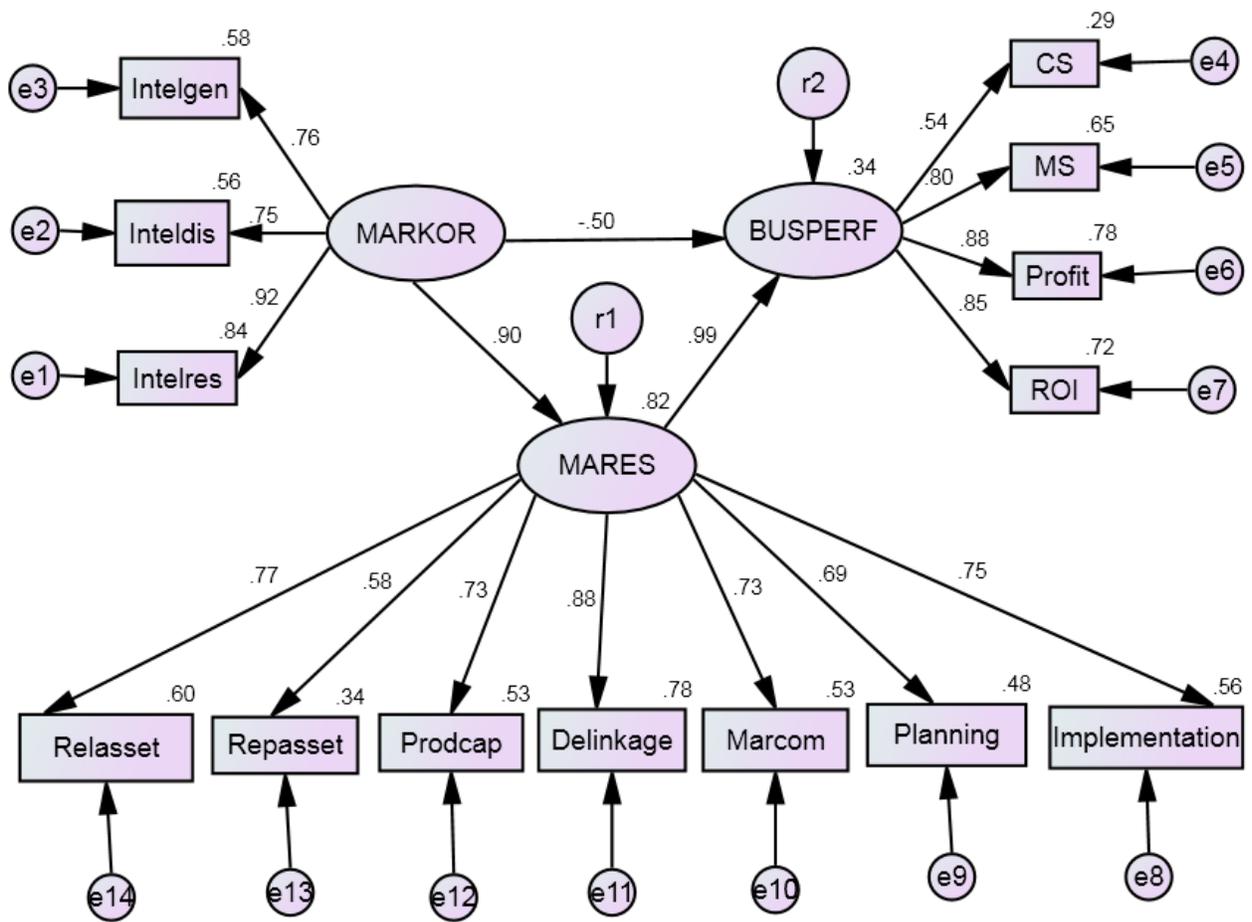


Figure 4.2: Estimation of the structural equation model

The regression weights that measure the relationship between the three latent variables and the 14 indicator variables along with their significance level has been depicted below in Table 4.4.

Table 4.4 Regression weights and significance level

			Estimate	S.E.	C.R.	P
Marketing resources	<---	Market orientation	.894	.056	15.833	***
Business performance	<---	Market orientation	-.413	.153	-2.700	.007
Business performance	<---	Marketing resources	.832	.169	4.933	***
Responsiveness	<---	Market orientation	1.000			
Intelligence dissemination	<---	Market orientation	.964	.054	17.752	***
Intelligence generation	<---	Market orientation	.957	.052	18.432	***
Customer satisfaction	<---	Business performance	1.000			
Market share	<---	Business performance	1.568	.149	10.531	***
Profit	<---	Business performance	1.733	.158	10.937	***
Return on investment	<---	Business performance	1.543	.143	10.780	***
Marketing communication	<---	Marketing resources	.930	.065	14.311	***
Product capabilities	<---	Marketing resources	1.050	.073	14.301	***
Delivery channel linkage capabilities	<---	Marketing resources	.981	.055	17.771	***
Planning capabilities	<---	Marketing resources	.707	.052	13.550	***
Marketing implementation capabilities	<---	Marketing resources	1.000			
Reputational assets	<---	Marketing resources	.795	.071	11.195	***
Relational assets	<---	Marketing resources	.973	.063	15.326	***

Source: Survey result, 2014

As indicated above in Table 4.4, the relationship among all the latent variables on the one hand and between the specific latent variables and their respective indicator variables on the other hand was statistically significant at $p < 0.01$ alpha level.

The regression weight for market orientation in the prediction of marketing resources was significantly different from zero at $p < 0.001$ level (two-tailed) as the probability of getting a critical ratio as large as 15.833 in absolute value was less than 0.001. The regression weight for market orientation in the prediction of business performance was also significantly different from zero at $p < 0.01$ level (two-tailed) since the probability of getting a critical ratio as large as -2.70 in absolute value was 0.007. Similarly, the regression weight for market orientation in the prediction of the indicator variables namely intelligence generation, intelligence dissemination, and intelligence responsiveness was significantly different from zero at $p < 0.001$ level (two-tailed).

The regression weight for marketing resources in the prediction of business performance was significantly different from zero at $p < 0.001$ level (two-tailed) as the probability of getting a critical ratio as large as 4.933 in absolute value is less than 0.001. The regression weight for marketing resources in the prediction of the indicator variables namely relational assets, reputational assets, product management capabilities, delivery channel linkage capabilities, marketing communication capabilities, marketing planning capabilities, and marketing implementation capabilities was also found to be significantly different from zero at $p < 0.001$ level (two-tailed).

The standardized regression weight that measures the relationship among the variables involved in the model is shown below in Table 4.5. The result revealed that there was a positive relationship between marketing orientation and marketing resources. When Market orientation changed by one unit, marketing resources increased by 0.904 folds. Likewise, there has been a

positive relationship between the three indicator variables and market orientation. When market orientation increased by one unit, intelligence generation, intelligence dissemination, and responsiveness increased by 0.762, 0.745, and 0.916 folds respectively. However, there was a negative direct relationship between market orientation and business performance where market orientation increased by one unit; business performance decreased by 0.497 times.

There was a positive association between marketing resources and business performance. When marketing resources increased by one unit, business performance appeared to improve by 0.989 fold as well. There has also been a positive relationship between marketing resources and the seven observed variables. In a similar fashion, when marketing resources enhanced by one unit; relational assets, reputational assets, product management capabilities, delivery channel linkage capabilities, marketing communication capabilities, marketing planning capabilities, and marketing implementation capabilities increased by 0.774, 0.580, 0.727, 0.884, 0.728, 0.692, and 0.746 folds respectively.

Table 4.5 Standardized regression weights

		Estimate
Marketing resources	<--- Market orientation	.904
Business performance	<--- Market orientation	-.497
Business performance	<--- Marketing resources	.989
Responsiveness	<--- Market orientation	.916
Intelligence dissemination	<--- Market orientation	.745
Intelligence generation	<--- Market orientation	.762
Customer satisfaction	<--- Business performance	.540
Market share	<--- Business performance	.805
Profit	<--- Business performance	.882
Return on investment	<--- Business performance	.848
Marketing communication capabilities	<--- Marketing resources	.728
Product management capabilities	<--- Marketing resources	.727
Delivery channel linkage capabilities	<--- Marketing resources	.884
Marketing Planning capabilities	<--- Marketing resources	.692
Marketing implementation capabilities	<--- Marketing resources	.746
Reputational assets	<--- Marketing resources	.580
Relational assets	<--- Marketing resources	.774

Source: Survey result, 2014

Table 4.6 below revealed the strength and the direction of the relationship among the three latent variables and their respective indicator variables.

Table 4.6 Squared multiple correlations

	Estimate
Marketing resources	.817
Business performance	.337
Relational assets	.600
Reputational assets	.336
Product management capabilities	.529
Delivery channel linkage capabilities	.782
Marketing communication capabilities	.530
Marketing planning capabilities	.480
Marketing implementation capabilities	.557
Return on investment	.718
Profit	.778
Market share	.648
Customer satisfaction	.292
Intelligence generation	.581
Intelligence dissemination	.555
Intelligence responsiveness	.839

Source: Survey result, 2014

As a result, 33.7 percent of the variance in business performance and 81.7 percent of the variance in marketing resources was observed to be explained by market orientation. Marketing resources explained 60 percent of the variance in relational assets, 33.6 percent of the variance in

reputational assets, 52.9 percent of the variance in product management capabilities, 78.2 percent of the variance in delivery channel capabilities, 53 percent of the variance in marketing communication capabilities, 48 percent of the variance in marketing planning capabilities, and 55.7 percent of the variance in marketing implementation capabilities.

Evaluation of the extent to which the hypothesized model fits the observed data was carried out through comparison of the threshold measure indexes against the actual fit indexes as shown below in Table 4.7.

Table 4.7 Model evaluation

Fit indexes	Fit criteria	Computed model fit indexes	Evaluation
Absolute fit measures			
CMIN/DF	< 3	4.942	Poor fit
Chi-square	>.05	.001	Poor fit
Goodness-of-fit index (GFI)	> .90	.876	Poor fit
The root mean squared residual (RMSR)	< .05	.063	Poor fit
The root mean squared error of approximation (RMSEA)	< .08	.102	Poor fit
Relative fit measures			
Comparative fit index (CFI)	> .95	.911	Poor fit
Normed fit index (NFI)	> .90	.892	Poor fit
Incremental fit index (IFI)	> .90	.912	Good fit
Relative fit index (RFI)	> .90	.867	Poor fit
Parsimonious fit measures			
Parsimonious normed fit index (PNFI)	> .50	.725	Good fit
Parsimonious comparative fit index (PCFI)	> .50	.741	Good fit

Source: Survey result, 2014

As shown above in Table 4.7, the hypothesized model failed to achieve a satisfactory fit in terms of the overall fit index and the individual fit indices. While IFI, PNFI, and PCFI achieved good fit; Chi-square, GFI, RMSR, RMSEA, CFI, NFI, and RFI were all observed to be poor fit. Therefore, it was considered that deletion of indicator variables with smaller pattern coefficients

and higher standardized residual covariances from the model may improve the fitness of the model.

The modification indices and the standardized residual covariances also gave an insight to identify those indicator variables whose deletion would improve the model fit. From the standardized residual covariance, it was found that the residual covariance between customer satisfaction, marketing communication capabilities, product management capabilities, reputational assets and the rest of the variables was very high. Therefore, these indicator variables should be deleted from the model in an effort to improve the model fit.

Therefore, an attempt was made to modify the structural model by maintaining the three indicator variables under market orientation, the three observed variables under marketing resources, and other three observed variables under business performance as presented below in Figure 4.3.

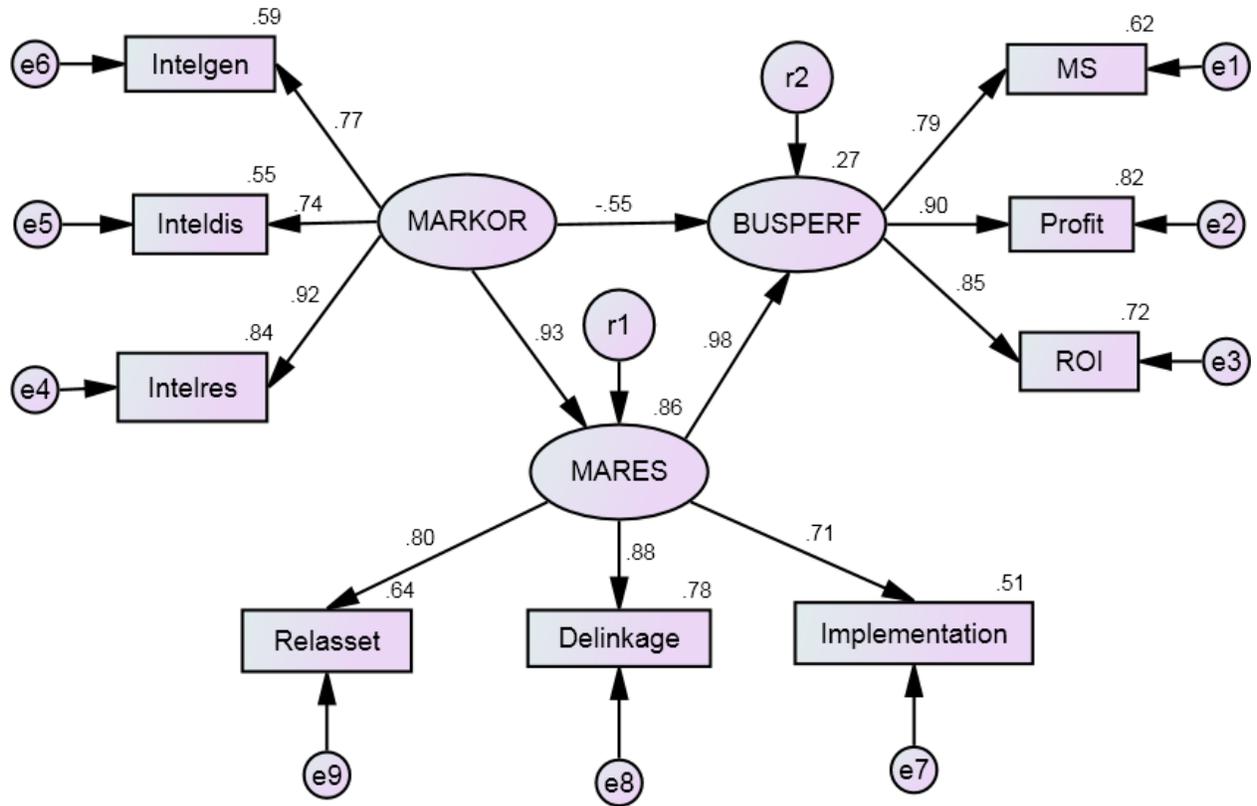


Figure 4.3: The modified structural equation model

The modified model was found to be overidentified with 24 degree of freedom since it involved 45 known elements and 21 unknown parameters. The number of distinct sample moments or known elements was 45 as the modified model involved 9 indicator variables. The unknown elements or parameters to be estimated in the model were 6 pattern/structure coefficients with three indicator variables constrained, 3 structural regression coefficients, 1 factor variance of the exogenous variable, 9 unique error variances related to the indicator variables, and 2 residual variances related to the endogenous variables.

All the factor pattern/structure coefficients were found to achieve statistical significance at an alpha value of 0.001. However, the structural regression coefficient that measured the relationship between market orientation and business performance achieved statistical significance at an alpha value of .05. Table 4.8 below presents the unstandardized regression weights and the level of statistical significance of all the variables involved in the modified model except the constrained indicator variables.

Table 4.8 Unstandardized regression weights and significance level of variables in the modified model

			Estimate	S.E.	C.R.	P
Marketing resources	<---	Market orientation	.874	.058	14.980	***
Business performance	<---	Marketing resources	1.331	.364	3.660	***
Business performance	<---	Market orientation	-.705	.335	-2.108	.035
Intelligence responsiveness	<---	Market orientation	1.000			
Intelligence dissemination	<---	Market orientation	.960	.055	17.599	***
Intelligence generation	<---	Market orientation	.962	.052	18.543	***
Market share	<---	Business performance	1.000			
Profit	<---	Business performance	1.158	.063	18.305	***
Return on investment	<---	Business performance	1.005	.057	17.617	***
Delivery channel linkage capabilities	<---	Marketing resources	1.025	.064	16.054	***
Relational assets	<---	Marketing resources	1.055	.072	14.738	***
Market implementation	<---	Marketing resources	1.000			

Source: Survey result, 2014

As shown above in Table 4.8, the statistically significant pattern/structure coefficients ($p < 0.001$) indicated that intelligence generation, intelligence dissemination, and intelligence responsiveness represent market orientation. The pattern/structure coefficients also revealed that relational assets, delivery channel linkage capabilities, and marketing implementation capabilities represent marketing resources ($p < 0.001$). Additionally, the statistically significant pattern/structure coefficients ($p < 0.001$) showed that business performance was composed of market share, profit, and return on investment.

The standardized pattern coefficients that tie the relationship between the three latent variables with the corresponding indicator variables and the structural coefficients that measure the relationship between the three latent variables are presented below in Table 4.9.

Table 4.9 Standardized regression weights of variables in the modified model

		Estimate
Marketing resources	<--- Market orientation	.926
Business performance	<--- Marketing resources	.984
Business performance	<--- Market orientation	-.552
Intelligence responsiveness	<--- Market orientation	.915
Intelligence dissemination	<--- Market orientation	.742
Intelligence generation	<--- Market orientation	.766
Market share	<--- Business performance	.788
Profit	<--- Business performance	.905
Return on investment	<--- Business performance	.848
Delivery channel linkage capabilities	<--- Marketing resources	.882
Relational assets	<--- Marketing resources	.802
Market implementation	<--- Marketing resources	.712

Source: Survey result, 2014

As indicated in Table 4.9 above, the statistically significant pattern/structure coefficients indicated that market orientation, marketing resources, and business performance were all composed of their respective indicator variables with coefficients greater than 0.70. These coefficients have meaningful or practical significance since their loading was found to be greater than 0.30 (Meyers et al., 2006). The confirmatory factor analysis, therefore, has provided support for the modified model. Since there was a statistically significant relationship between all the latent variables and their respective measured variables with a pattern coefficient greater than 0.70, the hypothesized model was found to be fit with the observed data. The result revealed that the proposed covariance matched the actual covariance. Therefore, the model can be considered as a credible explanation for the hypothesized relationships among the variables.

The structural relationship among the three latent variables in the model was also observed to be statistically significant ($p < 0.05$). There appeared to be a significant ($p < 0.05$) relationship between market orientation and business performance. The structural regression coefficient that measured the relationship between market orientation and marketing resources and the regression coefficient related to marketing resources and business performance were also found to be statistically significant ($p < 0.001$).

A good fit has been achieved on the overall fit of the model and the individual fit indices. Table 4.10 below presents a summary of the evaluation of adequacy of the model.

Table 4.10 Model fit summary

Fit indexes	Fit criteria	Computed model fit indexes	Evaluation
Absolute fit measures			
CMIN/DF	< 3	1.498	Good fit
Chi-square	>.05	.055	Good fit
Goodness-of-fit index (GFI)	> .90	.980	Good fit
The root mean squared residual (RMSR)	< .05	.021	Good fit
The root mean squared error of approximation (RMSEA)	< .08	.036	Good fit
Relative fit measures			
Comparative fit index (CFI)	> .95	.994	Good fit
Normed fit index (NFI)	> .90	.983	Good fit
Incremental fit index (IFI)	> .90	.994	Good fit
Relative fit index (RFI)	> .90	.974	Good fit
Parsimonious fit measures			
Parsimonious normed fit index (PNFI)	> .50	.655	Good fit
Parsimonious comparative fit index (PCFI)	> .50	.663	Good fit

Source: Survey result, 2014

The chi-square value which compared the comparison between the observed covariance and the hypothesized covariance was found to be statistically non-significant ($p > 0.05$ with 24 degree of freedom). Chi-square was used to assess the overall fit of the model with the expectation that the p value would be non-significant indicating a close fit between the hypothesized model and the actual data (Meyer, et al., 2006). In other words, while a significant chi-square value indicates

the existence of poor fit between the proposed model and the sample data and a non-significant chi-square represents a close fit between the actual data and the proposed model (Kline, 2011; Byrne, 2010). Therefore, a non-significant ($p > 0.05$) chi-square indicated that there has been a good fit between the modified model and the observed data as desired.

However, Chi-square alone could not be used as a dependable measure as it may be sensitive to the sample size. With large sample size, it may be possible to reject a good-fitting model (Thompson, 2004). Therefore, it was considered appropriate to use individual fit indices that fall under absolute, relative, and/or parsimonious fit measures.

The Goodness-of-Fit Index (GFI) is like R^2 in the multiple regression (Kline, 2011) that represents the proportion of the variance in the sample correlation/covariance which has been accounted for by the hypothesized model. The 0.98 GFI indicated that 98 percent of the variance in the observed correlation/covariance was explained by the proposed model. As shown in Table 4.10 above, a 0.98 GFI represented a good fit between the sample data and the proposed model as it was greater than the acceptable level of 0.90.

The Root Mean Squared Residual (RMSR) was conceptually the reverse of GFI which accounted the proportion of the variance in the sample correlation/covariance that was not accounted for by the proposed model. A 0.021 value of RMSR, therefore, indicated that only 2.1% of the variance in the sample correlation/covariance was not explained by the observed model which appeared to be a good fit between the sample data and the hypothesized model since it remained lower than the threshold value of 0.05.

The Root Mean Squared Error of Approximation (RMSEA) represented the averages of the residuals between the hypothesized model correlation/covariance and the observed correlation/covariance (Byrne, 2010). A 0.036 value of RMSEA indicated a lower level of residuals between the actual correlation/covariance and the proposed model. Thus, a 0.036 RMSEA revealed a good fit between the sample data and the hypothesized model since it was lower than the acceptable level of 0.08.

The Incremental Fit Index (IFI), the Comparative Fit Index (CFI), the Relative Fit Index (RFI), the Normed Fit Index (NFI) were all considered to be useful relative fit indices. Such indices assume that either there was no relationship in the data indicating a poor fit or there existed a perfect fit between the sample data and the hypothesized model (Meyer, et al., 2006). In addition the IFI measures the relative position of data between the two extremes of poor fit and perfect fit (Meyer, et al., 2006). As shown above in Table 4.10, a 0.994 value of IFI indicated an acceptable fit between the model and the observed data since it was greater than the acceptable level of .90. Similarly the CFI, NFI and RFI were all found to be greater than 0.95 which indicated a good fit between the hypothesized model and the sample data.

The parsimonious or adjusted fit measures are like the adjusted R^2 in multiple regression which penalize larger models with more estimated parameters (Meyers, et al., 2006). Since Parsimonious Normed Fit Index (PNFI) and the Parsimonious Comparative Fit Index (PCFI) were found to be greater than the acceptable level of 0.50, there was a good fit between the proposed model and the observed data.

4.4 Mediation Analysis

Once the model was tested for its fitness with observed data, the contribution of the mediating variable (marketing resources) was examined to explain the relationship between market orientation and business performance. Estimation of the influence of market orientation on business performance through the mediation effect of marketing resources was performed by the bootstrap method. Shrout and Bolger (2002, p.422) postulated that “bootstrap tests are powerful since they detect that the sampling distribution of the mediated effect is skewed away from zero”.

In the mediation model, market orientation was the independent variable (x), business performance was the dependent variable (y) and marketing resources was the mediating variable (M). In order to test whether the causal effect of market orientation on business performance could be explained by marketing resources as an intervening variable, some important criteria should be met. First, market orientation (x) should influence business performance. For the purpose of ensuring this requirement, the total effect (c) was estimated in the model.

Second, market orientation (x) should influence marketing resources, the mediating variable (M). To make sure that this requirement was met, coefficient ‘a’ which measured the effect of market orientation on marketing resources was estimated in the model. Third, marketing resources which represented the mediating variable (M) should influence business performance (y). In order to ensure that this requirement was satisfied, coefficient ‘b’ which measured the effect of marketing resources on business performance was estimated in the model. Finally, the indirect effect of market orientation on business performance was estimated by multiplying the two

coefficients 'a' and 'b' in the mediation model. Therefore, the total effect of market orientation on business performance (c) was computed as the sum of the direct effect (c') and the indirect effect (ab).

The total effect of market orientation on business performance is exhibited below in Figure 4.4. The result revealed that the total effect of market orientation (x) on business performance (y) was 0.36. This implied that a unit of change in market orientation would be associated with a 36% change in business performance.

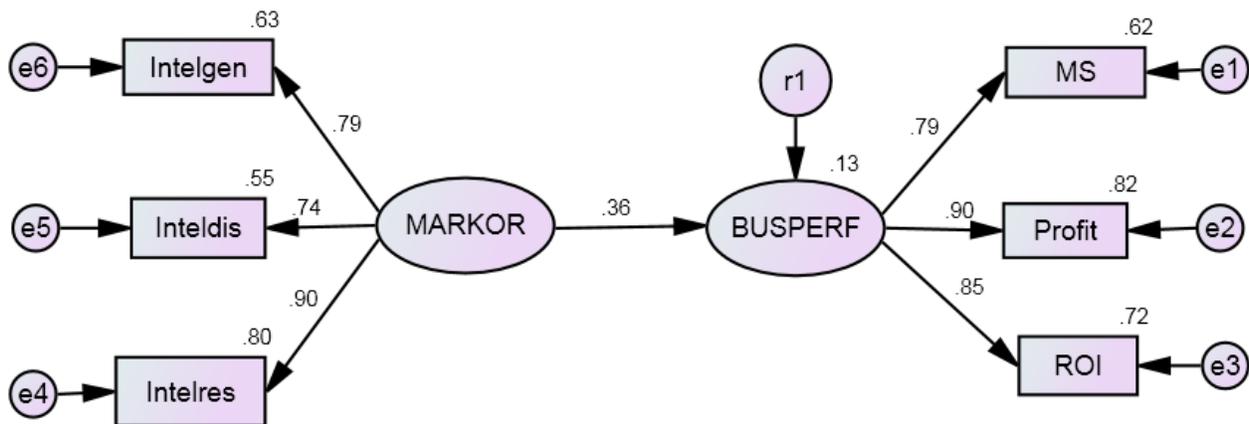


Figure 4.4: The total effect of market orientation on business performance

As shown below in Table 4.11, intelligence generation, intelligence dissemination, and responsiveness which represented market orientation were observed statistically significant ($p < 0.001$) along with market share, profit, and return on investment which represented business performance. This revealed that those indicator variables significantly represented the market orientation and business performance.

Table 4.11 Unstandardized regression weights and significance level of variables in the total effect model

			Estimate	S.E.	C.R.	P
Business performance	<---	Market orientation	.472	.076	6.191	***
Responsiveness	<---	Market orientation	1.000			
Intelligence dissemination	<---	Market orientation	.979	.065	15.140	***
Intelligence generation	<---	Market orientation	1.016	.063	16.091	***
Market share	<---	Business performance	1.000			
Profit	<---	Business performance	1.156	.064	18.179	***
Return on investment	<---	Business performance	1.006	.057	17.596	***

Source: Survey result, 2014

The standardized pattern coefficients that showed the direct relationship between market orientation and business performance with their corresponding indicator variables and the structural coefficients have been presented below in Table 4.12. The coefficient of all indicator variables of market orientation and business performance was found to be greater than 0.70 ($p < .001$). As suggested by Meyers et al. (2006), these pattern/structural coefficients have meaningful or practical significance since their loading was greater than 0.30. Besides, the total effect model confirms the fit between the theoretical model and the sample data as the proposed covariance matches the actual covariance. Therefore, the model was considered credible for providing a sound explanation regarding the hypothesized relationships among the variables.

The structural relationship between market orientation and business performance was found to be also statistically significant. The regression coefficient value of 0.362 that measured the

relationship between market orientation and business performance was observed to be statistically ($p < 0.001$).

Table 4.12 Standardized regression weights of variables in the total effect model

			Estimate
Business performance	<---	Market orientation	.362
Responsiveness	<---	Market orientation	.896
Intelligence dissemination	<---	Market orientation	.741
Intelligence generation	<---	Market orientation	.792
Market share	<---	Business performance	.788
Profit	<---	Business performance	.904
Return on investment	<---	Business performance	.849

Source: Survey result, 2014

Moreover, a good fit has been achieved on the overall fit of the model and the individual fit indices. Summary of evaluation of the adequacy of the total effect model has been presented below in Table 4.13.

Table 4.13 Model fit summary of the total effect model

Fit indexes	Fit criteria	Computed model fit indexes	Evaluation
Absolute fit measures			
CMIN/DF	< 3	1.834	Good fit
Chi-square	>.05	.066	Good fit
Goodness-of-fit index (GFI)	> .90	.987	Good fit
The root mean squared residual (RMSR)	< .05	.023	Good fit
The root mean squared error of approximation (RMSEA)	< .08	.047	Good fit
Relative fit measures			
Comparative fit index (CFI)	> .95	.994	Good fit
Normed fit index (NFI)	> .90	.988	Good fit
Incremental fit index (IFI)	> .90	.994	Good fit
Relative fit index (RFI)	> .90	.977	Good fit
Parsimonious fit measures			
Parsimonious normed fit index (PNFI)	> .50	.527	Good fit
Parsimonious comparative fit index (PCFI)	> .50	.530	Good fit

Source: Survey result, 2014

The number of distinct sample moments or known parameters was observed to be 21 and the number of unknown parameters or the number of distinct parameters to be estimated in the model was found to be 13 so that the number of degree of freedom was found to be 8. Therefore, with 8 degree of freedom, the chi-square was statistically non-significant ($p > 0.05$). Since the p

value was appeared to be non-significant, it indicated a good fit between the hypothesized total effect model and the actual data (Meyer et al., 2006).

In addition to the chi-square, the individual fit indices indicated a good fit between the theoretical model and the sample model. The GFI, RMSR, RMSEA, CFI, NFI, IFI, RFI, PNFI, and PCFI all revealed adequate fit between the theoretical model and the observed data.

In relation to the mediation effect, Baron and Kenny (1986) postulated that for a mediation analysis to take place, the total effect between the independent and dependent variable has to be statistically significant. This requirement was assumed to be fulfilled as the effect of market orientation on business performance appeared to be moderate with a coefficient score of 0.36 (Cohen, 1992; Shrout and Bolger, 2002) and statistically significant at ($p < 0.001$). However, Shrout and Baron (2002) argued that this stringent requirement of a statistically significant direct relationship between the independent and dependent variables should not be a necessary condition to perform mediation analysis

The direct effect (c') of market orientation (x) on business performance (y) and the indirect effect (c') of market orientation on business performance have been presented below in Figure 4.5.

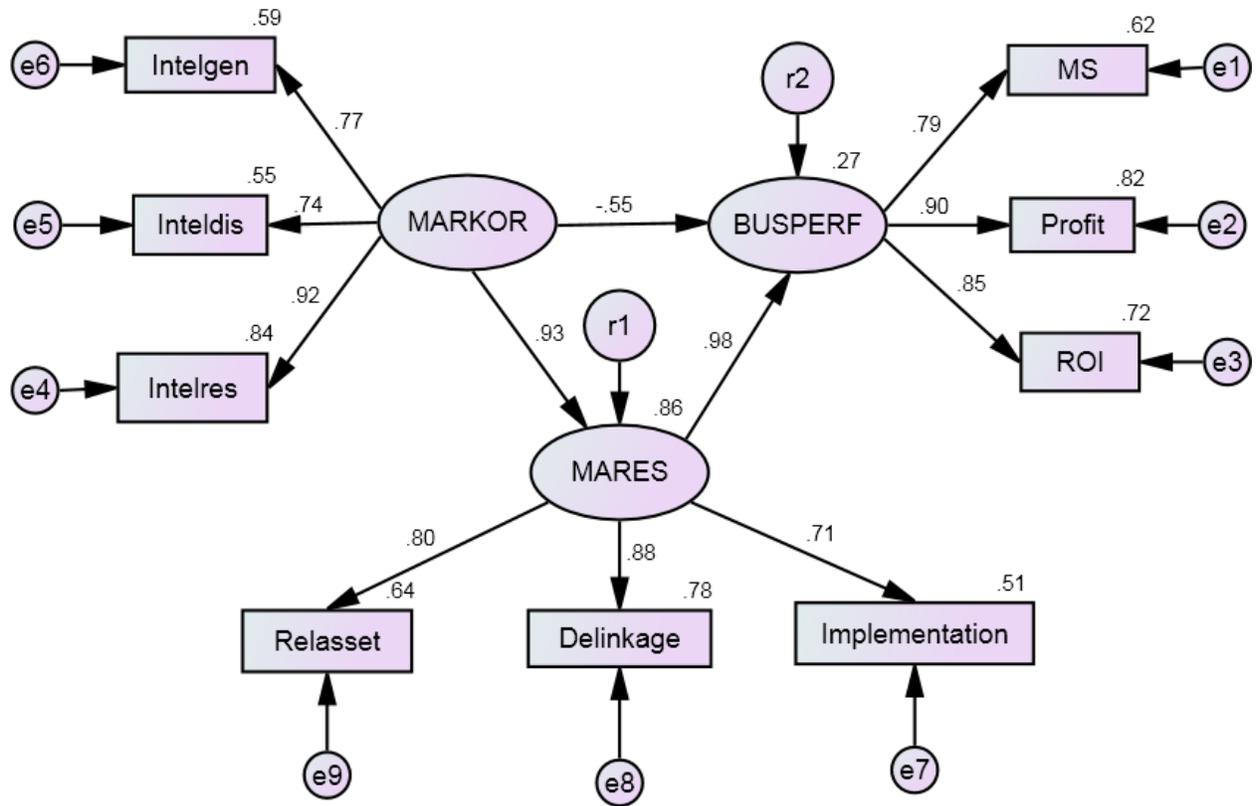


Figure 4.5: The direct and indirect effect of market orientation on business performance

The direct effect (c') of market orientation (x) on business performance was computed to be -0.55 . Therefore, a unit of change in market orientation was assumed to adversely cause a 0.55 change in business performance. The effect of market orientation (x) on marketing resources (M) which was represented by 'a' was 0.93 . Likewise, the effect of marketing resources (M) on business performance (y), which was represented by 'b' was 0.98 . Therefore, the indirect effect of market orientation (x) on business performance (y) which was represented by 'ab' was 0.91 . A unit of change in market orientation was associated with a 0.93 change on marketing resources and a unit of change in marketing resources was associated with a 0.98 change in business performance when market orientation was held constant.

Accordingly, as stated in the previous section, while the total effect of market orientation on business performance(c) was 0.36, the direct effect market orientation on business performance (c') was -0.55 and the indirect effect of market orientation on business performance through marketing resources was 0.91. Shrout and Bolger (2002) argued that the direct effect might be negative due to sampling fluctuation which would lead to an artificial outcome that the total effect (c) would be lower than the direct effect (c').

According to MacKinnon et al. (2000), empirical suppression might be a possibility about 50% of the time if sample estimates of c' are negative while the population c' = 0. This might be taken as a case of complete mediation where the negative sign in the relationship between market orientation and business performance was assumed to be 0. Furthermore, MacKinnon et al. (2000) and Shrout and Bolger (2002) postulated that when c' and 'ab' have opposite signs; empirical suppression is a possibility in case of these effects are not statistically significant. The result, therefore, revealed an inconsistent mediation model since the direct effect (c') and the indirect effect (ab) have opposite signs.

4.5 Moderation Analysis

As presented in the methodology section, market dynamism, competitive intensity, technological turbulence, and government regulation constitute the moderating variables. However, technological turbulence has been removed from the analysis as its Chronbach's alpha was found to be 0.59. Therefore, in this section, the moderation effect of market dynamism, competitive intensity, and government regulation was examined. More specifically, the moderation analysis addressed whether the addition of market dynamism, competitive intensity, and government

regulation in the model could significantly change the direction and magnitude of the relationship between market orientation and business performance.

Hierarchical regression analysis was used to test the moderated effect of market dynamism, competitive intensity, and government regulation on the relationship between market orientation and business performance. All the necessary assumptions for performing hierarchical regression analysis were met. First, the sample size used in the analysis was 377 which was assumed to be large enough to run hierarchical regression. Second, outliers which might distort the stability of the analysis and the result have been identified and removed from the dataset. Third, the normality assumption was satisfied as the Kurtosis values were lower than 8 except in the case of the interaction effect of market orientation and competitive intensity. Besides, an attempt was made to compute the Skewness values of all the variables involved in the analysis which were found to be lower than 3 as shown below in Table 4.14.

Table 4.14: The Kurtosis and Skewness values of variables used in the moderation analysis

	N	Mean	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
BP	377	3.8216	-.778	.126	.476	.251
MO_Centered	377	.0000	-.127	.126	-.578	.251
MD_Centered	377	.0000	-.359	.126	.096	.251
CI_Centered	377	.0000	-1.487	.126	2.768	.251
REG_Centered	377	.0000	-.677	.126	.280	.251
MOXMD	377	.1302	1.413	.126	6.171	.251
MOXCI	377	.0831	2.362	.126	18.309	.251
MOXREG	377	.0055	.417	.126	8.225	.251
Valid N (listwise)	377					

Source: Survey result, 2014

To deal with the multicollinearity problem; the focal independent variable and the moderating variables have been mean centered with a 0 mean value as shown above in Table 4.15. The multicollinearity diagnostics revealed that the tolerance value of all the variables involved in the analysis was greater than 0.10 and the VIF of all the variables was lower than 10 as shown below in Table 4.15. The result, therefore, revealed that there was no a multicollinearity problem so that stability of the regression weights was assured.

Table 4.15: Multicollinearity test of variables used in the moderation analysis

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
MO_Centered	.876	1.142
MD_Centered	.770	1.299
CI_Centered	.798	1.254
REG_Centered	.824	1.213
2 (Constant)		
MO_Centered	.870	1.150
MD_Centered	.759	1.317
CI_Centered	.730	1.369
REG_Centered	.820	1.219
MOXMD	.780	1.283
MOXCI	.717	1.395
MOXREG	.827	1.210

Source: Survey result, 2014

The hierarchical regression used in this study involved two models. Model 1 showed the main or the first order effect of market orientation, market dynamism, competitive intensity, and government regulation on business performance. Model 2 showed the moderation or the second

order effect of the interaction between market orientation and market dynamism, competitive intensity, and government regulation on business performance.

All the independent variables namely market orientation, market dynamism, competitive intensity, and government regulation have been mean centered in order to reduce the multicollinearity problem. The product term was computed by multiplying the mean centered independent variables. Finally, the statistical significance of changes in the magnitude and direction of the relationship between market orientation and business performance as a result of the introduction of the moderating variables was checked.

In the moderation analysis, market orientation (MO) was the principal independent variable and market dynamism (MD), competitive intensity (CI), and government regulation (REG) were the moderating variables. The interaction terms used to test the moderation effect were the product of the values of market orientation and market dynamism (MO X MD), market orientation and competitive intensity (MO X CI), and market orientation and government regulation (MO X REG).

The moderation model that showed the main effect and the moderation effect has been presented in Figure 4.6 below.

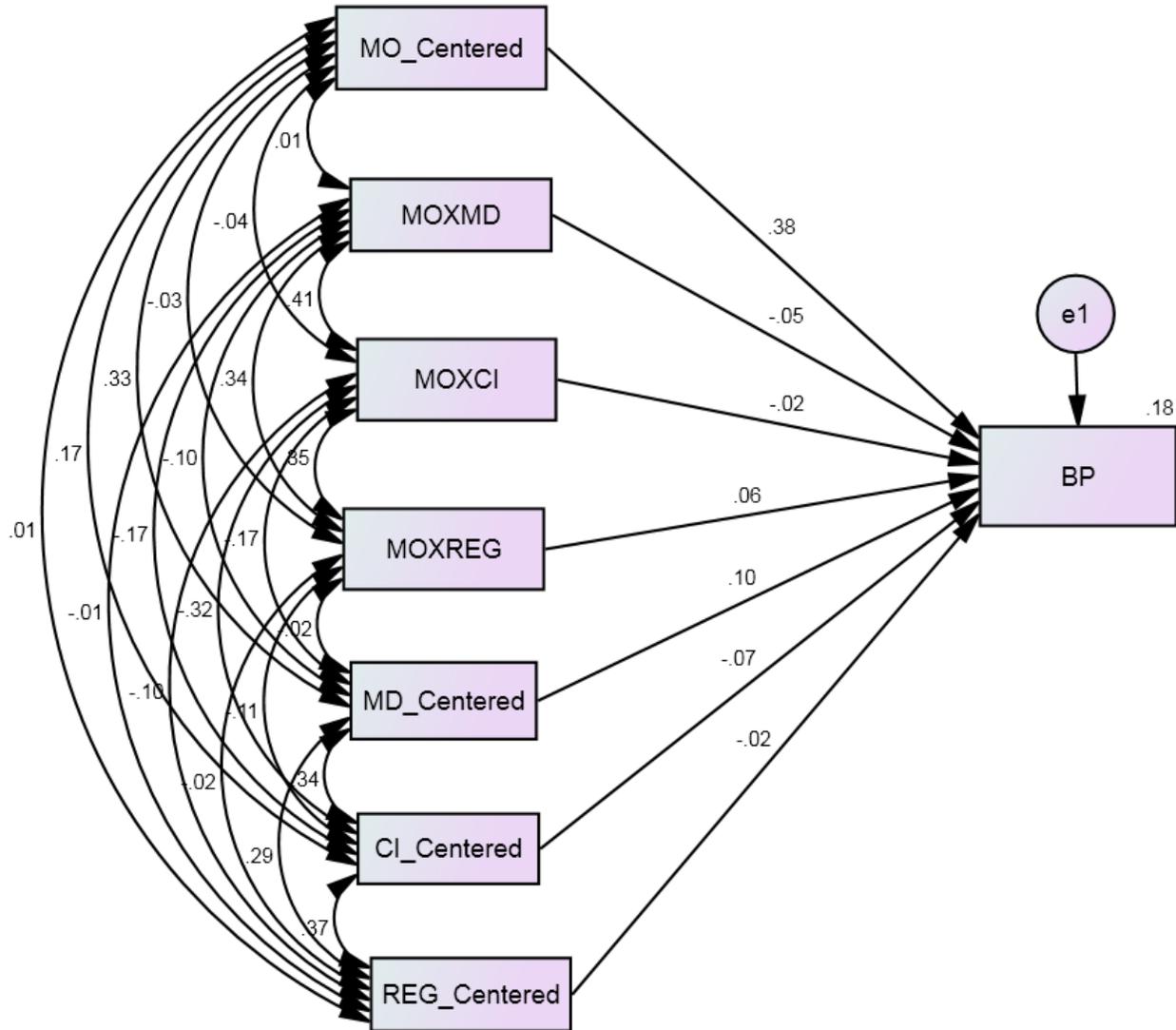


Figure 4.6 The moderation effect model.

Here, MO_Centered represented the mean centered market orientation which was assumed to be the independent variable (x), BP represented business performance which remained to be the dependent variable (y), and MOXMD being the interaction of the mean centered market orientation and the mean centered market dynamism which was the first interaction term (xz_1). Similarly, MOXCI represented the interaction of the mean centered market orientation and the

mean centered competitive intensity which was the second interaction term (xz_2), MOXREG represented the interaction of the mean centered market orientation and the mean centered government regulation which was the third interaction term (xz_3). While MD _Centered represented the mean centered market dynamism which was the first moderator variable (z_1), CI _Centered represented the mean centered competitive intensity which was the second moderator variable (z_2), and REG _Centered represented the mean centered government regulation as the third moderator variable (z_3).

The correlation among the independent variables and the product terms has been presented below in Table 4.16. Although the multicollinearity test could be conducted separately, the correlation table helped to assess the possibility of multicollinearity among the variables.

Table 4.16: The correlation value of the independent variables and the product terms

			Estimate
CI_Centered	<-->	REG_Centered	.365
REG_Centered	<-->	MD_Centered	.290
REG_Centered	<-->	MOXREG	-.017
REG_Centered	<-->	MOXCI	-.102
MOXMD	<-->	REG_Centered	-.014
MO_Centered	<-->	REG_Centered	.011
CI_Centered	<-->	MD_Centered	.343
CI_Centered	<-->	MOXREG	-.107
CI_Centered	<-->	MOXCI	-.324
MOXMD	<-->	CI_Centered	-.173
MO_Centered	<-->	CI_Centered	.170
MD_Centered	<-->	MOXREG	-.015
MD_Centered	<-->	MOXCI	-.173
MOXMD	<-->	MD_Centered	-.105
MO_Centered	<-->	MD_Centered	.329
MOXREG	<-->	MOXCI	.351
MOXMD	<-->	MOXREG	.339
MO_Centered	<-->	MOXREG	-.029
MOXMD	<-->	MOXCI	.410
MO_Centered	<-->	MOXCI	-.042
MO_Centered	<-->	MOXMD	.013

Source: Survey result, 2014

As presented above in Table 4.16, all the correlation values were found to be below 0.41 indicating that there was no serious multicollinearity problem in the model as all the independent variables have been mean centered.

The standardized regression coefficient (*b*) values are depicted below in Table 4.17.

Table 4.17: The regression coefficient of variables in the moderation model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.837	.040		95.722	.000		
	MO_Centered	.471	.062	.383	7.569	.000	.870	1.150
	MD_Centered	.134	.072	.100	1.846	.066	.759	1.317
	CI_Centered	-.080	.060	-.074	-1.340	.181	.730	1.369
	REG_Centered	-.021	.054	-.020	-.391	.696	.820	1.219
	MOXMD	-.099	.098	-.054	-1.009	.314	.780	1.283
	MOXCI	-.034	.083	-.023	-.409	.683	.717	1.395
	MOXREG	.097	.078	.064	1.240	.216	.827	1.210

a. Dependent Variable: BP

Source: Survey result, 2014

The beta weight 0.383 ($p < 0.001$) was the standardized regression coefficient that related market orientation to business performance controlling for the effects of market dynamism, competitive intensity, government regulation, the interaction of market orientation and market dynamism, the interaction of market orientation and competitive intensity and the interaction of market orientation and government regulation. Among all the beta values, this regression coefficient appeared to be the only significant determinant of business performance in the presence of other variables (as independent) being considered by the regression analysis. The beta values that measured the relationship market dynamism and business performance, competitive intensity and business performance, and government regulation and business performance controlling for all

other variables were 0.10, -.074, and -0.02 respectively. These standardized regression values were all non-significant ($p > 0.05$).

Similarly, the regression coefficients that revealed the interaction effect of market orientation and market dynamism to business performance, the interaction effect of market orientation and competitive intensity to business performance, and the interaction effect of market orientation and government regulation to business performance controlling for the effects of all other variables in the model were -0.054, -0.023, and 0.064 respectively. These beta values were also non-significant ($p > 0.05$).

The multiple regression equation corresponding to the main effect of market orientation (x), market dynamism (z_1), competitive intensity (z_2), and government regulation (z_3); and the interaction term of market orientation and market dynamism (xz_1), the interaction term of market orientation and competitive intensity (xz_2), and the interaction term of market orientation and government regulation (xz_3) was identified as follows.

$$y = 3.837 + 0.383 x + 0.10 z_1 - 0.074 z_2 - 0.03 z_3 - 0.054 xz_1 - 0.023 xz_2 + 0.064 xz_3$$

Next, the comparison between model 1 and model 2 was made in the hierarchical regression analysis. As mentioned earlier, model 1 represented the main effect of the independent variables without the interaction term on the dependent variable and model 2 represented the moderation effect of the independent variables with the interaction term on the dependent variable. First, the moderation effect of market dynamism on the relationship between market orientation and

business performance would be presented. Later, the moderation effect of competitive intensity and government regulation would be discussed in the subsequent sub-sections.

4.5.1 Analysis of the Moderation Effect of Market Dynamism

This analysis was conducted to test if a change in market dynamism changed the strength and/or the direction of relationship between market orientation and business performance. A hierarchical regression analysis was used to test whether the relationship between market orientation and business performance was moderated by market dynamism. The model summary has been presented below in Table 4.18.

Table 4.18: Summary of the main effect and the moderation effect of market dynamism

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.409 ^a	.167	.163	.73913	.167	37.520	2	374	.000
2	.410 ^b	.168	.161	.73970	.001	.420	1	373	.517

a. Predictors: (Constant), MD_Centered, MO_Centered

b. Predictors: (Constant), MD_Centered, MO_Centered, MOXMD

Source: Survey result, 2014

Table 4.18 showed the main effect of market orientation and market dynamism on business performance. The table also presented the statistical findings needed to test if market dynamism moderated the relationship between market orientation and business performance. Model 1 presented the first order effect and model 2 presented the second order effect. The statistical finding revealed that market orientation and market dynamism accounted for 16.7% of the variance in business performance controlling the effect of the interaction terms of the two

variables. When the interaction of market orientation and market dynamism was included in the model, the predictive capability slightly improved to 16.8% causing only a minor change. The 0.1% change in the value of R^2 from 16.7% to 16.8% was associated with the F value of 37.52 which appeared to be significant ($p < 0.001$). This implied that the variance accounted by the combined effect of market orientation and market dynamism on the business performance of public and private banks in Ethiopia was observed to be 16.7%. The ANOVA table given below also provided the same information that model 1 was statistically significant at $p < 0.001$ with F value of 37.52. Hence, model 1 which captured the main effect of market orientation and market dynamism on business performance remained statistically significant.

Table 4.19 ANOVA: The main effect and moderated effect of market dynamism

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.996	2	20.498	37.520	.000 ^b
	Residual	204.321	374	.546		
	Total	245.316	376			
2	Regression	41.225	3	13.742	25.115	.000 ^c
	Residual	204.091	373	.547		
	Total	245.316	376			

a. Dependent Variable: BP

b. Predictors: (Constant), MD_Centered, MO_Centered

c. Predictors: (Constant), MD_Centered, MO_Centered, MOXMD

Source: Survey result, 2014

Unlike model 1 which showed only the main effect of the independent variables, model 2 captured the interaction term of market orientation and market dynamism (MO X MD). Model 2 examined if interaction term of market orientation and market dynamism (MO X MD) moderate the relationship between market orientation and business performance. The coefficient of

correlation (R) changed from 0.409 to 0.41 when the interaction term of market orientation and market dynamism (MO X MD) was included in the model. The model with the interaction term showed that the change in the coefficient of determination (R^2) was only 0.001. The 0.168 coefficient of determination (R^2) was associated with a smaller 0.42 F value. Moreover, the F value change associated with the R^2 change of 0.1% was not statistically significant ($p > 0.05$).

Model 2 revealed that the variance in business performance accounted by market orientation and market dynamism increased only by 0.1% when the interaction of market orientation and market dynamism was included in the model. This indicated that adding the interaction term of market orientation and market dynamism (MO X MD) in the model did not increase the models' predictive capacity in predicting business performance in a statistically significant way. Therefore, the effect of market dynamism in moderating the relationship between market orientation and business performance was statistically non-significant.

Table 4.20 presented the beta weights of the principal independent variables namely market orientation and market dynamism and the beta weight of the product term of market orientation and market dynamism (MO X MD) along with their multicollinearity statistics.

Table 4.20: The beta weights and the multicollinearity statistics of market orientation, market dynamism, and the interaction term

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.822	.038		100.392	.000		
MO_Centered	.462	.061	.375	7.515	.000	.892	1.121
MD_Centered	.107	.067	.080	1.600	.111	.892	1.121
(Constant)	3.829	.040		96.289	.000		
MO_Centered	.464	.062	.377	7.532	.000	.890	1.124
MD_Centered	.102	.067	.076	1.513	.131	.880	1.136
MO X MD	-.057	.088	-.031	-.648	.517	.986	1.014

a. Dependent Variable: BP

Source: Survey result, 2014

Table 4.20 indicated that while market orientation was appeared to be a better and statistically significant ($b=0.375$, $p < 0.001$) determinant of business performance, market dynamism remained a weak and insignificant predictor ($b=0.08$, $p > 0.05$). However, the interaction of market orientation and market dynamism with a regression value of -0.031 and a t value of -0.648 was not found to be statistically significant ($p > 0.05$). Similarly the interaction term of market orientation and market dynamism (MO X MD) was not a significant incremental predictor of business performance as the associated F - value change of 0.42 and the beta weight of -0.031 were not statistically significant ($p > 0.05$). Therefore, the magnitude of the effect of market dynamism in moderating the relationship between market orientation and business performance was not statistically significant.

Table 4.20 also presented the statistics needed to measure the level of multicollinearity. According to Field (2009), multicollinearity was not a problem as long as the variance inflation factor (VIF) was lower than 10 and the tolerance statistic was greater than .10. Since the variance inflation factor of market orientation, market dynamism and the interaction term of market orientation and market dynamism was lower than 10 (Neter, Wasserman, and Kutner, 1985) and since the tolerance statistic of market orientation, market dynamism and the interaction term of market orientation and market dynamism was greater than .10, a multicollinearity problem was not observed.

Finally, the scatter plot presented below in Figure 4.7 revealed that when the level of market dynamism varied from low to moderate and from moderate to high, the effect of market orientation on business performance changed as well.

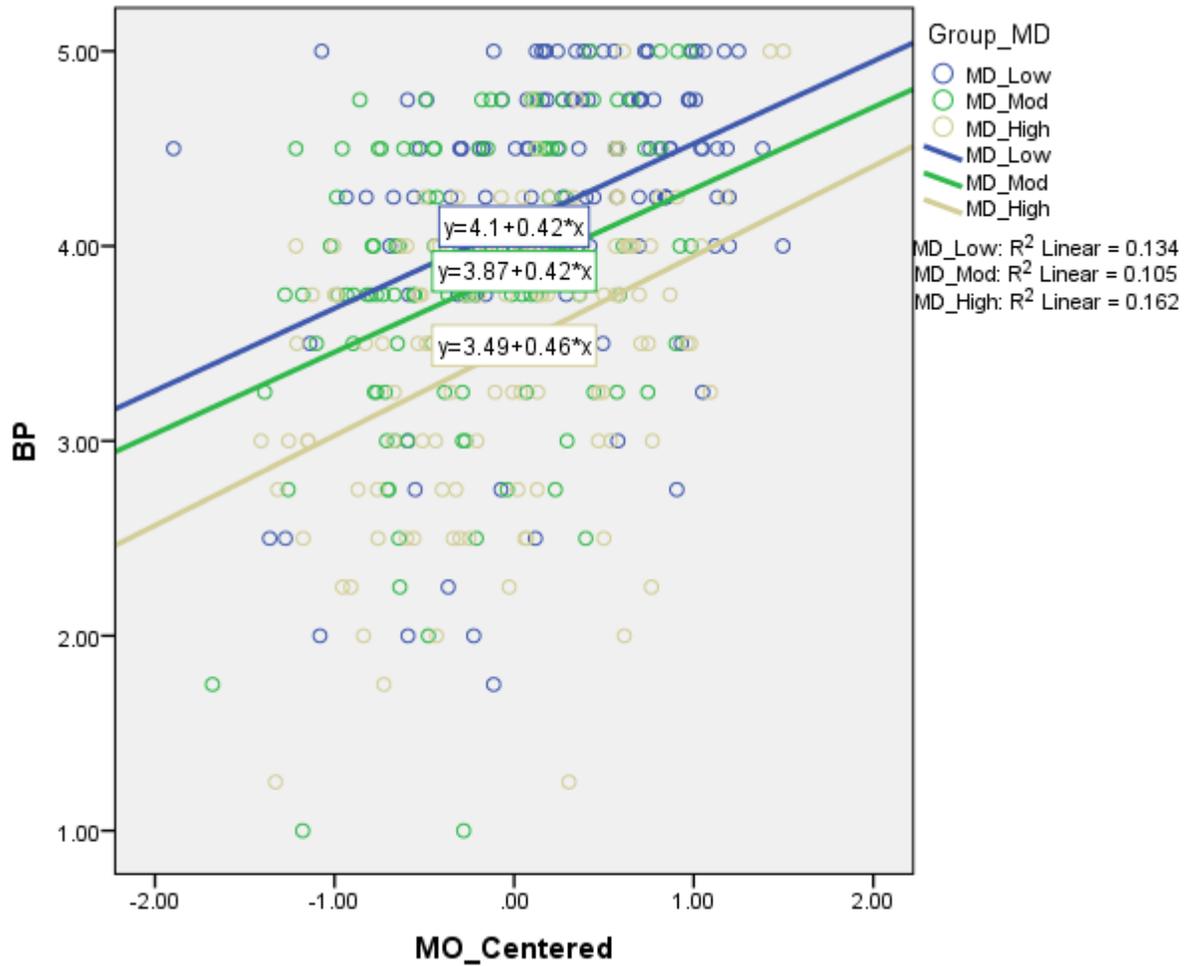


Figure 4.7 The degree of change in market dynamism associated with the degree of change in market orientation - business performance relationship

As a result, Figure 4.7 exhibited an ordinal interaction effect occurred as the lines did not cross and a synergistic interaction effect (Fairchild and McQuillin, 2009) was also observed since a change in the level of market dynamism enhanced the relationship between market orientation and business performance. However, the magnitude of the change was statistically non-significant ($p > 0.05$). When the level of market dynamism was low, 13.4% of the variance in business performance was explained by market orientation. In a similar fashion, when the level of market dynamism was moderate, 10.5% of the variance in business performance was

explained by market orientation. Furthermore, when the level of market dynamism was high, 16.2% of the variance in business performance was explained by market orientation. However, since the lines were parallel, there was no interaction effect indicating that the relationship between market orientation and business performance was not moderated by market dynamism.

4.5.2 Analysis of the Moderation Effect of Competitive Intensity

This analysis was conducted to test if a change in competitive intensity would change the strength and/or the direction of relationship between market orientation and business performance. For the purpose of testing this relationship, a hierarchical regression analysis was used. The statistical result has been presented below in Table 4.21.

Table 4.21: Summary of the main effect and the interaction effect of competitive intensity

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.404 ^a	.163	.159	.74091	.163	36.443	2	374	.000
2	.405 ^b	.164	.157	.74157	.001	.336	1	373	.562

a. Predictors: (Constant), CI_Centered, MO_Centered

b. Predictors: (Constant), CI_Centered, MO_Centered, MOXCI

Source: Survey result, 2014

Table 4.21 showed the main effect of market orientation and competitive intensity on business performance. Besides, the table presented statistical findings needed to test if competitive intensity moderated the relationship between market orientation and business performance. Here, model 1 presented the first order effect and model 2 presented the second order effect. The statistical finding revealed that market orientation and competitive intensity accounted for 16.3% of the variance in business performance controlling the effect of the interaction terms. When the

interaction of market orientation and competitive intensity was included in the model, the predictive capability slightly improved to 16.4% only with a minor change of 0.1% in R^2 . The change of 0.001 in the value of R^2 from 0.163 to 0.164 was associated with the F value of 36.443 and 2 degrees of freedom.

The coefficient of correlation (R) value of 0.404 and the coefficient of determination (R^2) value of 0.163 with a 36.443 F – value change were statistically significant ($P < 0.001$). This implied that the variance accounted by the combined effect of market orientation and competitive intensity on the business performance of public and private banks in Ethiopia was found to be 16.3%. The following ANOVA table also provided the same information that model 1 was statistically significant at $p < .001$ with F value of 36.443. This indicated that model 1 which captured the main effect of market orientation and competitive intensity on business performance was observed to be statistically significant.

Table 4.22 ANOVA: The main effect and interaction effect of competitive intensity

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.011	2	20.005	36.443	.000 ^b
	Residual	205.306	374	.549		
	Total	245.316	376			
2	Regression	40.195	3	13.398	24.364	.000 ^c
	Residual	205.121	373	.550		
	Total	245.316	376			

a. Dependent Variable: BP

b. Predictors: (Constant), CI_Centered, MO_Centered

c. Predictors: (Constant), CI_Centered, MO_Centered, MOXCI

Source: Survey result, 2014

Unlike model 1 which showed only the main effect of the independent variables, model 2 captured the interaction term of market orientation and competitive intensity (MO X CI). Model 2 examined whether the interaction term of market orientation and competitive intensity (MO X

CI) moderate the relationship between market orientation and business performance. When the interaction term of market orientation and competitive intensity (MO X MD) was included in the model, the coefficient of correlation (R) was changed from 0.404 to 0.405. The model with the interaction term showed that the change in the coefficient of determination (R^2) was only 0.001. The 0.164 coefficient of determination (R^2) was associated with a 0.336 F value and 1 degree of freedom. The F change associated with the R^2 change of 0.1% was not statistically significant as p value was 0.562.

Model 2 revealed that when the interaction of market orientation and competitive intensity was included in the model, the variance in business performance accounted by market orientation and competitive intensity increased only by 0.1%. This indicated that adding the interaction term of market orientation and competitive intensity (MO X CI) in the model did not increase the model's predictive capacity in predicting business performance in a statistically significant way. Therefore, the effect of competitive intensity in moderating the relationship between market orientation and business performance was statistically non-significant.

Table 4.23 below depicts the beta weight of market orientation and competitive intensity and the beta weight of the product term of market orientation and competitive intensity (MO X MD) along with their multicollinearity statistics.

Table 4.23: The beta weights and the multicollinearity statistics of market orientation, competitive intensity, and the interaction term

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.822	.038		100.151	.000		
	MO_Centered	.503	.059	.409	8.517	.000	.971	1.030
	CI_Centered	-.045	.052	-.042	-.867	.386	.971	1.030
2	(Constant)	3.825	.039		98.865	.000		
	MO_Centered	.503	.059	.409	8.517	.000	.971	1.030
	CI_Centered	-.055	.055	-.051	-1.007	.315	.871	1.149
	MOXCI	-.043	.074	-.029	-.580	.562	.895	1.118

a. Dependent Variable: BP

Source: Survey result, 2014

Table 4.23 above revealed that while market orientation was statistically significant at $p < 0.001$ with a regression value of 0.409; competitive intensity with a regression value of -0.042 was not statistically significant as its p value was 0.386. The interaction of market orientation and competitive intensity with a regression value of -0.029 and a t value of -0.58 was not statistically significant as $p > 0.05$. The interaction term of market orientation and competitive intensity (MO X MD) was not a significant incremental predictor of business performance as the associated F change of 0.42 and the beta weight of -0.031 were not statistically significant as the respective p value was greater than 0.05. Therefore, the magnitude of the effect of competitive intensity in moderating the relationship between market orientation and business performance was not statistically significant.

Table 4.23 above also presented the statistics needed to measure the level of multicollinearity. According to Field (2009) multicollinearity was not a problem as long as the variance inflation

factor (VIF) was lower than 10 and the tolerance statistic was greater than 0.10. Since the variance inflation factor of market orientation, competitive intensity and the interaction term of market orientation and competitive intensity was lower than 10 and since the tolerance statistic of market orientation, competitive intensity and the interaction term of market orientation and competitive intensity was greater than 0.10, multicollinearity was not a problem.

Finally, the scatter plot presented below in Figure 4.8 revealed that when the level of competitive intensity varied from low to moderate and from moderate to high, the effect of market orientation on business performance varied as well.

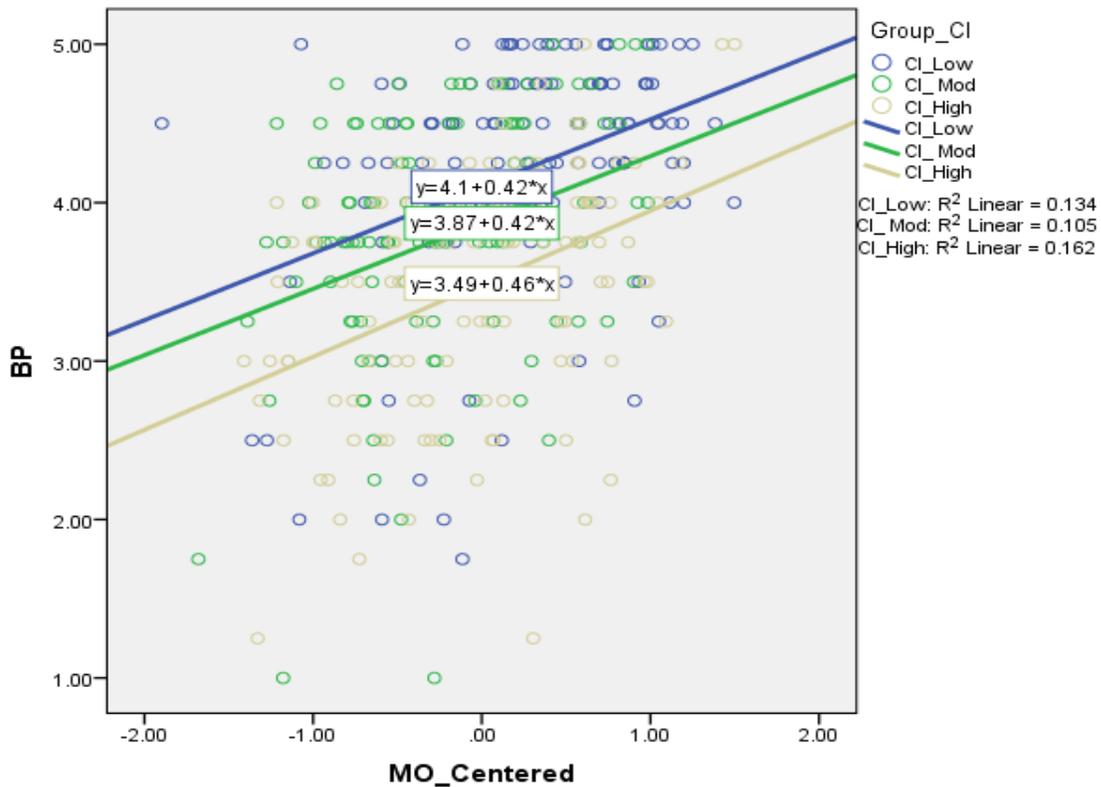


Figure 4.8 The degree of change in competitive intensity associated with the degree of change in market orientation - business performance relationship

Figures 4.8 revealed that an ordinal interaction effect occurred as the lines did not cross and a synergistic interaction effect (Fairchild and McQuillin, 2009) was observed since a change in the level of competitive intensity enhances the relationship between market orientation and business performance. However, the magnitude of the change was statistically non-significant ($p > 0.05$). When the level of competitive intensity was low, 13.4% of the variance in business performance was explained by market orientation; when the level of competitive intensity was moderate, 10.5% of the variance in business performance was explained by market orientation; and finally when the level of competitive intensity was high, 16.2% of the variance in business performance was explained by market orientation. However, since the lines are parallel, there was no interaction effect indicating that the relationship between market orientation and business performance was not moderated by competitive intensity.

4.5.3 Analysis of the moderation effect of government regulation

This analysis was conducted to test whether a change in government regulation would change the strength and/or the direction of relationship between market orientation and business performance. Accordingly, hierarchical regression analysis was used to test if the market orientation – business performance relationship was moderated by government regulation. The statistical result has been presented below in Table 4.24.

Table 4.24: Summary of the main effect and the moderation effect of government regulation

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.402 ^a	.162	.157	.74153	.162	36.068	2	374	.000
2	.405 ^b	.164	.157	.74162	.002	.910	1	373	.341

a. Predictors: (Constant), REG_Centered, MO_Centered

b. Predictors: (Constant), REG_Centered, MO_Centered, MOXREG

Source: Survey result, 2014

Table 4.24 revealed the main effect of market orientation and government regulation on business performance. The table also showed the moderation effect of government regulation on the relationship between market orientation and business performance. Model 1 presented the first order effect and model 2 presented the second order effect. The statistical finding showed that market orientation and government regulation accounted for 16.2% of the variance in business performance controlling for the interaction effect of the two variables. When the interaction of market orientation and government regulation was included in the model, the predictive capability slightly improved to 16.4% only with a minor change of 0.2%. The 0.2% change in the R^2 value from 0.162 to 0.164 was associated with the F value of 36.0682 and 2 degrees of freedom.

The 0.402 coefficient of correlation (R) and the 0.162 coefficient of determination (R^2) with a 36.068 F change and 2 degrees of freedom were statistically significant at $p < 0.001$. This implied that the variance accounted by the combined effect of market orientation and government regulation on the business performance of public and private banks in Ethiopia was 0.162. The ANOVA table given below also provided the same information. Therefore, model 1 was statistically significant at $p < 0.001$ with F value of 36.068 and 374 degree of freedom. This

implied that model 1 which represented the main effect of market orientation and government regulation on business performance was statistically significant.

Table 4.25: ANOVA: The main effect and moderated effect of government regulation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.666	2	19.833	36.068	.000 ^b
	Residual	205.651	374	.550		
	Total	245.316	376			
2	Regression	40.166	3	13.389	24.343	.000 ^c
	Residual	205.150	373	.550		
	Total	245.316	376			

a. Dependent Variable: BP

b. Predictors: (Constant), REG_Centered, MO_Centered

c. Predictors: (Constant), REG_Centered, MO_Centered, MOXREG

Source: Survey result, 2014

Unlike model 1 which showed only the main effect of the independent variables, model 2 showed the interaction term of market orientation and government regulation (MO X MD). Model 2 examined whether the interaction term of market orientation and government regulation (MO X MD) moderate the relationship between market orientation and business performance. The coefficient of correlation (R) changed from 0.402% to 0.405% when the interaction term of market orientation and government regulation (MO X MD) was included in the model. The model with the interaction term revealed that the change in the coefficient of determination (R^2) was only 0.002. The 0.164 coefficient of determination (R^2) was associated with a smaller 0.91 F value and 1 degree of freedom. The F change associated with the R^2 change of 0.002 was not statistically significant as p value was 0.341.

Model 2 revealed that the variance in business performance accounted by market orientation and government regulation increased only by 0.002 when the interaction of market orientation and

government regulation was included in the model. This indicated that adding the interaction term of market orientation and government regulation (MO X REG) to the model did not increase the models' predictive capacity in predicting business performance in a statistically significant way. Therefore, the effect of government regulation in moderating the relationship between market orientation and business performance was statistically non-significant.

Table 4.26 presents the regression coefficient of the principal independent variables namely market orientation and government regulation and the regression coefficient of the product term of market orientation and government regulation (MO X REG) along with their multicollinearity statistics.

Table 4.26: The regression coefficients and the multicollinearity statistics of market orientation, government regulation, and the interaction term

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.822	.038		100.067	.000		
	MO_Centered	.494	.058	.402	8.489	.000	1.000	1.000
	REG_Centered	-.017	.049	-.017	-.351	.725	1.000	1.000
2	(Constant)	3.821	.038		100.040	.000		
	MO_Centered	.496	.058	.403	8.512	.000	.999	1.001
	REG_Centered	-.017	.049	-.016	-.335	.737	1.000	1.000
	MOXREG	.068	.071	.045	.954	.341	.999	1.001

a. Dependent Variable: BP

Source: Survey result, 2014

Table 4.26 indicated that while market orientation was statistically significant at $p < 0.001$ with a regression coefficient of 0.402, government regulation with a regression coefficient of -0.017

was not statistically significant as its p value was 0.725. The interaction of market orientation and government regulation with a regression coefficient of .045 and a t value of .954 was not statistically significant as p was 0.341. The interaction term of market orientation and government regulation (MO X MD) was not a significant incremental predictor of business performance as the associated F change of 0.91 and the beta weight of 0.045 were not statistically significant as p value was 0.341. Therefore, the magnitude of the effect of government regulation in moderating the relationship between market orientation and business performance was not statistically significant.

Table 4.26 also presents the statistics needed to measure the level of multicollinearity. According to Field (2009) multicollinearity was not a problem as long as the variance inflation factor (VIF) was lower than 10 and the tolerance statistic was greater than .10. Since the variance inflation factor of market orientation, government regulation and the interaction term of market orientation and government regulation was lower than 10 and since the tolerance statistic of market orientation, government regulation and the interaction term of market orientation and government regulation was greater than 0.10, multicollinearity was not a problem.

Finally, the scatter plot presented below in Figure 4.9 showed that when the level of government regulation varied from low to moderate and from moderate to high, the effect of market orientation on business performance varied as well.

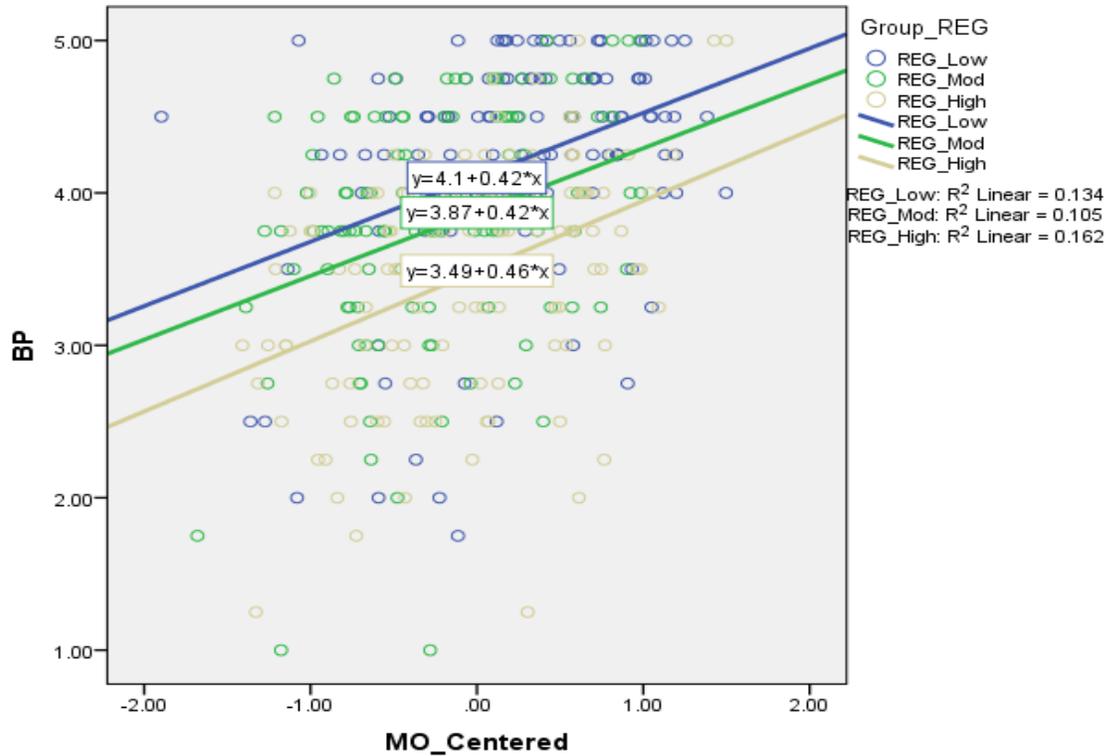


Figure 4.9: The degree of change in government regulation associated with the degree of change in market orientation - business performance relationship

Figures 4.9 exhibited that an ordinal interaction effect occurred as the lines did not cross and synergistic interaction effect (Fairchild and McQuillin, 2009) was observed since a change in the level of government regulation enhanced the relationship between market orientation and business performance. However, the magnitude of the change was found to be statistically non-significant ($p > 0.05$). Therefore, when the level of government regulation was low, 13.4% of the variance in business performance was explained by market orientation. Similarly, when the level of government regulation was moderate, 10.5% of the variance in business performance was explained by market orientation. Furthermore, when the level of government regulation was high, 16.2% of the variance in business performance was explained by market orientation.

However, since the lines were parallel, there was no interaction effect indicating that the relationship between market orientation and business performance was not moderated by government regulation.

4.5.4 Analysis of the Combined Moderation Effect of Market Dynamism, Competitive Intensity, and Government Regulation

A moderated multiple hierarchical regression analysis (Cohen and Cohen, 1983) was used to test if the market orientation – business performance relationship was moderated by the combined interaction effect of market dynamism, competitive intensity and government regulation. As suggested by Aiken and West (1991), a mean centering approach was used on market orientation, market dynamism, competitive intensity, and government regulation. The statistical result has been presented below in Table 4.27.

Table 4.27: Summary of the main effect and the moderation effect of market dynamism, competitive intensity, and government regulation on business performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.415 ^a	.172	.163	.73886	.172	19.342	4	372	.000
2	.421 ^b	.177	.162	.73960	.005	.753	3	369	.521

a. Predictors: (Constant), REG_Centered, MO_Centered, CI_Centered, MD_Centered

b. Predictors: (Constant), REG_Centered, MO_Centered, CI_Centered, MD_Centered, MOXREG, MOXMD, MOXCI

c. Dependent Variable: BP

Source: Survey result, 2014

As presented above in Table 4.27, model 1 revealed the main effect of market orientation, market dynamism, competitive intensity and government regulation on business performance. Model 2 on the other hand presented the second order effect or the interaction terms of market dynamism, competitive intensity and government regulation on business performance. The statistical finding showed that the combined main effect of market orientation, market dynamism, competitive intensity and government regulation account for 17.2% of the variance in business performance controlling for the interaction terms. When the interaction terms were included in the model, the predictive capability slightly improved to 17.7% only with a minor change of 0.5%. The 0.005 change in the R^2 value from 0.172 to 0.177 was associated with the F value of 19.342 and 4 degrees of freedom.

The 0.415 coefficient of correlation (R) and the 0.172 coefficient of determination (R^2) with a 19.342 F change and 4 degrees of freedom were statistically significant at $p < 0.001$. This implies that the variance accounted by the combined effect of the interaction terms on the business performance of public and private banks in Ethiopia was 17.2%. The ANOVA table given below also provided the same information that model 1 was statistically significant at $p < 0.001$ with F value of 19.342 and 372 degree of freedom. This implies that model 1 which represented the main effect of market orientation, competitive intensity, and government regulation on business performance was statistically significant.

Table 4.28: ANOVA: The main effect and moderated effect of market dynamism, competitive intensity, and government regulation on business performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42.236	4	10.559	19.342	.000 ^b
	Residual	203.080	372	.546		
	Total	245.316	376			
2	Regression	43.472	7	6.210	11.353	.000 ^c
	Residual	201.845	369	.547		
	Total	245.316	376			

a. Dependent Variable: BP

b. Predictors: (Constant), REG_Centered, MO_Centered, CI_Centered, MD_Centered

c. Predictors: (Constant), REG_Centered, MO_Centered, CI_Centered, MD_Centered, MOXREG, MOXMD, MOXCI

Source: Survey result, 2014

Unlike model 1 which shows only the main effect of the independent variables, model 2 revealed the interaction term of market orientation and market dynamism (MO X MD), market orientation and competitive intensity (MOXCI) and market orientation and government regulation (MO X REG). Model 2 examined if the interaction terms of market orientation and market dynamism (MO X MD), market orientation and competitive intensity (MOXCI) and market orientation and government regulation (MO X REG) moderate the relationship between market orientation and business performance. The coefficient of correlation (R) value changed from 0.415 to 0.421 when the interaction terms were included in the model. The model with the interaction term revealed that the change in the coefficient of determination (R^2) value was only 0.5%. The 16.4% coefficient of determination (R^2) related to the interaction terms was associated with a smaller 0.753 F value and 3 degree of freedom. The F change associated with the R^2 change of 0.5% was not statistically significant as the p value was 0.521.

As discussed above, Model 2 revealed that the percentage of the variance in business performance accounted by market orientation, market dynamism, competitive intensity, and government regulation increased only by 0.5% when the interaction are included in the model. This indicates that adding the interaction terms in the model doesn't increase the model's predictive capacity in predicting business performance in a statistically significant way. Therefore, the effect of market dynamism, competitive intensity and government regulation on the moderated relationship between market orientation and business performance was statistically non-significant.

Table 4.29 below presents the regression coefficient of the principal independent variables namely market orientation, market dynamism, competitive intensity, and government regulation and the regression coefficient values of the product terms of market orientation and market dynamism (MO X MD), market orientation and competitive intensity (MOXCI) and market orientation and government regulation (MO X REG) along with their multicollinearity statistics.

Table 4.29: The regression coefficients and the multicollinearity statistics of market orientation, government regulation, and the interaction term

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	3.822	.038		100.428	.000					
	MO_Centered	.464	.062	.377	7.486	.000	.402	.362	.353	.876	1.142
	MD_Centered	.145	.072	.109	2.019	.044	.203	.104	.095	.770	1.299
	CI_Centered	-.070	.057	-.065	-1.225	.221	.028	-.063	-.058	.798	1.254
	REG_Centered	-.025	.054	-.024	-.465	.642	-.012	-.024	-.022	.824	1.213
2	(Constant)	3.837	.040		95.722	.000					
	MO_Centered	.471	.062	.383	7.569	.000	.402	.367	.357	.870	1.150
	MD_Centered	.134	.072	.100	1.846	.066	.203	.096	.087	.759	1.317
	CI_Centered	-.080	.060	-.074	-1.340	.181	.028	-.070	-.063	.730	1.369
	REG_Centered	-.021	.054	-.020	-.391	.696	-.012	-.020	-.018	.820	1.219
	MOXMD	-.099	.098	-.054	-1.009	.314	-.034	-.052	-.048	.780	1.283
	MOXCI	-.034	.083	-.023	-.409	.683	-.030	-.021	-.019	.717	1.395
	MOXREG	.097	.078	.064	1.240	.216	.034	.064	.059	.827	1.210

a. Dependent Variable: BP

Source: Survey result, 2014

Table 4.29 above indicated that market orientation was statistically significant at $p < .001$ with a regression coefficient of .383, market dynamism was not statistically significant as its p value was .066, competitive intensity was not statistically significant as its p value was 0.181, and government regulation was not statistically significant as its p value was 0.696. The interaction of market orientation and market dynamism (MOXMD) with a regression coefficient of -0.054 and a t value of -1.009 was not statistically significant as p was 0.341. Similarly, the interaction of market orientation and competitive intensity (MOXCI) with a regression coefficient of -0.023 and a t value of -0.409 was not found to be statistically significant ($p > 0.05$). Finally, the

interaction of market orientation and government regulation (MOXREG) with a regression coefficient of 0.064 and a t value of 1.240 was not statistically significant as p was 0.216.

Table 4.29 also presents the statistics needed to measure the level of multicollinearity. According to Field (2009) multicollinearity was not a problem as long as the variance inflation factor (VIF) was lower than 10 and the tolerance statistic was greater than 0.10. Since the variance inflation factor of market orientation, market dynamism, competitive intensity, government regulation, the interaction term of market orientation and market dynamism, market orientation and competitive intensity, and market orientation and government regulation was lower than 10; multicollinearity problem was not observed. Besides since the tolerance statistic of all the focal independent variable, the moderating variables, and the interaction terms was greater than 0.10, multicollinearity was not a problem.

Finally, the scatter plot presented below in Figure 4.10 shows that when the level of market dynamism, competitive intensity, and government regulation varied from low to moderate and from moderate to high, the effect of market orientation on business performance varied as well.

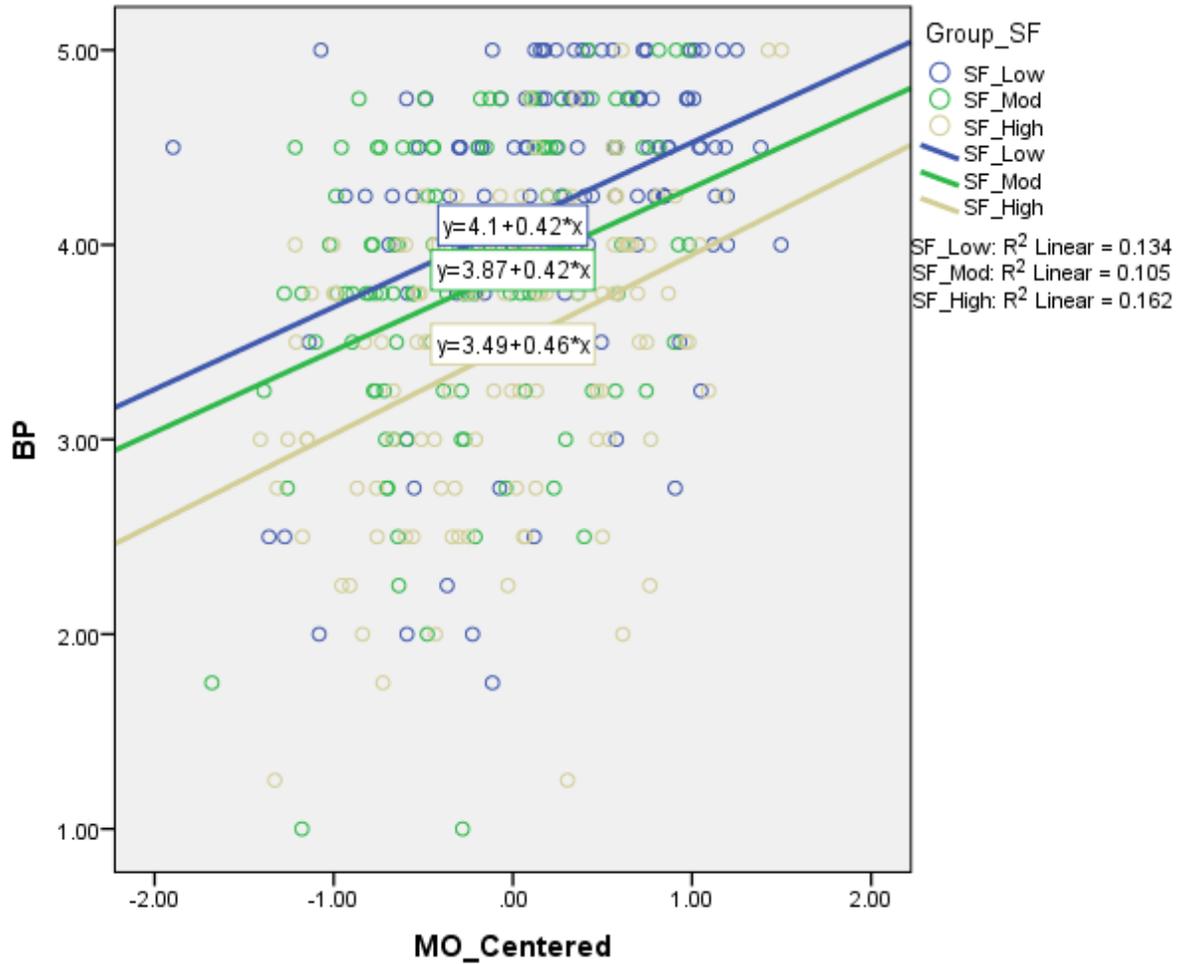


Figure 4.10: The degree of change in moderating variables associated the degree of change in market orientation -business performance relationship.

Figure 4.10 exhibits that an ordinal interaction effect occurred as the lines did not cross and a synergistic interaction effect (Fairchild and McQuillin, 2009) was observed since a change in the level of the moderating variables enhanced the relationship between market orientation and business performance. However, the magnitude of the change was statistically non-significant. When the level of the moderating variables was low, 13.4% of the variance in business performance was explained by market orientation; when the level of the moderating variables was moderate, 10.5% of the variance in business performance was explained by market

orientation; and finally when the level of the moderating variables was high, 16.2% of the variance in business performance was explained by market orientation. However, since the lines are parallel, there was no interaction effect indicating that the relationship between market orientation and business performance was not moderated by the market dynamism, competitive intensity, and government regulation.

4.6 Comparing Public and Private Banks Level of Market Orientation, Marketing Resources and Business Performance

This section examined if there was a significant difference between public and private banks in terms of their level of market orientation, marketing resources, and business performance as a result of their ownership structure in the Ethiopian context. As a result the analysis was carried out to examine whether public and private banks in Ethiopia significantly differ in terms of their level of market orientation marketing resources and business performance.

4.6.1 Comparing the Mean of Public and Private Banks Level of Market Orientation

The mean level of market orientation of public banks (μ_1) was hypothesized to be the same as the mean level of market orientation of private banks (μ_2). The null hypotheses, therefore, appeared to be as follows.

H_{5a}: There is no significant difference between public and private banks in Ethiopia in terms of their market orientation.

The mean score and standard error of marketing resources of public and private banks has been presented in Table 4.30 below.

Table 4.30 The mean and standard error of market orientation level of public and private banks

	Ownership type	N	Mean	Std. Deviation	Std. Error Mean
Market Orientation	Public bank	143	3.5434	.66536	.05564
	Private bank	234	3.2018	.61784	.04039

Source: Survey result, 2014

On the average, the level of market orientation of public banks was found to be greater ($\mu_1 = 3.543$, $SE = .056$) than their private counterparts ($\mu_2 = 3.201$, $SE = .040$). In order to test whether the mean values of public banks level of market orientation were different from that of private banks in a statistically significant way, a two-sample t-test was performed. The statistical result of the t-test has been presented in Table 4.31 below.

Table 4.31 Independent sample test of the level of market orientation of public and private banks

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Market Orientation	Equal variances assumed	.177	.674	5.058	375	.000
	Equal variances not assumed			4.968	283.163	.000

Source: Survey result, 2014

Since equality of variance was assumed to be statistically non-significant ($p > 0.05$), the *t*-test was performed with equal variances assumed. The t-test result revealed that there remained a statistically significant difference ($p < 0.001$) between public and private banks in Ethiopia, pertaining to their level of market orientation. Therefore, the proposed null-hypothesis that there

was no significant difference between public and private banks in terms of their level of market orientation was rejected. This means that there exists a significant difference between public and private banks in terms of their level of market orientation in Ethiopia. However, the effect size was small with $r = 0.253$. That means the type of ownership structure explained only 6.40 percent of the variance of the level of market orientation across public and private banks in Ethiopia.

4.6.2 Comparing the Mean of Public and Private Banks Marketing Resources

The mean score of marketing resources of public banks (μ_1) was hypothesized to be the same as the mean score of marketing resources of private banks (μ_2). The null hypotheses, therefore, appeared as follows.

H_{5b} : There is no significant difference between public and private banks in Ethiopia in terms of their marketing resources.

The mean score and standard error of marketing resources of public and private banks has been presented in Table 4.32 below.

Table 4.32 The mean and standard error of marketing resources of public and private banks

	Ownership type	N	Mean	Std. Deviation	Std. Error Mean
Marketing resources	Public bank	143	3.7639	.67096	.05611
	Private bank	234	3.3250	.58904	.03851

Source: Survey result, 2014.

On the average, public banks' marketing resources was greater ($\mu_1 = 3.764$, $SE = .056$) than private banks' market orientation level ($\mu_2 = 3.325$, $SE = .038$). The statistical result of the t-test has been presented in Table 4.33 below.

Table 4.33 Independent sample test of marketing resources of public and private banks

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Marketing resources	Equal variances assumed	1.984	.160	6.654	375	.000
	Equal variances not assumed			6.449	270.667	.000

Source: Survey result, 2014.

Since equality of variance was assumed to be statistically non-significant ($p > 0.05$), the *t*-test was performed with equal variances assumed. The t-test result showed that there was a statistically significant ($p < 0.001$) difference between public and private banks in terms of their marketing resources in Ethiopia. Therefore, the proposed null-hypothesis that there was no significant difference between public and private banks in terms of their marketing resources was rejected. This means that there exists a significant difference between public and private banks in terms of their marketing resources in Ethiopia. However, the effect size was moderate with $r = 0.325$. That means the ownership structure explained only 10.56% of the variance of marketing resources across public and private banks in Ethiopia.

4.6.3 Comparing the Mean of Public and Private Banks Business Performance

The mean of the business performance of public banks (μ_1) was hypothesized to be the same as the mean of the business performance of private banks (μ_2). The null hypotheses, therefore, appeared as follows.

H_{5c} : There is no significant difference between public and private banks in Ethiopia in terms of their business performance.

The average level and standard error of the business performance of public and private banks has been presented in Table 4.34 below.

Table 4.34 The mean and standard error of business performance of public and private banks

Ownership type	N	Mean	Std. Deviation	Std. Error Mean
Business performance Public bank	143	4.0647	.87649	.07330
Private bank	234	3.6731	.72543	.04742

Source: Survey result, 2014.

On the average, public banks' business performance was found to be greater ($\mu_1 = 4.065$, SE = .073) than their private counterparts ($\mu_2 = 3.673$, SE = .047). The statistical result of the t-test has been presented in Table 4.35 below.

Table 4.35 Independent sample test of the business performance of public and private banks

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Business	Equal variances assumed	4.028	.045	4.694	375	.000
Performance	Equal variances not assumed			4.486	258.196	.000

Source: Survey result, 2014.

As revealed from Table 4.35 above, since equality of variance was statistically significant ($p < 0.05$); the t -test was performed with equal variances not assumed. The t -test result showed that there was a statistically significant ($p < 0.05$) difference between public and private banks in terms of their business performance. Therefore, the proposed null-hypothesis that there was no significant difference between public and private banks in terms of their business performance was rejected. This means that there exists a significant difference between public and private banks in terms of their business performance in Ethiopia. However, the effect size of the difference was 0.269 which was a small size effect (Field, 2009). This implies that banks' ownership structure explained only 7.24 percent of the variance of business performance across public and private banks in Ethiopia.

4.7 Summary of the Chapter

The data screening and data cleaning processes were carried out to make the dataset ready for statistical analysis. All the data values were accounted for without any missing values in the dataset. To deal with outliers, 41 cases that fall outside the 99% confidence level or greater than

2.57 Z - value were removed from the dataset. The statistical result showed that the maximum absolute values for Skeweness and Kurtosis fall within the acceptable level with no violation of the normality assumption.

The CFA result revealed that the originally specified model did not fit with the sample data on chi-square, GFI, RMSR, RMSEA, CFI, NFI, and RFI. Therefore, the hypothetical model was modified based on the pattern coefficient, modification index, and standardized residual covariance. As a result, the variables representing customer satisfaction, reputational assets, product management capabilities, marketing communication capabilities and marketing planning capabilities were removed from the model. The modified model was found to be fit in terms of chi-square, GFI, RMSR, RMSEA, CFI, NFI, IFI, RFI, PNFI, and PCFI (indexes).

The total effect of market orientation on business performance was observed to be 0.36 but the direct effect was accounted for – 0.55. However, the indirect effect was found to be 0.91, where complete and inconsistent mediation was observed due to suppression effect. Finally, the results revealed that there had been a statistically significant difference between public and private banks in terms of their market orientation, marketing resources, and business performance.

CHAPTER 5 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides detailed discussion on the research results in light of the theoretical foundations presented in the literature review section. The first section of the chapter emphasizes on the statistical findings related to the adequacy of the structural equation model, the statistical implications of the dimensions that tie together market orientation, marketing resources, and business performance. The second section of the chapter presents discussion on the statistical findings related to the total effect, direct effect and indirect effect of market orientation on business performance. The third section of the chapter sheds light on the statistical findings of the moderation analysis. The last section presents findings on the statistical difference between public and private banks in terms of their market orientation, marketing resources, and business performance. The chapter further presents discussions on each research question and hypothesis.

5.2 Model Adequacy

The result revealed that the modified model was fit enough to adequately explain the relationship between market orientation and business performance of public and private banks in Ethiopia. All the latent variables and their respective indicator variables in the SEM were appeared to be statistically significant ($p < 0.05$). The result further showed that the total effect of market orientation on business performance was 0.36 ($p < 0.001$). This implies that while market orientation accounted for 13% of the variance in business performance, the aggregate effect of market orientation and marketing resources on business performance was observed to be 27% ($p < 0.05$). This implied that market orientation and marketing resources together accounted for

27% of the variance in business performance of banks in Ethiopia. However, the effect of both market orientation and marketing resources on business performance was found to be weak.

The direct effect of market orientation on business performance was computed to be - 0.55 ($p < 0.05$). The finding indicated that market orientation had a direct but adverse effect on business performance in the Ethiopian banking environment. This empirical evidence can be considered important in terms of theoretical contribution, since a negative relationship between market orientation and business performance was observed only in few studies including the one conducted in Taiwan after the financial crisis (Grewal and Tansuhaj, 2001). However, the finding remained consistent with the theoretical explanations related to the conditions under which market orientation can augment a positive effect on business performance. Ellis (2004) reported that market orientation would have a direct and strong positive effect on business performance in mature economies. He strongly argued that in developing economies characterized by ill-defined market structure and strong demand for products or services, firms can achieve a remarkable business performance with minimal market orientation effort. Qu and Ennew (2005) also argued that market orientation cannot enhance business performance in a market where competition is stifled due to excessive regulation.

The indirect effect of market orientation on business performance mediated by marketing resources was found to be positive and strong. The result revealed that the market orientation – business performance relationship mediated by marketing resources was 0.91 ($p < 0.001$). The result revealed that banks which build their relational assets, improve their delivery linkage

capabilities with an efficient and effective marketing implementation capabilities would boost their business performance.

5.3 Market Orientation

The result showed that all the three dimensions of market orientation were statistically significant ($p < 0.001$). This indicated that banks in Ethiopia have been engaged in intelligence generation, intelligence dissemination, and responsiveness. Intelligence generation presupposes that organizations need to have the necessary structural setup to generate relevant, accurate, current and sufficient information related to their internal and external environment. With this regard, the result revealed that banks do an in-house market research and periodically review the likely effect of changes on competition, regulations, and technology on their operation.

Furthermore, the findings indicated that banks in Ethiopia effectively communicate the intelligence they generated regarding customers' preferences, customers' perception on the service quality, changes in the competition, regulation, and technology to employees and departments at all levels. Banks held interdepartmental meetings to discuss market trends and developments to design and implement appropriate marketing strategies that would avert adverse consequences or help them to tap new opportunities. Banks also circulated documents that provide information about their customers satisfaction at all levels on regular basis.

The result also revealed that banks try to be responsive to the market which is characterized by limited dynamism albeit on limited basis. It is apparently obvious that the prohibition of foreign banks hinder the intensity of the competition which in turn adversely affects the banking product

mix in Ethiopia. However, banks try to be responsive to the market through introduction of new products such as interest free saving and loan arrangements tailored to Muslim customers.

5.4 Business Performance

In this study two marketing and two financial metrics had been used to measure business performance. Both the financial and marketing metrics namely profit return on investment, customer satisfaction and market share were statistically significant ($p < 0.001$).

The pattern/structure coefficients of all the four indicators were found statistically significant at $p < 0.001$. The strength of the pattern coefficient of customer satisfaction was 0.54 which was lower than the pattern loading of other indicator variables. Besides, the standardized residual covariance of customer satisfaction was as high as 6.064 exceeding the standardized residual covariances of all other indicators. These results contributed to the inadequacy of the model. Therefore, customer satisfaction had been removed from the model. Once customer satisfaction was removed from the model, the pattern coefficients of market share, profit and return on investment were greater than .70 and they were also found statistically significant at $p < 0.001$.

In the Ethiopian banking sector where competition has been restricted only to domestic banks, it should not be surprising that customer satisfaction appeared to be a less important business performance metric. The fact that the penetration rate of banking services in Ethiopia has been at the lowest level, customers' choices have been limited. Therefore, a dissatisfied customer may continue his patronage with the existing bank regardless of a disappointing service experience he/she might encounter. It is also possible that trust, confidence, and credibility might be

important factors for choice of a financial service provider with an overriding effect on temporal dissatisfaction. On the other hand, this can also be attributed to the fact that customers in general found all the banks providing almost similar services, with minor or insignificant differences in their approaches in terms of banking products or delivery channels such as use of ATM.

5.5 The Direct Effect of Market Orientation on Business Performance

The discussion in this section focuses on the first research question and the associated hypothesis.

Research question 1:

To what extent does market orientation directly and positively influence the business performance of banks in Ethiopia?

Hypothesis 1:

H₁: Market orientation directly and positively influences the business performance of banks in Ethiopia.

Since the penetration rate of banking service in Ethiopia is at its lowest level, banks do not often encounter market problem as long as they make their service available to the users. In Ethiopia, customers take the initiative to approach banks and not the other way round. As a result, there is no drive for banks to invest in market orientation since the financial return may not be rewarding. Even without investing in market orientation, banks often remained profitable as witnessed by most banks profitability even in their first year operation bearing larger initial establishment outlays and high promotional expenditures. This is further reinforced by the non-

existence of foreign banks in Ethiopia where the intensity of the competition remained limited to only domestic players. As a result, the banking sector in the Ethiopian context is characterized by stability and low level of risk where there is no a critical push factor for innovation.

As a result, banks in Ethiopia are not actively engaged in carrying out marketing research to identify unmet needs to introduce new banking products. Besides, banks have not been actively engaged in continuous promotional campaigns for attraction of new customers or retention of their existing customers. This can be attributed to the fact that the banking sector in Ethiopia is characterized by a supply side market where the possibility of making investment to enhance banks' level of market orientation remained least in their priority agenda. Finally, banks in Ethiopia are neutral to price - based competition since interest rate is centrally fixed by National Bank of Ethiopia. All these factors diluted the potential of banks in Ethiopia to become market oriented.

Related to the first research question, the statistical result revealed that market orientation directly influenced the business performance of banks in Ethiopia. However, the direction of the effect was negative. As presented in the analysis section, the regression coefficient of the direct relationship between market orientation and business performance was - 0.55 at $p < 0.05$. Therefore, the first hypothesis was rejected since the finding showed a statistically significant negative direct relationship between market orientation and business performance.

The observed statistically significant ($p < .05$), though negative and direct relationship between market orientation and business performance may have a theoretical contribution as there are

only few studies that witnessed such an adverse effect (Grewal and Tansuhaji, 2001; Voss and Voss, 2000). The immaturity of the banking sector, the restriction of competition among domestic banks due to prohibition of foreign banks, the lower penetration rate of banking services, and the fact that Ethiopia came out of the socialist legacy in the last two decades seem to account for the negative relationship between market orientation and business performance in the Ethiopian banking sector.

5.6 Marketing Resources

The discussion in this section is associated with the second hypothesis.

Hypothesis 2:

H₂: There is a direct and positive relationship between market orientation and marketing resources in the Ethiopian banking sector.

In this study, marketing resources comprised of relational assets, reputational assets, product management capabilities, delivery linkage capabilities, marketing communication capabilities, marketing planning capabilities, and marketing implementation capabilities. All the seven marketing resource dimensions were statistically significant ($p < .001$). However, the pattern coefficient that measured the relationship between each of these indicators and marketing resources resulted in mixed findings.

The pattern coefficients of relational assets, product management capabilities, delivery linkage capabilities, marketing communication capabilities, and marketing implementation capabilities were greater than the acceptable level of 0.70. However, the pattern coefficients of reputational

assets and marketing planning were found to be 0.58 and 0.69 respectively which were lower than the required threshold of 0.70. As a result these two indicator variables had been removed from the model to improve the model fit. Besides, the standardized residual covariances of product management capabilities and marketing communication capabilities were found higher and thus removed from the model to improve the model adequacy.

Relational assets measured the extent to which banks in Ethiopia nurtured a long lasting and mutually beneficial relationship with their external and internal customers. In other words, the extent to which banks have been actively engaged in attracting, satisfying, and retaining their customers and employees can be influenced by relational assets. The result revealed that banks in Ethiopia have been above average in terms of establishing successful relationships with their customers and employees. Besides, the pattern coefficient of relational assets was observed to be 0.77 which was above the threshold level of 0.70 and remained statistically significant ($p < 0.001$).

Reputational assets measured the brand power, credibility, and reputation of banks in Ethiopia. Brand building would be a matter of necessity than a matter of choice in mature markets since banks have to differentiate their products from their competitors to seize a dependable place in the mind of their customers. The Ethiopian banking market is far from maturity and in most measures it is still at its infancy stage in terms of product mix, service delivery systems, technology, and competition. Therefore, most banking products in Ethiopia have been traditional and generic that differentiation of their services or products is at a very low level. As a result the pattern coefficient of reputational assets was computed to be 0.58 which was lower than the

required level of 0.70. Therefore, in light of the immaturity of the market; banks' effort to build a strong, valued and credible brand power cannot decisively influence their performance in the short run.

Product management capabilities measured the ability of the bank to introduce new banking products using either a market pull approach or a technology push approach. In a competitive and mature market, introducing a new banking product and modifying or improvising the existing banking products would influence the bottom line performance. However, in a banking industry like Ethiopia, which is still considered to be at its infancy stage, customers' expectation has been limited to the basic banking products. As a result, the banking products available to date are traditional and few in number. Even though some there were some anecdotal efforts made by banks to introduce new products such as interest free saving and loan services targeted to Muslim customers, a complete range of product/service modification is yet to be expected. The immaturity of the market, the expectation of customers for generic bank products, and technological lags coupled with poor infrastructure significantly limit the banking product mix in Ethiopia. As a result, there has been a limited urge and inertia for innovative banking products. Therefore, even the pattern coefficient of this indicator was 0.73; it has been removed from the model as its standardized residual covariance was higher than the standardized residual covariance of other indicator variables.

Delivery channel linkage capabilities define the availability and accessibility of banking services to customers. Delivery channel linkage capabilities measured banks' abilities to avail banking products to various users through expansion of branches relying on interpersonal service delivery

or through electronic medium for non-personal service delivery. Since the penetration rate of banking services in Ethiopia is at its lowest level, banks in Ethiopia are actively engaged in branch expansion with interpersonal service delivery. Electronic banking is not fully operational yet in Ethiopia as the proclamation was promulgated recently. Although, banks make ATM services available in Addis Ababa and major cities, the scope of coverage of electronic banking is limited. Since the pattern coefficient was 0.88 and the standardized residual covariance was low, delivery channel linkage capabilities has been retained in the model. In countries like Ethiopia where the penetration level of banking service was at its low end, building delivery channel capabilities to make banking services accessible and available for the mass would improve the marketing efficiency and effectiveness of banks.

Market communication capabilities indicated the ability of banks to inform, persuade, or remind customers about their services. Marketing communication capabilities would help banks to create awareness about new products, inform customers about changes in service delivery systems, and persuade customers to continue their patronage, or deal with aggressive promotions launched by competitive banks. Since most banks offer undifferentiated banking products, promotion has focused on informing customers about the opening up of new branches, changes in working hours, or support to sales promotion efforts of banks to encourage customers to save more. Even though the pattern coefficient was reported to be 0.73, this dimension had been removed from the model since the standardized residual covariance was higher than the standardized residual covariances of the other indicator variables. The undifferentiated banking service, lack of distinct positioning strategies, and limited brand building exercises put advertising campaigns, public

relation and digital advertising efforts peripheral to influence the business performance of banks in Ethiopia.

Marketing planning capabilities measured the ability of banks to develop a thorough marketing plan, the capability to segment and target the market, and the competency to design creative marketing strategies. Marketing planning and creative marketing strategies would be essential in a mature market to introduce new banking products that would address unmet needs of customers, to create distinct positions or to differentiate the services of the bank. Besides, marketing planning competencies would be indispensable in turbulent marketing environment as to deal with the competition and bring desirable changes. The pattern coefficient of marketing planning capabilities was found to be 0.69 and the standardized residual covariance remained higher. To improve the model fit, therefore, this indicator variable had been removed from the model. In the Ethiopian banking sector which is characterized by low technological turbulence, low market dynamism, limited competition, and undifferentiated customers preference; marketing planning capabilities cannot be a critical determinant of the bottom line business performance.

Marketing implementation capabilities represented the ability of banks to allocate marketing resources and organizational ability to implement marketing programs and strategies. The pattern coefficient was observed to be 0.75 and the standardized residual covariance of this indicator was found to be low. Therefore, this indicator variable had been retained in the model. The result indicated that marketing competencies to effectively and efficiently carry out marketing routines and programs would influence the firms' potential to improve the bottom line performance.

Related to the second hypothesis, therefore, the result revealed that there was a direct and positive relationship between market orientation and marketing resources. The regression coefficient of the relationship between market orientation and marketing resources was 0.93 at $p < .001$. Since a statistically significant relationship was found between market orientation and marketing resources, the second hypotheses was not rejected. The result revealed that banks with higher market orientation invest in marketing resources which in turn improved the potential of banks for effective and efficient execution of marketing activities.

5.7 The Mediation Effect of Marketing Resources on the Market Orientation - Business Performance Relationship

This section presents discussion on the second research question and the third hypothesis.

Research question 2:

How do marketing resources mediate the relationship between market orientation and business performance of banks in Ethiopia?

Hypothesis 3:

H₃: Market orientation indirectly influences the business performance of banks in Ethiopia through the mediator effect of marketing resources.

Before addressing the research question and the hypothesis, it would be appropriate to discuss how market orientation, marketing resources, and business performance had been captured in the full SEM. Over the last two decades two distinctive styles of research evolved on market orientation (Ellis, 2004). The first line of research was propounded and popularized by Kohli and

Jaworski (1990) and Narver and Slater (1990) which emphasized on organization wide philosophy towards the market. Kohli and Jaworski (1990) identified intelligence generation, intelligence dissemination, and responsiveness as critical dimensions that determine the degree of outward orientation of a company toward the market. The second line of research on market orientation focused on the actual execution of the marketing function within the organization. There are various contributors in this regard using different descriptors such as marketing capabilities (Day 1994; Hooley et al., 1998; Morgan et al. 2009 and Vorhies and Morgan, 2005), marketing assets (Amit and Schoemaker, 1993 and Greenley et al., 2005), marketing resources (Srivastava et al., 1998) and marketing practice (Ellis, 2004).

In this study, an effort has been made to integrate the two lines of research together. Conceptually, the outward orientation of firms toward the market improves the effectiveness of the marketing function within the organization. The generation and dissemination of intelligence about the market regarding the competition, customers' preferences, technology, regulation etc helps firms to design appropriate marketing strategies in response. This guides the set of marketing programs that firms shall adopt to successfully execute the marketing function in a fashion that fits to their broader market outlook. In this study, therefore, the full structural equation model represented the two views of market orientation. Market orientation had been used as an external market outlook of firms involving the three dimensions propounded by Kohli and Jaworski (1990). The statistical result revealed that the pattern coefficients of intelligence generation, intelligence dissemination, and responsiveness were found to be greater than 0.70 and remained statistically significant ($p < .001$).

Marketing resources involved various marketing assets and capabilities which determine the efficiency and effectiveness of the execution of the marketing function using the dimensions suggested by Ngo and O’Cass (2012); Hooley et al. (2003), Srivastava et al. (1998) Vorhies and Morgan (2009), and Raaij et al., (2008). In the full structural equation model, marketing resources involve relational assets, reputational assets, product management capabilities, delivery linkage capabilities, marketing communication capabilities, marketing planning capabilities, and marketing implementation capabilities.

The relationship between market orientation and marketing resources remained strong and positive. The regression coefficient that measures the relationship between market orientation and marketing resources was found to be 0.93. This implied that 86% of the variance in marketing resources would be explained by market orientation. The strong relationship between market orientation and marketing resources implied that the level of market orientation of banks in Ethiopia influence their level of investment in marketing resources including relational assets, delivery linkage capabilities, and marketing implementation capabilities. Marketing resources in turn strongly and positively influenced business performance.

Related to the second research question, the result revealed that market orientation augmented a statistically significant positive effect on marketing resources ($p < 0.001$) and marketing resources exert positive influence on business performance ($p < 0.001$). As presented in section 5.5, the regression coefficient of the effect of market orientation on marketing resources was observed to be 0.93 and the regression coefficient of the effect of marketing resources on

business performance was 0.98. Therefore, the indirect effect of market orientation on business performance mediated by marketing resources was found to be 0.91.

The result, therefore, supported the third hypothesis. The finding indicated that banks which invested in building their marketing resources would outperform others which did not invest in marketing resources. Besides, the result indicated that marketing resources were better indicators of business performance than market orientation. This was supported by the result which showed that while the regression weight of the total effect of market orientation on business performance was 0.36, the regression weight of the total effect of marketing resources on business performance was 0.47. This implied that while market orientation accounted for only 13% of the variance in business performance, marketing resources accounted for 22% of the variance in business performance.

5.8 The Moderation Effect

The discussion in this section addresses the third research question and the fourth hypothesis.

Research question 3

How do market dynamism, competitive intensity, and government regulation moderate the relationship between market orientation and business performance of banks in Ethiopia?

Hypothesis 4

H₄: Market dynamism, competitive intensity, and government regulation moderate the relationship between market orientation and business performance.

As presented in the analysis section; t -value of the regression coefficient associated with the xz_1 , xz_2 , and xz_3 , the R^2 change test, and the significance level of the multiple hierarchical regression coefficient of the interaction terms of xz_1 , xz_2 , and xz_3 were used to test the moderation effect.

The regression coefficient of the interaction effect of market orientation and market dynamism (xz_1) was -0.054 with a t value of -1.009 and p value of 0.314. As a result the interaction effect of market orientation and market dynamism was found to be statistically non-significant. The findings revealed that the regression coefficient of the interaction effect of market orientation and competitive intensity (xz_2) was -0.023 with a t value of -0.409 and p value of 0.683. Therefore, the interaction effect of market orientation and competitive intensity appeared to be statistically non-significant. Finally, the statistical finding revealed that the regression coefficient of the interaction effect of market orientation and government regulation (xz_3) was 0.064 with a t value of 1.240 and p value of 0.216. Therefore, the interaction effect of market orientation and government regulation was also statistically non-significant. Finally, the statistical findings provided enough evidence that the hypothesis was rejected as the p values associated with the interaction terms were found to be greater than 0.05.

The non-significant moderation effect of market dynamism and competitive intensity on the relationship between market orientation and business performance in the Ethiopian banking sector were observed to be consistent with the literature. As reported by Wrenn (1997), Appiah Adu (1998), Greenley (1995), and Harris (2001); market dynamism, technological turbulence, and competitive intensity generally have a little moderation effect on the positive relationship between market orientation and business performance. Besides, Kirca et al. (2005) revealed from their review of 21 studies that there were insufficient empirical evidences that support the

moderation effect of competitive intensity, technological turbulence, and market dynamism on the market orientation – business performance relationship.

The statistically non-significant moderation effect indicated that the magnitude of the effect of market orientation on business performance did not significantly vary as a result of variation in the level of market dynamism, competitive intensity, and government regulation. As presented in the analysis, a low level change in market dynamism, competitive intensity, and government regulation explained 13.4% of the variation in the market orientation - business performance relationship. A moderate level change in market dynamism, competitive intensity, and government regulation accounted for 10.5% of the variation in the market orientation - business performance relationship. Finally, a high level change in market dynamism, competitive intensity, and government regulation was found to explain 16.2% of the variation in the relationship between market orientation and business performance. Therefore, only a small proportion of the variance in business performance was explained by the interaction effects after removing the independent variables.

The non-significant moderation effect was principally related to the inherent characteristic of the banking sector in Ethiopia. In a dynamic environment, high market orientation would improve business performance as market driven firms could better sense the changes and reacted faster to those changes. The Ethiopian banking sector is characterized by limited competition, limited market dynamism, and high regulation. Under such environment, the degree of risk and uncertainty associated with low level of sensitivity to change is minimal. This perhaps explained as to why market dynamism, competitive intensity, and government regulation failed to moderate

the relationship between market orientation and business performance in a meaningful way in Ethiopia.

5.9 Variations across Public and Private Banks in Terms of their Market Orientation, Marketing Resources and Business Performance

This section provides discussion on the fourth research question and the fifth hypothesis.

Research question 4:

To what extent do public and private banks in Ethiopia differ in terms of their market orientation, marketing resources, and business performance?

Hypothesis 5:

H₅: There is no significant difference between public and private banks in terms of their market orientation, marketing resources, and business performance.

The result revealed that public and private banks differ in terms of their level of market orientation, marketing resources, and business performance. Public banks excelled private banks across all the variables examined in this study with marked significant differences ($p < 0.001$). More specifically, the mean score of public banks market orientation (3.543) was compared to that of private banks (3.202). This difference was found to be statistically significant with $p < 0.001$. Therefore, the hypothesis that public banks and private banks were assumed to be the same in terms of their level of their market orientation was rejected. Public banks were found to be better in terms of their market orientation than private banks due to the efforts they exerted to defend their gradually declining market share since the liberalization of the financial sector.

However, the mushrooming of domestic private banks in Ethiopia gradually caused threats to a visible decline in the market share of public banks. To deal with the declining market share and the competition, public banks demonstrated better outward orientation to the market through better level of engagement in intelligence generation, intelligence dissemination, and response to the competition.

The mean score of public and private banks' marketing resources was 3.764 and 3.325 respectively. This difference was found to be statistically significant ($p < .001$). Therefore, the hypothesis that public banks and private banks were the same in terms of their marketing resources was rejected. Public banks were better than private banks in terms of their marketing resources needed to implement the routine marketing activities. Public banks generally excelled private banks in terms of their total capital, number of branches, and number of employees which helped them to possess and deploy greater marketing resources than their counter private banks.

The mean score of public and private banks business performance was 4.065 and 3.673 respectively. This difference was statistically significant with $p < 0.001$. Therefore, the hypothesis that public banks and private banks were the same in terms of their business performance was rejected. To deal with the competition and their declining market share, public banks started taking various measures including launching of core banking, BPR driven reforms on organizational setup and process, improving working hours and service quality which all contributed to their better performance as compared to that of their private bank counterparts.

5.10 Conclusion

5.10.1 Summary of Findings

The study attempted to provide new empirical evidences on the relationship between market orientation and business performance in the context of Ethiopia which is a developing economy characterized by a limited competition among domestic banks due to the legal prohibition of foreign banks from operating in Ethiopia. The findings of the study can be broadly classified into four categories. The first part covers findings related to total effect, direct effect, and indirect effect of market orientation on business performance. The second part addresses findings on the extent to which the hypothesized model fits the sample data and the third part covers findings regarding the moderated effect of market dynamism, competitive intensity, and government regulation on the market orientation - business performance relationship. Furthermore, the last part presents the summary of the findings related to each hypothesis.

First, the total effect of market orientation on business performance was observed to be positive and significant. The regression coefficient of market orientation on business performance was 0.36 ($p < 0.001$). The result revealed that the variance of business performance explained by market orientation was only 13% which appeared to be a weak association. The direct effect of market orientation on business performance was -0.55 ($p < 0.05$). The negative direct effect implied that banks in Ethiopia did not have sound reason to invest in market orientation since the financial return was not rewarding. Without investing in market orientation, banks have often been profitable in Ethiopia even in their first year of operation. Therefore, in Ethiopia where competition is stifled by law, positive relationship between market orientation and business performance has not been observed. However, the indirect effect of market orientation on

business performance mediated by marketing resources was 91% ($p < .001$). Since, the signs of the direct effect (-) and the indirect effect (+) were different, suppression effect was observed. As a result the mediation model revealed a complete but inconsistent mediation effect.

Second, the research provided additional evidences on the argument whether market orientation shall be taken primarily as an outward orientation of the organization toward the market or as internal marketing competencies for carrying out the marketing function. As indicated previously, the total effect of market orientation on business performance as measured by the regression coefficient was 0.36 ($p < 0.001$) which accounted for only 13% of the variance in business performance. On the other hand, the result revealed that the regression coefficient of the total effect of marketing resources on business performance was 0.47 ($p < 0.001$). Therefore, 22% of the variance in business performance was explained by marketing resources. Although the association was not strong, it was evident that marketing resources were found to be a better indicator of business performance than market orientation in the Ethiopian banking environment.

The hypothesized model which tested the total effect of market orientation on business performance and the mediated effect market orientation on business performance mediated by marketing resources was fit. The modified structural equation model which comprised of the measurement model and the structural model was found fit in terms of chi-square, GFI, RMSR, RMSEA, CFI, NFI, IFI, RFI, PNFI, and PCFI. The hypothesized model was overidentified with 24 degree of freedom. There was a statistically significant relationship between all the latent variables and their respective measured variables with a pattern coefficient greater than 0.70.

A good fit has been achieved on the overall fit of the model and the individual fit indices. The chi-square which represented comparison between the observed covariance and the hypothesized covariance was statistically non-significant and therefore represented a good fit at $p > 0.05$ with 24 degree of freedom. A good fit was also found on each individual index. The GFI was 0.98, the RMSR was 0.021, the RMSEA was 0.036, the CFI was 0.994, the NFI was 0.983, the IFI was 0.994, the RFI was 0.974, the PNFI was 0.655, and the PCFI was 0.663.

The multiple moderation analysis revealed that the regression coefficient of the main effect of market orientation (x), market dynamism (z_1), competitive intensity (z_2), and government regulation (z_3) was computed to be 0.415. However, the addition of the interaction terms of market orientation and market dynamism (xz_1), market orientation and competitive intensity (xz_2) and market orientation and government regulation (xz_3) slightly improved the regression coefficient to 0.421. Similarly, the addition of the interaction terms to the model increased the capacity of x , z_1 , z_2 , and z_3 to predict business performance from 17.2% to 17.7% with an R^2 change of 0.5% which was too small and non-significant ($p > 0.05$) to exert any meaningful influence. The 0.5% change in R^2 represented the variance accounted for by the interaction terms of xz_1 , xz_2 and xz_3 above and beyond the variance accounted for in the model by the independent variables of x , z_1 , z_2 , and z_3 .

Finally, summary of the findings of the five hypotheses has been presented below in Table 5.1.

Table 5.1: Summary of the hypotheses results

Hypothesis	Result
H ₁ Market orientation directly and positively influences the business performance of banks in Ethiopia.	Rejected
H ₂ There is a direct and positive relationship between market orientation and marketing resources in the Ethiopian banking sector.	Failed to reject
H ₃ Market orientation indirectly influences the business performance of banks in Ethiopia through the mediator effect of marketing resources.	Failed to reject
H ₄ The relationship between market orientation and business performance is moderated by market dynamism, competitive intensity, and government regulation.	Rejected
H ₅ There is no a statistically significant difference between public and private banks in terms of their market orientation, marketing resources and business performance.	Rejected

Source: Survey result, 2014

The first hypothesis examined if there was a direct and positive relationship between market orientation and business performance. Although the total effect of market orientation on business performance was found to be positive and significant ($p < 0.05$), this hypothesis was rejected since the direct effect of market orientation on business performance was -0.55 ($p < 0.05$). The second hypothesis examined if there was a positive relationship between market orientation and marketing resources. This hypothesis was not rejected as the regression

coefficient of market orientation on business performance was 0.93 ($p < 0.05$). The third hypothesis examined if there existed a positive relationship between marketing resources and business performance. This hypothesis was not rejected as the beta weight of the relationship between marketing resources and business performance was 0.98 ($p < 0.001$). The fourth hypothesis examined whether the relationship between market orientation and business performance was moderated by market dynamism, competitive intensity, and government regulation. This hypothesis was rejected as the addition of the interaction terms to the model resulted in a non-significant increase in the capacity to predict business performance only from 17.2% to 17.7% with an R^2 change of 0.5% ($p > 0.05$). The last hypothesis which tested whether there existed similarity between public banks and private banks in terms of their market orientation, marketing resources, and business performance was rejected since public banks outperformed private banks in terms of their market orientation, marketing resources and business performance ($p < 0.001$).

5.10.2 Original Contribution to Knowledge

In the Ethiopian banking sector which is characterized by limited market dynamism, limited competition, and stringent regulation; the negative and direct effect of market orientation on business performance provided new empirical evidence on the relationship between market orientation and business performance in immature economies. Besides, unlike other studies (Ngo and O’Cass, 2012; Hooley et al., 2005; Morgan et al., 2009) that separately addressed the mediator effect of either marketing assets or marketing capabilities, this study attempted to fill the gap by treating the mediating effect of marketing resources capturing both marketing assets and marketing capabilities in explaining the market orientation-business performance

relationship. Finally, this study examined the effect of government regulation on moderating the relationship between market orientation and business performance for the first time in the Ethiopian banking sector, although the effect was found statistically non-significant ($p > 0.05$).

5.10.3 Limitations of the Study

This study suffers from a range of limitations that should be taken into account in evaluating or generalizing the findings. The sample participants of this study were marketing managers and branch managers in Addis Ababa where branch managers outside Addis Ababa were not part of the study due to constraints to reach out them in person throughout every corner of Ethiopia. The omission of branch managers outside Addis Ababa, therefore, remained to be the limitation of this study. Besides, the study examined the effect of market orientation on business performance mediated by marketing resources and moderated by market dynamism, competitive intensity, and government regulation. However, it has to be noted that other exogenous factors, mediating, and/or moderating variables which may influence the business performance of banks in Ethiopia have not been examined in this study. Finally, as indicated by Augusto and Coelho (2009) and Deshpande and Farley (1999), since market orientation has both a short term and long term effect on business performance, a longitudinal study should have been used to examine the long term effect of market orientation on business performance. However, this study was cross-sectional which captured only the snapshot of the effect of market orientation on business performance in the banking sector of Ethiopia.

5.11 Recommendations

Market orientation generally augments positive influence on business performance in mature economies characterized by intense competition and market turbulence. There are countless empirical evidences in support of the positive effect of market orientation on business performance (Kohli and Jaworski, 1990; Narver and Slater, 1990; Doyle and Wong, 1998; and matsuno and Mentzer, 2000).

Drawing from the experience of other developing countries which came out of the socialist legacy, the current protectionist policy of Ethiopia that prohibits foreign banks from operating in the financial sector cannot be assumed to be envisaged in the long run. This scenario is further reinforced by Ethiopia's plea for WTO accession. In the long run the competitive landscape of the Ethiopian banking sector is expected to change. Domestic banks in Ethiopia, therefore, shall capitalize on the current protectionist policy to buy time and make the necessary preparations to deal with the competition they may face from overseas operators in the future. The current profitability of banks in Ethiopia without investing in market orientation cannot be guaranteed once the dynamics of the competition changes. Therefore, it is a matter of strategic necessity for banks in Ethiopia to be futuristic to adopt organization wide outward orientation to the market in terms of intelligence generation, intelligence dissemination, and responsiveness.

Banks in Ethiopia shall strategize to bring about an archetypical transformation in their marketing practices by way of institutionalizing segment marketing in place of the age old mass marketing or the "shot-gun" approach to the market. Banks in Ethiopia shall introduce a range of new banking products or services that would appeal to variety of clusters in the market. Banks

shall strive to differentiate their services with clear and distinct positioning ideas that would help them to win the mind of customers in the long run. With this regard, banks in Ethiopia shall address their clueless image and lack of clear brand persona in the market. Building a strong, valued, and credible brand would be an indispensable asset to lay the foundation for a sustainable success in the market in the long run.

In the short run, banks shall build on their marketing resources to bolster their business performance. Banks shall invest in establishing a long lasting and mutually benefiting relationship with their profitable customers. Banks shall also employ a variety of channel links to improve their market penetration rate. With this regard, banks shall use a mix of the traditional branch based market expansion strategy along with the digital delivery modalities to improve their accessibility to the market. Banks shall cater their ATM service, mobile banking services, and other electronic banking services to the young and educated customers in cities while penetrating the rural market with the current mode of branch based banking operation.

5.12 Direction for Further Studies

Future study can be conducted on the relationship between market orientation and business performance in Ethiopia across various sectors including hotels, tourism, manufacturing, education, health, Ethiopian airlines, Ethio telecom, and other public and private organizations. Future study can also be conducted on the effect of market orientation on business performance from customers' perspective. A longitudinal study can also be conducted in the future to test the long term effect of market orientation on business performance in the Ethiopian banking sector. Finally, as market orientation entails marketing actions and decisions, it is imperative to conduct

a qualitative study for an in-depth examination of the implementation aspect of market orientation in the Ethiopian banking industry.

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Appendix: Questionnaire

UNIVERSITY OF SOUTH AFRICA (UNISA)
SCHOOL OF BUSINESS LEADERSHIP (SBL)



QUESTIONNAIRE TO BE FILLED BY BRANCH MANAGERS AND TOP LEVEL MARKETING MANAGERS

Dear Participant,

I am conducting a research on “Market orientation and business performance: An empirical study of the banking sector in Ethiopia”. This research is conducted in partial fulfillment of the Doctoral Degree in Business Leadership (DBL). The survey is intended to study the extent to which banks in Ethiopia are market oriented and how market orientation influences their business performance through the mediation effect of marketing resources. Besides, the study will test how market dynamism, competitive intensity, technological turbulence, and government regulations moderate the relationship between market orientation and business performance of banks in Ethiopia.

Please note that the survey is developed to be anonymous and I, the researcher, will have no way of connecting the information to you personally. If you choose to participate in this survey it will not take more than 20 minutes of your time. I do not foresee that you will experience any negative consequences by completing this questionnaire. The researcher will keep any individual information provided herein confidential, not to let it out of his possession, and to analyze the feedback received only at a group level. The records will be kept for five years for publication purposes where after it will be permanently destroyed.

It will be a great contribution if you may complete all the items covered in the questionnaire since your opinion is of utmost importance. I thank you in advance for sharing your valuable experience and time in completing the questionnaire.

If you require any further information, want feedback on the study or need to contact the researcher about any aspect of this study; please do not hesitate to do so through the address given hereunder. If you agree to participate in the survey, you may proceed to the next page.

Kind regards,

Mulugeta Gebre-Medhin Kassie

Part I: Market orientation dimensions

This part of the questionnaire covers items related to market orientation dimensions. Please indicate how much you agree or disagree with each of the following statements by circling the number that best represents your opinion. 1 indicates strongly disagree (SDA), 2 indicates disagree (DA), 3 indicates neutral (N), 4 indicates agree (A) and 5 indicates strongly agree (SA).

Intelligence generation		SDA	DA	N	A	SA
1	In our bank, we meet with customers at least once a year to find out what banking products they will need in the future.	1	2	3	4	5
2	Employees from our bank interact directly with customers to learn how to serve customers needs better.	1	2	3	4	5
3	In our bank, we do a lot of in-house market research.	1	2	3	4	5
4	Our bank is fast enough to detect changes in our customers' product/service preferences.	1	2	3	4	5
5	Our bank surveys end-users at least once a year to assess the quality of financial service offerings.	1	2	3	4	5
6	Our bank periodically reviews the likely effect of changes on the banking environment such as competition, regulations and technology on customers.	1	2	3	4	5
Intelligence dissemination		SDA	DA	N	A	SA
1	Our bank holds interdepartmental meetings at least once a quarter to discuss market trends and developments.	1	2	3	4	5
2	Marketing personnel in our bank take time to discuss customers' future needs with other functional departments.	1	2	3	4	5
3	Our bank periodically circulates documents (e.g., reports, and newsletters) that provide information on our customers.	1	2	3	4	5
4	Data on customer satisfaction are disseminated at all levels in our bank on a regular basis.	1	2	3	4	5
Responsiveness		SDA	DA	N	A	SA
1	In our bank, principles of market segmentation drive new banking product development efforts.	1	2	3	4	5
2	Our bank tends to pay attention to changes in the customer's product/service needs.	1	2	3	4	5
3	Our bank periodically reviews the product development efforts to ensure that they are in line with what customers want.	1	2	3	4	5
4	Our bank plans are driven more by technological advances than by market research.	1	2	3	4	5
5	Several departments of the bank get together periodically to plan a	1	2	3	4	5

	response to changes in our business environment.					
6	If a major competitor were to launch an intensive campaign targeted at our customers, the bank responded immediately.	1	2	3	4	5
7	The activities of the different departments in this bank are well coordinated.	1	2	3	4	5
8	Customer complaints are properly handled in our bank.	1	2	3	4	5
9	When our bank comes up with a great marketing plan, we can implement it in a timely fashion.	1	2	3	4	5
10	When our bank finds out that customers are unhappy with the quality of the service, we take corrective actions immediately.	1	2	3	4	5
11	When the bank finds that customers would like to modify a product or service, the departments involved make concerted efforts to do so.	1	2	3	4	5

Part II: Marketing assets and marketing capabilities

This part of the questionnaire covers items related to marketing assets and marketing capabilities. Please indicate how much you agree or disagree with each of the following statements by circling the number that best represents your opinion. 1 indicates strongly disagree (SDA), 2 indicates disagree (DA), 3 indicates neutral (N), 4 indicates agree (A) and 5 indicates strongly agree (SA).

Relational assets		SDA	DA	N	A	SA
1	The level of customers' satisfaction in our bank is better than that of competitors.	1	2	3	4	5
2	The level of customers' attraction of our bank is better than that of competitors.	1	2	3	4	5
3	The level of customers' retention of this bank is better than that of competitors.	1	2	3	4	5
4	This bank has a centralized customer data base system for better usage of customer information in comparison with other banks.	1	2	3	4	5
5	The level of employees' job satisfaction in this bank is better than that of competitors.	1	2	3	4	5
6	The level of employees' retention of this bank is better than that of competitors.	1	2	3	4	5
Reputational assets		SDA	DA	N	A	SA
1	Our bank has a strong brand name and reputation compared to other competitive banks.	1	2	3	4	5
2	Our bank commands more credibility with customers than other competitive banks as it is well established in the market.	1	2	3	4	5
Product capabilities		SDA	DA	N	A	SA
1	Our bank has the capability to develop new banking products.	1	2	3	4	5
2	Our bank ensures that product development efforts are responsive to	1	2	3	4	5

	customer needs.					
Delivery channel linkage capabilities		SDA	DA	N	A	SA
1	Our bank has the ability to open up as many new branches as possible to make the banking services conveniently available to customers.	1	2	3	4	5
2	Our bank has the ability to use automated banking services such as ATM or telephone banking to reach out as many customers as possible.	1	2	3	4	5
3	Our bank has the capability to develop safe and secure systems so that our customers develop confidence in using electronic banking services.	1	2	3	4	5
4	Our bank delivers superior levels of customer service and support to its customers.	1	2	3	4	5
5	Our bank is good at understanding customer needs and requirements.	1	2	3	4	5
6	Our bank has effective relationships with key target customers.	1	2	3	4	5
7	Our bank is good at creating relationships with customers.	1	2	3	4	5
8	Our bank is good at maintaining and enhancing relationships with our customers.	1	2	3	4	5
Marketing communication capabilities		SDA	DA	N	A	SA
1	Our bank has the ability to successfully develop and execute advertising campaigns.	1	2	3	4	5
2	Our bank has effective Public Relation (PR) capabilities.	1	2	3	4	5
3	Our bank has the capability to build strong and valued brand image.	1	2	3	4	5
4	Our bank has a user friendly/interactive website.	1	2	3	4	5
Marketing planning capabilities		SDA	DA	N	A	SA
1	This bank has the capability to develop a thorough marketing plan.	1	2	3	4	5
2	This bank has the ability to effectively segment and target its market.	1	2	3	4	5
3	This bank has the ability to develop creative marketing strategies.	1	2	3	4	5
Marketing implementation capabilities		SDA	DA	N	A	SA
1	Our bank has the ability to allocate marketing resources effectively.	1	2	3	4	5
2	Our bank has the organizational ability to effectively execute marketing programs.	1	2	3	4	5
3	Our bank has the ability to translate marketing strategies into action.	1	2	3	4	5
4	Our bank has the ability to execute marketing strategies in a timely manner.	1	2	3	4	5

Part III: Moderating variables of business performance

This part of the questionnaire covers items related to moderating variables. Please indicate how much you agree or disagree with each of the following statements by circling the number that best represents your opinion. 1 indicates strongly disagree (SDA), 2 indicates disagree (DA), 3 indicates neutral (N), 4 indicates agree (A) and 5 indicates strongly agree (SA).

Market dynamism		SDA	DA	N	A	SA
1	Over time in the banking sector, customers' product preferences have changed quite a bit.	1	2	3	4	5
2	Our customers tend to look for new banking products all the time.	1	2	3	4	5
3	New customers tend to have product-related needs that are different from those of our existing customers	1	2	3	4	5
4	We cater to many of the same customers that we used to in the past.	1	2	3	4	5
Competitive intensity		SDA	DA	N	A	SA
1	Competition in the banking sector is intensive.	1	2	3	4	5
2	There are many aggressive promotion campaigns in the banking sector.	1	2	3	4	5
3	Anything that one bank can offer, other banks can match readily.	1	2	3	4	5
4	Our competitors are relatively weak.	1	2	3	4	5
Technological turbulence		SDA	DA	N	A	SA
1	The technology in the banking sector is changing rapidly.	1	2	3	4	5
2	Technological changes provide big opportunities in the banking sector.	1	2	3	4	5
3	It is difficult to forecast where the technology in the banking sector will be in the next 2 to 3 years.	1	2	3	4	5
4	Technological developments in the banking sector are rather minor.	1	2	3	4	5
Regulations		SDA	DA	N	A	SA
1	The government is making too many decisions on behalf of the banking sector.	1	2	3	4	5
2	The government has very restrictive rules on the business scope of banks.	1	2	3	4	5
3	Many more new banks would enter the banking sector if there were fewer government regulations to comply with.	1	2	3	4	5
4	There are adequate laws and regulations to ensure fair competition in the banking sector.	1	2	3	4	5

Part IV. This part of the questionnaire covers items related to market based and financial performances. Please evaluate the performance of your bank over the past year relative to your competitors by circling the number that best represents your opinion. 1 indicates much worse than competitors (MWC), 2 indicates worse than competitors (WC), 3 indicates indifferent (I), 4 indicates better than competitors (BC) and 5 indicates much better than competitors (MBC).

Market performance		MWC	WC	I	BC	MBC
1	Customer satisfaction of this bank in comparison to competitive banks.	1	2	3	4	5
2	Market share of this bank in comparison to competitive banks.	1	2	3	4	5
Financial performance						
1	Profit of this bank in comparison to competitive banks.	1	2	3	4	5
2	Return on investment of this bank in comparison to competitive banks.	1	2	3	4	5

Part V. Profile of the participant and the bank

This part of the questionnaire covers items related to the demographics of the participant and the profile of the bank.

1. Name of the bank: _____
2. Current position of the participant: Branch manager Marketing manager
3. Highest educational qualification attained:
 - High school complete College Diploma BA Degree MA or above
4. Number of service years of the participant in the current managerial position:
 - < 5 years 5 – 10 years > 10 years

Thank you!