Industry and firm effects on the performance of financial services mediated by competitive advantage in Ethiopia

by

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Declaration

I, Yifru Tafesse Bekele, student number 72750774, hereby declare that *Industry and firm effects on performance of financial services mediated by competitive advantage in Ethiopia* is my own work and all reference material and other sources used in this work have been acknowledged by means of complete references.

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Abstract

The main objective of this study was to explain top management perceptions of industry and firm effects on firm performance through the mediation of competitive advantage in financial service firms operating in a regulated industry in a developing Ethiopian economy. The resource-based and industry-based views, constituting the two main schools of thought explaining performance variations among firms, were used as theoretical foundation of this study. Porter's five-forces framework was used during this process. The researcher employed a post-positivist paradigm using a cross-sectional survey design. A total of 27 financial service firms (15 banks and 12 insurance firms) that had functioned for three and more years were selected for the study. The unit of analysis was 'firms', while respondents were top level managers with a total target population of less than 300. A census survey rather than a sample survey was undertaken. A total of 287 survey questionnaires were distributed (banks 180 and insurance industry 107), of which 215 were collected from 26 firms (15 banks and 11 insurance firms). Of the questionnaires 206 were properly completed leading to a valid response rate of 71%. These were used for the data analysis. A variance-based PLS-SEM approach, which is relevant to evaluate the predictive effects of the industry and firm factors on firm performance, was used to explain the hypothesized model using SmartPLS 2.00 software as well as the Statistical Package for the Social Sciences program. The assessment of the hypothesized model indicated that the R^2 result on firm performance variance due to the combined industry effects and firm effects was 39%, indicating a moderately significant predictive accuracy of the model. The relative direct effect size (f^2) of the industry on firm performance was 3%, while firm had a direct effect size of 2%, which was small. The combined indirect relative predictive accuracy of industry and firm effect sizes on firm performance through competitive advantage was high at 27%. This was driven by the relative substantial predictive power of firm effect on competitive advantage (f^2 = 65%). Furthermore, the predictive capability (Q^2) assessment result of the model indicated that both industry and firm effects had a 23% relevant predictive power on firm performance. The direct relative measure of the predictive relevance (q^2) value of industry effect (q^2 = 0.02) on firm performance was relatively higher than that of the firm effect (q^2 = 0.01). Competitive advantage had a relative predictive power of 0.12, which was driven by the direct relative predictive capability of firm effect (q^2 = 0.25) on competitive advantage. The overall assessment results of the structural model revealed that the model had satisfactory statistical power to predict the hypothetical research model. The hypothesis that industry effects

had an influence on the performance of financial service firms was not supported. The result indicated that industry effects had a positive and non-significant relationship with firm performance, which points to competitiveness in the financial services industry. These results were achieved against the tenets of Porter's five-forces framework. The hypothesis that firm effects had a positive predictive effect on firm performance was also not supported, indicating that resources and capabilities do not directly lead to improved firm performance. The direct effect of competitive advantage on firm performance was supported. The mediating effect of competitive advantage between industry effects and firm performance was not significant, while the mediation of competitive advantage between firm effects and firm performance was highly significant. The findings of this study revealed that firm effects were relevant through the mediation of competitive advantage in explaining performance variances among financial service firms, operating in a strictly regulated industry. The relative predictive power of firm effect on competitive advantage was high. Firm resources, particularly intangible resources and dynamic capabilities, are the key predictors of firm performance indirectly through the mediation of competitive advantage. Such an advantage may not last long given the excessive supervision and regulations that exist and the fact that firms are being dictated to by the government to comply with its strategic direction as opposed to pursuing their own firm specific strategies. Such practice could encourage competing financial firms to converge and pursue similar types of strategies and encourage imitations to gain short term competitive advantage and superior performance. This finding contradicts the fundamental premise of the resource-based view and firm heterogeneity even though it tentatively supports the argument made by Foss and Knudsen (2003) who argue that heterogeneity is not a necessary condition to gain competitive advantage and superior firm performance. Financial service firms should not only develop and manage their resources and capabilities, but they should also monitor the changes in the industry. This finding highlights the fact that firms can create competitive advantage and enjoy superior performance in a closed and regulated industry. The findings of this research make a significant contribution to the existing debate on the resource-based and industry-based views in explaining the causes of firms' performance variations specifically in a regulated environment.

Key words: industry effects, firm effects, competitive advantage, firm performance, five forces, tangible resource, intangible resources, dynamic capabilities.

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Abbreviations and Acronyms

AfDB:	African Development Bank
AVE:	average variance extracted
BPC/BPCU:	bargaining power of customers
BPS:	bargaining power of suppliers
BSC:	balanced scorecard
CBE:	Commercial Bank of Ethiopia
CE:	capital employed
CEOs:	chief executive officers
COA:	cost advantage
COMPA:	competitive advantage
DA:	differentiation advantage
DC:	dynamic capability
EEA:	Ethiopian Economics Association
EIC:	Ethiopian Insurance Corporation
EP:	economic profit
EVA:	economic value added
FP:	financial performance
FIRME:	firm effect
FIRMP:	firm performance
GDP:	Gross Domestic Product
GoF:	goodness-of-fit
HLM:	hierarchical linear modelling
INDUE:	industry effect
INTAG:	intangible asset
IO:	industrial organization
MP:	marketing performance
NBE:	National Bank of Ethiopia
OLS:	ordinary least square
PLS:	partial least square
RBV:	resource-based view

RIV:	rivalry
ROA:	return on asset
SBL:	School of Business Leadership
SC:	share company
SCP:	structure-conduct performance
SEM:	structural equation modelling
SMEs:	small- and medium-sized enterprises
SPSS:	Statistical Package for Social Sciences
TANG:	tangible asset
TMV:	total market value
TSP:	threats of substitute products
UNISA:	University of South Africa
USA:	United States of America
VAF:	variance accounted for
VCA:	variance components approach
VIF:	variance inflation factor
VRIO:	value, rareness, inimitability, organization

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CHAPTER 1: ORIENTATION AND BACKGROUND

1.1 INTRODUCTION

This chapter discusses service and its importance, provides background information on the Ethiopian financial services with special emphasis on banks and insurance services and covers the research context of the study. The statement of the research problem, objectives, scope of the study, significance of the study, definition of terms and organization of the thesis are included in this chapter. Finally, the key issues discussed are presented as a chapter summary.

1.2 IMPORTANCE OF SERVICES AND BACKGROUND INFORMATION ON THE FINANCIAL SERVICES IN ETHIOPIA

1.2.1 Service and its Importance

Service can be defined as deeds, efforts or performance of an intangible nature that can be provided by a party to another party with or without the objective of making a profit (Hoffman & Bateson, 2001; Kotler & Keller, 2006; Grewal & Levy, 2010). Service can be divided into equipment-based services such as automated services and people-centred (professional) services such as that offered by auditors or medical doctors (Boshoff & du Plessis, 2009). It can also be viewed as a continuum of minor services of a pure intangible service component (Kotler & Keller, 2006). From a continuum perspective services such as transportation, banking and insurance could be categorized as major services accompanied by minor goods. However, every business that offers tangible products also involves some degree of service elements (Boshoff & du Plessis, 2009).

The global economy that was once dominated by manufacturing industries has been replaced by the service sector. The importance of service in today's economy has become more dominant than ever before, contributing to a lion's share of the GDPs of many countries (Hoffman & Bateson, 2001; Boshoff & du Plessis, 2009). For example, the contribution of services to the GDP of South Africa in 2007 was 70%, while in 2006 the same sector constituted 65%, 49.8%, and 70.5% of the GDP of Kenya, Egypt and the European Union respectively (Boshoff & du Plessis, 2009). The contribution and importance of services to the economic growth of countries is expected to continue in future. The Ethiopian economy has been one of the fastest growing economies in the

world with an average growth rate of 10.8% since 2005 (AfDB, 2016). The share of agriculture to GDP decreased from 43.1% in 2011/12 to 36.7% in 2015/16, while the industry and service sectors grew from 11.5% and 45.9% in 2011/12 to 16.7% and 47.3% in 2015/16 respectively (NBE, 2015/16). The contribution of the service sector to the growth of GDP from 2011/12 to 2015/16 was about 50% on average (NBE, 2015/16). The service sector grew by 10.2% from 2013/14 to 2015/16 and it contributed 4.7% points to the 10.2% GDP growth in 2013/14 and 2014/15 (NBE, 2015/16; AfDB, 2016). A further breakdown of data related to the high growth of the service sector has been spurred by the growth of wholesale and retail services, hotels and tourism (EEA, 2011). Recently particularly since 2014/15 the service sector growth has been mainly attributed to the increasing growth rate of hotels and tourism accounting for 29.2%, transport and communications and financial intermediation contributing 13.3% and 6.9% respectively (AfDB, 2016). In view of its high percentage contribution to the growth of the country's GDP, the importance of the service sector cannot be overemphasized.

The role of financial services in facilitating, stabilizing and supporting economic growth has also been critical (MacDonald & Koch, 2006; Sambasivam & Ayele, 2013). Financial service firms provide a variety of products and services. The major financial services include such institutions as banks, micro-finance, money transfer, brokerage, life and non-life insurance, credit card, pension funds, credit unions, savings institutions, investment funds and other similar firms (NBE, 2008; Clulow, Gerstman & Barry, 2003). The financial services firms that primarily play significant roles in the industry in Ethiopia are banks, insurance companies and micro-finance institutions (NBE, 2014/15). The industry data indicate that the combined growth rate of banks and insurance companies has been more than twice the growth rate of the service sector (NBE, 2010/11-2015/16). Banks and insurance companies operating in urban areas for instance, accounted for a 95% of total value added to the financial services industry from 1995/96 to 2005/06 (EEA, 2011). This research dealt with banks and insurance companies that have had better organizational and management capabilities than micro-finance and other institutions. The historical developments of banking and insurance services are presented below.

1.2.2 Banking Services

The banking business began in Ethiopia during the reign of Emperor Menelik II some 111 years ago when the Emperor authorized the National Bank of Egypt, which was ruled as part of the British Empire, to establish the Bank of Abyssinia in 1905 (Gidey, 1987). The Bank of Abyssinia began operations in 1906 with a fifty-year concession period (Ennew & Waite, 2007). In the subsequent period the Bank of Abyssinia opened five branches in Harar in 1906, Dire Dawa in 1908, Dessie in 1912, Gore in 1924 and Gambella 1931 and in Djibouti in the 1920s. All these banks were managed by the British (Pankhurst, 1963; Gidey, 1987).

The Emperor further authorized the establishment of another bank from France namely the Societe Nationale d'Ethiopie pour le Developpement de l'Agriculture du Commerce in May 1909, paying a lower interest rate (10%) than the Bank of Abyssinia (15%) in order to attract more depositors (Schaefer, 1992). Following the coronation of Emperor Haile Selassie and due to his ambition of enhancing Ethiopia's economy, he established the Bank of Ethiopia in August 1931 after the sale of the Bank of Abyssinia (Gidey, 1987). The bank became the first bank in Africa to serve as a government bank, but was fully owned by the Emperor and the ruling family. The ambitious developments were soon interrupted by the Italian invasion in 1935. During the Italian occupation from 1935 to 1940, some Italian banks were established, such as Banca di Italia, Banco di Roma, Banco di Napoli, Banca nacionale, Casa de Creito v (Gidey, 1987). The Austrian Maria Theresa coin with an estimated circulation of 35 000 000 to 50 000 000 in 1934 had been the major currency since the 19th century until 1941 (Pankhurst, 1963). The Austrian silver coins were the most popular means of monetray trannsactions and used for saving as well during these periods.

Following the defeat of Italy, Barclays Bank was opened in Ethiopia in 1941 but ceased operations in 1943. In 1942 the State Bank of Ethiopia was established to provide commercial banking services, playing the role of a central bank (CBE, 2009/10). In October 1963, the Commercial Bank of Ethiopia (CBE) was established, taking over commercial banking services from the State Bank of Ethiopia (CBE, 2009/10). In the same year a new Proclamation No. 207/1955[1] was issued

[1]Ethiopian calendar. In every leap year it is 7 or 8 years behind the Gregorian calendar.

allowing foreigners to have ownership rights of banking business to a maximum of 49% (Gidey, 1987). Soon after this proclamation, Addis Ababa Bank, the first private bank in the country was established in 1964 (Gidey, 1987).

The period from 1964 to 1974 could be considered as the take-off stage during which financial services had registered a remarkable growth until the socialist government took power in the mid-1970s (EEA, 2011). The 1974 revolution resulted in changes of political ideology from a capitalist orientation towards socialism. A new military dictatorial leadership named *Derg*, meaning a committee in Amharic, took over power from the Emperor to administer the country. As a result, all privately owned businesses were nationalized. Moreover, Banco Di Roma and Banco di Napoli, which used to operate in Eritrea and Addis Ababa Bank were nationalized and merged with the Addis Ababa Bank (Gidey, 1987). Gidey (1987) citting Proclamation No. 184/1973 indicated that Addis Ababa Bank merged with the CBE in 1973. The CBE was the only commercial bank in the country that enjoyed monopoly during the socialist period and beyond, from 1975 to 1993. Its monopoly ended with the declaration of licensing and supervision of the banking business by Proclamation No. 84/1994, which allowed private banks to operate in the country.

During the socialist period from 1974 to 1991 the banks were financing state and cooperative projects that had to assist in implementing centralized economic planning (Geda, 2006). Since the liberalization of the economy in 1991, there have been tremendous changes in the country both at the macro and micro levels. At the macro level for instance, a free market economy was promulgated that resulted in various proclamations. As a result, many public enterprises that were under the command economy were liberalized. Private investment, which had been forbidden to domestic investors, was then allowed though foreigners are still barred from investing in financial services. According to Proclamation No 84/1994, the minimum capital requirement to establish a bank was 10 million Birr[2]. The total number of commercial banks operating in the country, including the Development Bank of Ethiopia, was 19 (NBE, 2014/15) of which 16 were private. The remaining three were government-owned. The Development Bank of Ethiopia is a state-owned bank dedicated to financing development projects, unlike commercial banks. The report

[2] Birr is the Ethiopian currency.

further indicated that the total number of branches in the network in the country has reached 2 693, which is 2.2% higher than the previous year. Of these branches, 35.5% were in Addis Ababa. The 2009/10 bank to population ratio of 1:117 474 improved to 1:33 448 in 2014/15; showing an average growth rate of over 50% per annum. By the end of June 2015, the total capital of the banking sector was 31.5 billion Birr, which was 19% higher than the previous year. This capital increment was due to the regulator's new requirement that every bank's minimum capital deposits should be raised to 500 million Birr by 2014 from the 10 million Birr set in 1994. The performance of public as well as private banks operating in a protected market has been profitable (EEA, 2011; NBE, 2014/15).

A study by Zemzem and Gashaw (2014) on the industry structure of the banking sector from 2001 to 2012 revealed that the market concentration was very high, even though it has been decreasing. The dominance of the banking sector by the government-owned CBE with about two-thirds of the banking assets, a deposit of 68% and profit share of 65% in 2014/15 (Bezabeh & Desta, 2014; NBE, 2014/15), has affected the competitive landscape of the sector (EEA, 2011). The country's total deposit to GDP was 17.2% in 2010/11 and grew to 22.5% in 2013/14 (Geda, 2015; NBE, 2014/15), while the average bank deposit to GDP ratio in Africa was 22% in 2011 (Mamvura, 2015). Geda (2015) questions the reliability of such a high rate of savings in Ethiopia given the 10% total savings rate across all banks in 2013/14, which he further attributes to errors in the official data. The Ethiopian financial sector in general is highly concentrated and operates in a highly regulated and protected environment. Having no capital market, experiencing inefficiencies and a lack of competitiveness, leaves it under-developed compared to its neighbours (EEA, 2011; Kapur & Gualu, 2012; Bezabeh & Desta, 2014; Zemzem & Gashaw, 2014; Waktola, 2015).

1.2.3 Insurance Services

The insurance business in Ethiopia began with the establishment of the Bank of Abyssinia in 1905 (Hailu, 2007), then acting as an agent for foreign insurers to primarily underwrite fire and marine insurance businesses. The Imperial Insurance Company of Ethiopia Ltd, the first local insurance company, was established in 1951 by six shareholders including Emperor Haile Selassie, with a capital of 1 000 000 Birr (Hailu, 2007). Hailu (2007) points out that there were 17 foreign insurance companies operating in Ethiopia through agents until the early 1950s, mainly providing cover on life, marine, fire and general accident insurances in major urban areas such as Addis Ababa, Asmara and Dire Dawa. Hailu (2007) further cites a survey of insurance companies operating in Ethiopia by the then Ministry of Commerce, Industry and Tourism of Ethiopia, which indicates that in the 1960s the number of foreign insurance companies operating through their agents had increased to 33.

Although foreign insurance companies dominated the insurance business until 1960, 14 domestic insurance companies with ownership participation by some foreigners were established from 1960 to 1969 (Hailu, 2007). Following the promulgation of the Commercial Code of the Empire of Ethiopia in 1960, the number of insurance companies increased tremendously. The Commercial Code under Articles 654 to 712 gave rise to the flourishing of local insurers. By 1969 the total number of domestic insurance companies in Ethiopia had reached 15 (Hailu, 2007). Under article 306 of the Commercial Code of the Empire of Ethiopia (1960), any insurance business established as a share company would have to meet the minimum capital required, which was then 50 000 Ethiopian Dollar. Furthermore, the Maritime Code of the Empire of Ethiopia (1960), under Articles 288 to 356 laid down the provisions for the marine insurance business.

The Commercial Code and Maritime Code of the Empire of Ethiopia (1960) were the only applicable laws in the insurance business in Ethiopia till 1970. In 1970, Proclamation No. 281/1970 could be cited as the first legislation that stipulated the necessary provisions to promote and regulate an insurance business in the country. According to this Proclamation, the minimum capital required to establish general insurance and life insurance businesses was 400 000 and 600 000 Ethiopian Dollar respectively, and 1 million Ethiopian Dollar to establish both general and life

insurance. After a year the government issued Insurance Regulation Legal Notice No. 393/71 that stipulated requirements with respect to licensing issuance and renewal, issuance and transfer of shares and reporting compliances to the Controller. It also stated that at least 51% of the shares of an insurance company had to be owned by Ethiopians or domestic companies operating in Ethiopia. According to the reports of the Controller of Insurance in 1971 and 1974 there were 13 insurance companies actively operating in the country. Until December 1972, a total of 15 local insurers, 43 agents, 8 insurance brokers, 5 actuaries and 15 loss adjusters and assessors were licensed following the enactments of Proclamation No. 281/1970 and Legal Notice No. 393/71.

All banks and insurance companies were in 1975 nationalized by the socialist government following Proclamation No. 26/1975, paving the way for the establishment of the state-owned Ethiopian Insurance Corporation (EIC) through Proclamation No. 68/1975. The EIC was established on 1 January 1976 as a public enterprise with a paid-up capital of 11 million Ethiopian Dollar to provide all classes of insurance businesses in Ethiopia (Hailu, 2007). It enjoyed monopoly market conditions from 1975 to 1993. Three years after the fall of the military government, new insurance legislation under Proclamation No. 86/1994 was issued that gave birth to the licensing and supervision of insurance businesses in the country. Private insurance companies were once gain allowed to operate in the country. The total minimum capital required to establish general and long-term insurance businesses in 1994 was 7 million Birr (3 million Birr for general insurance and 4 million Birr for long-term or life insurance), increased to 75 million Birr since 2013, following Proclamation No. 746/2012 and Minimum paid-up Capital for Insurers Directive No. SIB/34/2013. The minimum capital for general insurance has increased to 60 million Birr, while for long-term insurance businesses it has grown to 15 million Birr. The revised Proclamation No. 746/2012 stipulates more stringent requirements and supervisory compliance than before. The number of insurance companies reached 17 in 2014/15 with 377 branches across the country (NBE, 2014/15). Sixteen of them were owned privately in the form of share companies, while the other one was state-owned.

Similar to the banking business, the insurance business has had a high level of concentration (concentration of four insurers was over 70% in 2008) compared to 38% in Kenya (EEA, 2011). Moreover, about 53% of insurance branches were located in Addis Ababa in 2014/15 (NBE,

2014/15). The total capital of insurance companies reached 2.8 billion Birr in the same period, with private companies accounting for about 78% of the total capital (NBE, 2014/15). This rise was the result of the capital increment demanded by the regulatory body. In spite of the increasing number of insurance companies, it has been one of the least developed services even by African standards and it has not even reached the level where it was four decades ago (EEA, 2011).

1.3 THE RESEARCH CONTEXT

The service industry accounts for the lion's share of the Ethiopian economy. Financial services that fall under the service sector play a key role in expediting growth and development by lending money and covering risks. The major financial service firms operating in Ethiopia are banks and insurance companies (EEA, 2011; NBE, 2014/15) that mainly serve clients in urban areas. Micro-finance institutions serve rural markets and lower market segments that are hardly addressed by banks. They do not serve corporate clients like banks and insurance companies. Businesses in financial services allow Ethiopians only and foreign nationals, including those of Ethiopian origin, are prohibited from investing in financial services (Ethiopian Proclamations No. 592/2008; No. 746/2012). There were 16 private and one government-owned commercial bank in 2014/15. Similarly, there were 16 private insurance companies and one state-owned company, the EIC. Despite the increasing number of privately owned commercial banks and insurance companies, the state-owned CBE and EIC have been the dominant players in the industry (EEA, 2011). The banking and insurance services penetration levels have been very low compared to many other African countries (EEA, 2011; Bezabeh & Desta, 2014; NBE, 2014/15; Waktola, 2015). Generally, the financial services industry has been characterized by low levels of efficiency, lack of competitiveness, limited products and service varieties and state dominance and an excessive regulatory framework (Access Capital, 2010; EEA, 2011; Kapur & Gualu, 2012; Bezabeh & Desta, 2014). Despite the stringent regulations and low level of financial services, both commercial banks and insurance companies have been performing profitably and expanding their market coverage in major parts of the country (Access Capital, 2010; EEA, 2011; NBE, 2014/15). Therefore, this research on 'Industry and firm effects on performance of financial services mediated by competitive advantage in Ethiopia' was carried out on banks and insurance companies that have been operating in a stringent regulatory economic environment.

1.4 STATEMENT OF THE RESEARCH PROBLEM

The quest for firm success has always been one of the critical questions of both academics and practitioners in the field of strategic management (Eriksen & Knudsen, 2003; Takata, 2016). The industrial organization (IO) and the resource-based view (RBV) of the firm have been the two major perspectives of strategic management in explaining the underlying factors of firm performance (Mauri & Michaels, 1998; Spanos, Zaralis & Lioukas, 2004; Arend, 2009; Kamasak, 2011). The IO model, which views firms as homogeneous units, supports external industry factors (Porter, 1985; 1991; Mauri & Michaels, 1998), while the RBV of the firm focuses on firms' idiosyncratic internal resources in explaining the reasons for the firm's success (Grant, 1991; Barney, 1991; Spanos, *et al*., 2004; Arend, 2009). Through the theoretical lenses of IOs, the relative attractiveness of an industry determines the performance of firms (Spanos, *et al*., 2004; Houthoofd & Hendrickx, 2012). Porter (1980a; 1985; 1991), who extended the IO view, states that the industry force, which includes the bargaining power of buyers and suppliers, rivalry among existing firms, barriers to entry and threats of substitute products determine the competitive advantage and profitability of firms in an industry. The collective impact of the five forces determines the intensity of industry competition, thus affecting the profitability of firms in an industry (Bridoux, 2004; Porter, 1980b; 1985; 2008).

Contrary to the IO and industry-based views that focus on industry factors, the RBV argues that firm specific resources and capabilities are the key drivers of competitive advantage and firm performance (Barney, 1991; Grant, 1991; Takata, 2016). Proponents of the RBV stipulate that the sources and drivers of competitive advantage and superior performance of firms are mainly attributable to idiosyncratic, valuable and costly-to-copy resources and the blending of these resources into firm-specific capabilities (Barney, 1991; 2001a; Conner, 1991; Peteraf & Bergen, 2003; Barney & Hesterly, 2010; Bamiatzi, Bozos, Cavusgil & Hult, 2016).

Although much empirical evidence suggests that the contribution of firm-specific factors has been higher in the context of developed markets (Rumelt, 1991; Amit & Shoemaker, 1993; McGahan & Porter, 1997; Mauri & Michaels, 1998; Hawawini, Subramanian & Verdin, 2005; Short, McKelvie, Ketchen & Chandler, 2009; Tarziján & Ramírez, 2010), there are studies that reveal that industry factors have higher effects than firm factors (Schmalensee, 1985; Kotha & Nair,

1995; McGahan & Porter, 1997). Studies of the impacts of both industry and firm-specific factors in explaining performance variations of firms, particularly in the context of the emerging economies, had reported mixed results (Karabag & Berggren, 2014). Recent evidence in Turkey, Korea and China, suggests that industry effects have higher impacts on firm performance than firm effects (Luo, 1999; Chen, 2010). Other studies in Vietnam (Tuan & Yoshi, 2010), Taiwan (Wu, 2010), Turkey (Kamasak, 2011) and Kenya (Gaya, Struwig & Smith, 2013) reveal that firm effects play a bigger role than industry effects. Although many empirical studies have been conducted on the relative effects of industry versus firm factors in predicting firm performance since Schmalensee's (1985) seminal work, the debate has not yet been resolved (Spanos & Lioukas, 2001; Spanos, *et al*., 2004; Galbreath & Galvin, 2008; Short, *et al*., 2009; Majumdar & Bhattacharjee, 2014).

More specifically, to the knowledge of the researcher there is no study of industry and firm effects on the performance of firms mediated by competitive advantage, particularly in the financial services industry in Ethiopia. Since it is possible that the phenomenon is contextual in nature, the researcher was motivated to investigate the predictive effects of industry and firm factors on firm performance in an emerging financial service industry in Ethiopia using Porter's (1985; 1991; 2008) five-forces framework and the RBV (Caloghirou, Protogerou, Spanos & Papaglannakis, 2004; Kim & Oh, 2004; Sheehan & Foss, 2007; 2009; Galbreath & Galvin, 2008; Newbert, 2008), using competitive advantage as the mediating variable (Barney 1991; Spanos & Lioukas, 2001; Barney & Hesterly, 2010; Gjerde, Knivsfla & Saettem, 2010; Sigalas & Economou, 2013).

Based on the above problem statement, the major research question was formulated as follows:

> To what extent do industry effects and firm effects explain the performance of financial service firms in Ethiopia through the mediation of competitive advantage?

This study addressed the following:

1. To what extent do industry effects predict competitive advantage, and the performance of financial service firms in Ethiopia?
2. How do firm effects explain the competitive advantage, and the performance of financial service firms in Ethiopia?

3. How does competitive advantage contribute to the performance of financial service firms in Ethiopia?
4. To what extent does competitive advantage mediate the relationship between industry effects and the performance of financial service firms in Ethiopia?
5. To what extent does competitive advantage mediate the relationship between firm effects and the performance of financial service firms in Ethiopia?

1.5 RESEARCH OBJECTIVES

1.5.1 Main Research Objective

The main objective of this research is to determine the industry effects and firm effects on firm performance through the mediation of competitive advantage in financial service firms, operating in a highly-regulated industry in the developing economy of Ethiopia.

1.5.2 Specific Research Objectives

The research objectives specifically were to explain

1. the extent to which firm effects through internal firm resources (such as tangible assets, intangible assets and dynamic capabilities) affect competitive advantage, and the performance of financial services in Ethiopia.
2. how the industry effects through the industry five forces affect competitive advantage, and the performance of financial services in Ethiopia.
3. the mediation effect of the competitive advantage on the relationship between industry effects and the performance of financial services in Ethiopia.
4. the mediation effect of the competitive advantage on the relationship between firm effects and the performance of financial services in Ethiopia.

1.6 SCOPE OF THE STUDY

This research investigated the predictive capabilities of industry and firm effects, mediated by the competitive advantage on firm performance of financial service firms operating in a regulated industry in Ethiopia. Industry effects were represented by Porter's five forces namely: rivalry among existing competitors, threat of new entrants, bargaining power of suppliers, bargaining power of customers and threat of substitute products. Firm effects were conceptualized as firm-specific resources and capabilities denoted by tangible resources, intangible resources and dynamic capabilities. This research falls in the field of strategic management. The two major theoretical approaches to explaining firm performance are the RBV (internal perspective) and the industry structure (external perspective) using the five-forces framework. These were used to conduct the study. The study did not cover strategic group and corporate effects since the financial services industry is in its early stages of development with limited service varieties and scope of operations.

The study covered 26 financial service firms (15 banks and 11 insurance companies) in Addis Ababa, Ethiopia that had performance records for three years and longer available. These financial service firms operate in a closed and highly regulated environment. 'Firm' was identified as the unit of analysis and top management members who have to formulate, execute and control strategies of their respective firms were the respondents of the study. Since strategy formulation and controlling is the responsibility of leaders, the geographic scope and respondents of the research was limited to the top management members of firms, located at head office level in Addis Ababa. The top management members involved as respondents were presidents, vice presidents, chief executive officers (CEOs), deputy CEOs and all their immediate subordinates in managerial positions.

1.7 SIGNIFICANCE OF THE STUDY

The findings of this research generally are significant in contributing to the existing body of knowledge in strategic management. This study is important particularly in advancing the RBV and industry structure approach of strategic management as it investigated firm and industry effects on the performance of firms through the mediating effect of competitive advantage, in the context of a closed and highly regulated economy. Since there were limited prior studies on the predictive capabilities of industry and firm effects on firm performance, the findings could bridge the theoretical gap in the existing debates on firm versus industry effects in explaining performance variations of firms, besides the contribution to the ongoing debate on industry versus firm effects. The results identified the key drivers of competitive advantage and performance variations among banks and insurance companies in Ethiopia. Researchers and academics in the field of strategy could therefore benefit from the findings of this research in further advancing the field of strategic management. Students of strategic management can also use this research as a basis for their research projects.

Apart from its theoretical contributions to the academic field, the findings of this study also contribute, among others, to practitioners, policy makers, consultants and other professionals in the financial services industry in general and banks and insurance companies in particular. Practitioners such as executives and managers who are involved in strategic planning and execution may benefit from the findings and recommendations of this research. The outputs of this study are important to members of boards of directors of banks and insurance companies. These leaders might gain important insights into how their respective financial service firms might be affected. Policy makers such as the National Bank of Ethiopia (NBE) (regulatory body) can gain valuable inputs from this study since it highlighted the key issues that influence and explain the performance of banks and insurance companies. This study is also beneficial to consultants and professionals in the banking and insurance services since it has addressed issues related to performance variations due to industry and firm effects directly and indirectly in a comprehensive manner.

1.8 DEFINITION OF TERMS

- Industry: refers to 'the group of firms producing products that are close substitutes for each other' (Porter, 1980b: 5).
- Industry effects: refer to the characteristics of an industry structure that affect firm performance (Mauri & Michaels, 1998; Galbreath & Galvin, 2008).
- Firm: refers to a collection of productive resources, seeking to achieve above-normal returns (Barney, 1991; Conner, 1991).
- Firm effects: they 'capture the influence of firm-specific factors such as heterogeneity in resources and competences and also the differences in corporate and competitive strategies' (Houthoofd & Hendrickx, 2012: 239).
- Firm resources: refer to tangible assets, intangible assets and dynamic capabilities of firms as conceptualized by Teece, Pisano and Shuen (1997), Caloghirou, *et al*. (2004) and Galbreath and Galvin (2008) as defined below:
    - Tangible assets refer to financial and physical assets such as real estate, financial investments (such as bonds, stocks, shares, etc.), cash reserves, cash flows, equipment and branches that can be valued and reflected in a balance sheet.
    - Intangible assets include a firm's reputation and image, customer service reputation, organizational structure, organizational policies and organizational culture that are not included in the balance sheet.
    - Dynamic capabilities are managerial and organizational processes that include coordination and integration, learning and reconfiguration or transformation of tangible and intangible assets.
- Competitive advantage: refers to a firm's ability to create more economic value than its marginal competitors using differentiation and/or cost advantages (Peteraf & Barney, 2003).
- Firm performance: covers financial and marketing performance in terms of customer satisfaction, market share, rate of acquiring new customers, profit margin, return on assets and overall profit levels (Powell, 1996; Caloghirou, *et al*., 2004).
- Top management members: in the context of this study they included CEOs, deputy CEOs, presidents, vice presidents, department directors and/or managers who report directly to the CEOs, deputy CEOs, presidents, vice presidents of banks and insurance companies.

- Financial institutions/services: include banks, insurance companies, micro-finance institutions, money transfer institutions, postal savings, etc. (NBE, 2008). Financial service firms also include credit card companies, credit unions, pension funds, etc. (Clulow, *et al*., 2003; MacDonald & Koch, 2006).

1.9 ORGANIZATION OF THE THESIS

This thesis is divided into the following six chapters:

- The first chapter as already presented deals with the orientation of the study, which discussed the background of the financial services, the research environment, the statement of the research problem, objectives, significance of the study, definition of terms and organization of the thesis.
- The second chapter presents the theoretical and empirical literature review of the study. It particularly discusses the industry-based view employing Porter's five-forces framework and the RBV that are highly relevant to explain firm performance variations. The competitive advantage and firm performance are also covered. This chapter further discusses the complementary views of both Porter's five-forces framework and the RBV. Empirical evidence of both industry and firm effects on firm performance is presented. Finally, a chapter summary and research gap are presented.
- The third chapter covers the research framework and hypotheses of the study.
- The fourth chapter presents detailed accounts of the ontology and epistemology of the research, the research design and methodology, sampling approach, data collection and analysis technique and a chapter summary.
- The fifth chapter covers the data analysis and results of the study. It presents descriptive statistics and sample characteristics, data cleaning and preparation, evaluations of measurement and structural models and a chapter summary.
- Chapter six includes the discussions, conclusions and recommendations of the study. Under the discussion part of this chapter, firm and industry effects on performance are discussed, followed by the research questions and results of the hypotheses. The findings and contributions of this research are included under the conclusions. Limitations, recommendations and future research directions are finally presented.

CHAPTER 2: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

This chapter covers the key theoretical underpinnings of strategic management and the rationale for choosing two dominant theoretical approaches to explain performance differences between firms. The industry-based view based on the traditions of IO and structure-conduct-performance (SCP), later expanded by Porter (1980b; 1985) using his five-forces framework, and the RBV of the firm (Barney, 1991) are used as the two theoretical positions to explain the underlying factors for competitive advantage and performance variations among firms (Spanos & Lioukas, 2001; Spanos, *et al*., 2004; Kim & Oh, 2004; Caloghirou, *et al*., 2004; Barney & Clark, 2007; Kim, Song & Koo, 2008; Galbreath & Galvin, 2008; Gjerde, *et al*., 2010; Houthoofd & Hendrickx, 2012). The concept of competitive advantage, its origins, types, drivers and appraisal techniques are thoroughly discussed. The concept of firm performance and its measurements, competitive advantage and performance variations among firms are also covered. This chapter dwells upon the complementary view of Porter's five-forces and the resource-based perspective. Finally, the chapter concludes by discussing the empirical studies completed in various parts of the world and identifying the literature gap in the research, and by summarizing the chapter summary.

2.2 STRATEGIC MANAGEMENT AND FIRM PERFORMANCE

The field of strategic management, has been the theoretical basis explaining the reasons for competitive advantage and performance variations among firms (Rumelt, Schendel & Teece, 1994). Despite its short existence, strategic management has achieved high popularity and acceptance among researchers as well as practitioners who have been concerned with factors that determine performance variations and competitiveness of firms (Ghobadian & Oregan, 2008). Its contributions to business firms go back to the 1960s, particularly following the works of Chandler in 1962 on 'Strategy and Structure' and that of Ansoff on 'Corporate Strategy' in 1965 (Rumelt, *et al.*, 1994; Hoskisson, Hitt, Wan & Yiu, 1999; Ghobadian & Oregan, 2008), mainly using case-based research approaches. The main focus during the 1960s was on the characteristics of firms' internal strengths and weaknesses as drivers of performance variations among firms (Nothnagel,

2008; Nham & Hoang, 2011). The most important contributions to the growth of strategic management stemmed from the IO approach, a branch of micro-economics theory during the 1970s (Hoskisson, *et al.*, 1999; Allen & Helms, 2006; Ghobadian & Oregan, 2008; Lipczynski, Wilson & Goddard, 2009; Nham & Hoang, 2011). As a result, the focus of strategic management shifted from internal firm characteristics to its external industry structure based on the works of Mason (1939) and Bain (1951; 1956) using industry as the unit of analysis. This was followed by the adoption of the SCP paradigm to explain variations of firm performance (Porter, 1979; Scherer, 1980; Lipczynski, *et al*., 2009).

According to the IO model, the characteristics of an industry have been considered as the key drivers of firm performance. This model has made significant contributions to strategic management through its econometric techniques, which later gave birth to the transaction cost theory and agency theory, both of which are referred to as organizational economics. The specialty of organizational economics deals with exchange processes that focus on explaining a firm's boundary relationships with its external environment and cost minimization to increase firm performance (Hoskisson, *et al.*, 1999; Nham & Hoang, 2011). The transaction-cost theory explains an exchange process where managers are supposed to expand firm boundaries through ownership, cooperation or trading in the market, while the agency theory conceptualizes an exchange process in which a firm (principal) delegates responsibility to an agent (such as managers, employees, etc.) to pursue its goals for compensation and incentives to the agent for performing the jobs (Combs & Ketchen, 1999). Nevertheless, both the transaction and agency theories do not explain performance variations among firms (Stoelhorst & Raaij, 2004).

Another important development based on the tradition of IO economics that addressed both industry and firm factors, was Porter's competitive strategy or the positioning school as specified by Mintzberg, Ahlstrand and Lampel (1998), who stated how firms compete within an industry (Stoelhorst & Raaij, 2004; Parnell, 2010). Porter (1979; 1980a; 1980b) underscored the importance of the five-forces framework in determining the attractiveness of an industry and the performance of firms in that industry. In this regard, Porter's popular book on competitive strategy in 1980 made a significant contribution to the discipline of strategic management, particularly how it explains firm performance (Barney, 2002). A firm gains market power as a result of operating in

an attractive industry or market structure with appropriate strategic positions relative to its competitors (Porter, 1985). The IO and its SCP approach can be well designated by the five-forces (competitive or market forces) framework to predict performance differences among firms in an industry (Galbreath & Galvin, 2008). In the 1970s and early 1980s the emphasis shifted towards the IO perspective from the internally focused approach of the 1960s. Wernerfelt (1984) therefore provided a fresh look at the importance of internal firm resources and coined the term RBV, an approach which was later expounded by Barney (1986a; 1986c; 1991) and Peteraf (1993) to become one of the dominant theories of strategic management. The RBV focuses on firm efficiency leading to performance differences among firms (Barney & Clark, 2007; Barney, Ketchen, & Wright, 2011).

Even though strategic management has been a multidisciplinary field of study, the two schools of thought that best serve as the theories of competitive advantage and performance variations among firms can be represented by the Porter's five-force (external oriented) approach anchored in the IO model and the RBV (internal) of firms (Mauri & Michaels, 1998; Ma, 2000b; Spanos & Lioukas, 2001; Hoopes, Madsen & Walker, 2003; Kim & Oh, 2004; Barney & Clark, 2007; Galbreath & Galvin, 2008; Kim, *et al.*, 2008; Sigalas & Economou, 2009; Daveni, Dagnino & Smith, 2010; Kamasak, 2011). These schools of thought are highly important to examine and understand the issue of firm value-creation capture and competitive advantage and explaining performance variations (Bowman & Ambrosini, 2000; Coff, 2003; Stoelhorst & Raaij, 2004). Both the industry-structure approach that stemmed from the field of micro-economics and the RBV of firms rooted in the management discipline provide an integrated perspective that could help to advance the field of strategic management (Spulber, 2003; Hussler, Penin, Dietrich & Burger-Helmchen, 2012). Many empirical studies have been undertaken to test the effects of the RBV and the industry-based approach in predicting and explaining performance variations among firms, primarily in the context of developed economies (Spanos & Lioukas, 2001; Kim, *et al*., 2008; Arend, 2009; Karabag & Berggren, 2014).

The purpose of strategic management is mainly to assist top level managers to explain competitive advantage and performance variations among organizations (Parnell, 2010; David, 2011). As the prime objective of this study was to explain impacts of industry and firm effects in predicting firm

performance, it was appropriate to use both the industry structure using Porter's five-forces framework (Porter, 1980b; 2008; Pecotich, Hattie & Low, 1999; Stoelhorst & Raaij, 2004) and the RBV with its unique and difficult-to-copy internal firm resources and capabilities (Barney, 1991; Peteraf, 1993; Stoelhorst & Raaij, 2004; Kim, *et al.*, 2008; Barney & Hesterly, 2010). These theories are separately discussed in the following sections.

2.3 INDUSTRY STRUCTURE

2.3.1 The Concepts of Industry Structure and the Five-forces Framework

Porter's five forces are interchangeably used as a competitive forces approach (Teece, *et al.*, 1997). Porter's framework (Spanos & Lioukas, 2001) covers market forces (Kim & Oh, 2004) or industry structure (Pecotich, *et al.*, 1999; Douglas & Ryman, 2003; Weerawardena, O'Cass & Julian, 2006; Galbreath & Galvin, 2008), competitive intensity (O'Cass & Ngo, 2007), industry forces (Takata, 2016) or industry-level factors (Bamiatzi, *et al.*, 2016). Despite the synonymous use, the contents, meanings and components of the five forces remain the same. In this study, although some of the above terms are used interchangeably, the competitive forces approach, industry structure or Porter's five-forces framework was used as conceived by Porter (1980a; 1980b; 2008).

According to the theoretical perspective of IO, the relative attractiveness of an industry determines the performance of firms (Porter, 1980a; 1980b; Spanos, *et al*., 2004; Houthoofd & Hendrickx, 2012). According to this theory, the profit maximization motives of firms depend on the characteristics of the external market or industry structure, which include such elements as the number of firms, the extent of barriers to entry and the degree of product differentiation (Hoskisson, *et al*., 1999; Claver, Molina & Tari, 2002; Goddard, Tavakoli & Wilson, 2009). Majumdar and Bhattacharjee (2014) argue that performance variations among firms stem from mere luck as a result of operating in an attractive industry or due to political support. The IO theory states that a firm should have the capacity to sense the opportunities and threats in its external environment and position itself to excel relative to its competitors, gain sustainable competitive advantage and demonstrate superior performance (Wilson, 2012). The success of firms could therefore depend on the characteristics of the industry in which they compete (Porter, 1991; Rumelt, *et al*., 1994; Ghobadian & Oregan, 2008). The SCP model that originates from the IO paradigm of Mason (1939; 1949) and Bain (1951; 1959), explains that industry structure influences firm conduct and competitive behaviour, which in turn impact on firm performance (Spanos, *et al*., 2004; Grant 2008; 2010; Barney & Hesterly 2010; Houthoofd & Hendrickx, 2012). The SCP model indicates that the industry structure is the main determinant of firm profitability (Porter, 1980b; Scherer, 1980; Lipczynski, *et al*., 2009). This approach stipulates that the industry structure (concentration levels, product differentiation, entry and exit barriers) determines the degree of competition and the profitability of the firms. It influences the conduct of firms operating in the

market, which in turn influences the performance of those firms (Scherer & Ross, 1990; Hoskisson, *et al*., 1999; Lipczynski, *et al*., 2009; Andonova & Ruiz-Pava, 2016).

Despite its significant contribution to the field of strategic management, the IO model that focuses on industry structure failed to consider a firm's internal activities and the dynamic nature of the competitive landscape (Grimm, Lee & Smith, 2006). The IO and SCP perspectives failed to predict high performance variations in an industry (Parnell, Lester, Long & Koseoglu, 2012). It views every firm as homogeneous that operates under a similar set of industry forces such as similar suppliers, distributors, customer and claims competitors that affect firm performance independently of the firm itself (Arend, 2009). Moreover, the IO analysis which employs quantitative data cannot measure managerial perceptions of industry structure (Pecotich, *et al*., 1999).

Porter (1980a; 1980b) brought the role of industry structure from economics, the IO background, to the field of strategic management as one of the determinants and drivers of performance variations (Hoopes, *et al*., 2003; Galbreath & Galvin, 2008). A firm could select an attractive industry and adopt competitive strategies to manipulate industry forces in order to position itself favourably and command market dominance (Porter, 1980a; Fahy, 2000). Porter's five-forces framework accepts performance variations of firms as a function of the attractiveness of an industry structure determined by these forces (Tavitiyaman, Hailin & Zhang, 2011). In explaining the contribution of Porter to strategic management, Stoelhost and Raaij (2004: 467) say that:

> By turning IO on its head, Porter was able to use the structure-conduct-performance perspective to show managers how to exploit different forms of barriers to competition and (legal) market power to create competitive advantage.

Besides clarifying firm performance as a dependent variable in strategic management, Porter's works have made immense contributions to the growth of strategic management (Barney, 2002).

Porter's five forces analytical framework, though rooted in the IO tradition, differs from IO due to its shift towards firm activities and its interactions with an industry in which it operates where both ultimately influence a firm's strategy and performance as opposed to IO's exogenous and static view of industry structure (Spanos & Lioukas, 2001). Porter (1991) recognized firm resources as

intermediate between activities and competitive advantage. For him, firms need to position themselves in an attractive industry in order to gain competitive advantage and superior performance. Extending the IO view, Porter (1980a; 1980b; 1985; 2008) developed the industry analysis model using the five-forces framework, which includes threats to entry, bargaining power of buyers, bargaining power of suppliers, rivalry among existing firms and threats of substitute products as determinants of a firms' competitive advantage and profitability in an industry (Galbreath & Galvin, 2008; Barney & Hesterley, 2010). These five forces provide the tools to analyse the degree of attractiveness of the industry structure which affects competitive advantage and firm performance. The collective strength of these forces, which depend on the industry structure and other context-specific factors, determines the performance variations of firms in an industry (Porter, 1985; 2008; Takata, 2016). The performance of a firm in an industry therefore depends, among many other factors, on those five forces and their relative position in the industry in which it operates (Porter, 1991; Lucas & Kirillova, 2011). A firm's relative position enhances its defence capabilities against industry forces resulting in market power and therefore monopoly rents (Porter, 1980a; Teece, *et al*., 1997; Spanos & Lioukas, 2001).

Barney and Hesterley (2010), based on the works of Brandenburger and Nalebuff (1996), argue that apart from the five competitive forces, a firm's complementors should be included as the sixth force to Porter's five-forces model. Firms with complementors create more value to customers than those without since there is partial interdependence among firm complementors. Complementors, unlike competitors that share markets, help to complement the values of products and increase the market size of firms. It is therefore suggested that complementors have to be considered as the sixth force (Grant, 2010). Porter (1980b; 1998; 2008) does not consider complementors as an additional sixth force. He argues that complementors are not structural forces that determine firm profitability and their impact on performance can only be viewed through the five forces. Similarly, government policy, industry growth rate and technology are factors, not just industry forces that need to be analysed within the five-forces framework (Porter, 1998; 2008; Magretta, 2012). He further advises strategists to focus on the five forces and 'keep overall structure in mind instead of gravitating to any one element' (Porter, 2008: 33) and avoid considering factors that do not constitute parts of the five forces.

Since industry structure drives competition, explains industry profitability and consequently performance variations among firms, firms have to find favourable positions in an industry in order to take advantage of or defend themselves against the influences of these forces (Porter, 2008). The five-forces framework influences a firm's strategy and performance and helps to analyse industry structure and its competitive environment (Pecotich, *et al.*, 1999; Grimm, *et al.*, 2006). Analysing industry structure using the five-forces model therefore indicates how economic value can be created by a firm as it is affected by these forces, thus determining the extent of competitive advantage and level of performance (Coff, 2003; Porter 2008; Barney & Hesterly, 2010; Takata, 2016). Given these conceptual arguments, the five forces are thus relevant in predicting competitive advantage and firm performance (Spanos & Lioukas, 2001; Kim & Oh, 2004; Galbreath & Galvin, 2008). The effects of each of the five forces as conceptualized by Porter (1980a; 1980b; 2008) are presented below.

2.3.2 Threats of New Entry

Threats of new entrants refer to the prospect of new competitors entering an existing industry (Galbreath & Galvin, 2008). New entrants to an industry affect costs, prices and the rate of investment of a firm as a result of their new capacities and eagerness to gain a market share (Porter, 1985; 2008). Existing firms could decrease their prices or increase their investment in order to defend their markets against newcomers. New entrants cannot enter on equal terms with existing firms that have better advantages over the entrants (Grant, 2010). The extent of threats by new entrants depends on entry barriers and the reactions of existing competitors (Porter, 2008; Pearce & Robinson, 2009). The major sources of barriers to new entrants that could create advantages for existing firms include economies of scale, product differentiation and customer switching cost, capital requirements, access to distribution channels, cost disadvantages, independence of scale, government policy or legal barriers and expected retaliation (Porter, 1985; 2008; Lipczynski, *et al.*, 2009).

Economies of scale

Economy of scale refers to declines in the unit cost of a product as the absolute volume per period increases as the fixed cost is spread over more units, due to more efficient technology, better prices

from input suppliers or network advantages from buyers (Porter, 1985; 2008). Economies of scale stem from every activity of a firm in its supply chain as a result of producing large volumes, which lowers the unit cost of a product (Porter, 2008; Lipczynski, *et al*., 2009). Such scale advantages created by companies are referred to as supply-side economies of scale (Porter, 2008). Furthermore, Porter argues that there is a demand-side benefit of scale, which results from having network effects of buyers whose willingness to pay for a company's product increases with the number of other buyers who prefer and support that company (Porter, 2008).

The supply-side scale economies create threats to newcomers obliging new entrants to enter either on a small scale and incur high unit costs (cost disadvantage) or enter on a large scale and bear the cost of low capacity utilization (Porter, 2008; Grant, 2010). The demand-side benefits of scale discourage newcomers as customers may not be willing to buy at the same or higher prices, which will force the newcomers to reduce prices to create and build their customer base (Porter, 2008). Companies with economies of scale advantages can therefore charge low prices and create barriers to new entrants in the industry (Pearce & Robinson, 2009).

Product differentiation and customer switching cost

Established firms could develop brand preference and customer loyalty due to their prior advertisement, customer service reputations, being first in the industry and product differentiation (Porter, 1985; Grant, 2010). Differentiation creates barriers to newcomers and forces them to incur high costs to earn customers' loyalty. If customers have high brand preference and loyalty, the new entrant will find it difficult to attract buyers (Thompson, Peteraf, Gamble & Strickland, 2012). Customers may switch to a new entrant due to a lower price, better services, marketing and promotional campaigns (Lipczynski, *et al*., 2009). When switching cost is high, customers may not easily change suppliers. It then becomes difficult for a newcomer to attract customers (Porter, 2008). When customers change their suppliers, they may face such fixed costs as searching for and learning costs, product and/or process modifications, retraining employees to work on the new product and processes and installation and replacement costs (Porter, 1985; 2008; Lipczynski, *et al*., 2009). The higher the switching costs of customers, the more difficult it is for a newcomer to gain customers, resulting in an entry barrier.

Capital requirement

The amount of capital required to enter an existing business may create entry barriers, particularly if the business needs prior expenditure on research and advertisement (Porter, 1979; 2008). Huge capital requirements to start a business could create an entry barrier and thus limit the number of firms in an industry. Apart from the capital requirement for fixed assets, the need to extend customer credit services, accumulate inventories, finance start-up losses and meet other working capital requirements create entry barriers (Porter, 1985; 2008). Porter argues that if the industry is attractive and capital markets are efficient, new entrants can obtain funds to join the industry (2008).

Access to distribution channels

For access a new entrant has to persuade distribution channel entities or operatives that have already been dealing with existing products (Thompson, Strickland & Gamble, 2010). The lower the number of wholesalers or retailers or branches and the more existing competitors have developed long-term relationships with quality customer services, the more difficult it will be for new entrants (Porter, 1985). Unequal access to distribution channels sometimes creates high entry barriers and forces new entrants to establish their own channels or incur high costs to gain access (Porter, 2008).

Cost disadvantages independent of scale

Irrespective of the size and economies of scale advantage, incumbents can have cost advantages as a result of their experience curve, partnership with the best and cheapest suppliers, government subsidies, favourable locations, possession of proprietary technology, low fixed costs and brand image and identities that allow existing firms or incumbents to experience better efficiency (Porter, 1985; 2008; Thompson, *et al*., 2012).

Government policy

Government policy can create entry barriers or even prohibit entry into industry using its licensing requirements and legal and regulatory measures (Porter, 2008; Lipczynski, *et al*., 2009). Its

importance becomes relevant when it affects industry structure through the five forces (Magretta, 2012). In Ethiopia, for example, the financial sector prohibits foreign nationals from entering the market. Businesses such as banks, insurance, telecommunications, advertising agencies and media face stringent regulations and they are exclusively restricted to Ethiopian nationals (Ethiopia Proclamations No. 592/2008; 746/2012). Safety regulations and compliance with environmental pollution standards can also increase the cost for new entrants (Thompson, *et al.*, 2010). Although government is not considered as the sixth force in Porter's five-forces model, it is important to understand and analyse how relevant government policies influence both existing firms and newcomers in terms of promoting, restricting and regulating competition in an industry (Porter, 1998; 2008).

Expected retaliation

Firms may implement entry-deterring strategies through pricing, product, branding and marketing activities in order to discourage new entrants (Lipczynski, *et al*., 2009). The extent of firms' reactions and retaliations to new entrants influence decisions of newcomers whether to enter a certain industry. Newcomers should expect retaliation if:

> … incumbents have previously responded vigorously to new entrants, incumbents possess substantial resources to fight back, including excess cash and unused borrowing power, available productive capacity, or clout with distribution channels and customers, incumbents seem likely to cut prices because they are committed to retaining market share at all costs or because the industry has high fixed costs, which create a strong motivation to drop prices to fill excess capacity, and industry growth is slow so newcomers can gain volume only by taking it from incumbents (Porter, 2008: 29).

Newcomers, besides analysing retaliation from incumbents, should design appropriate entry strategies that overcome entry-deterring strategies of existing competitors and maximizing their return on investment.

2.3.3 Bargaining Power of Buyers

Customers with better bargaining power can force sellers to reduce prices, demand and capture more value and quality of products or more services, thus squeezing the profitability of firms in an industry (Porter, 1985; 2008; Hoopes, *et al.*, 2003; Altuntas, Semercioz, Mert & Pehlivan, 2014). The bargaining power of customers relative to that of sellers depends on the relative cost that each party incurs and each party's ability to manage its bargaining position (Grant, 2010).

Buyers become powerful over sellers when they easily switch to competing brands or substitutes at low or no cost, have more bargaining power than buyers that have high switching costs, are small in number and concentrated or purchase in large volumes and when the products/services of the sellers are identical with little differentiation (Porter, 1985; Thompson, *et al.*, 2012). The larger the purchase volume of products, the more bargaining power customers will have in the form of cheaper prices and better services (Tavitiyaman, *et al.*, 2011). Customers become powerful if they earn low profits and purchase standard or undifferentiated products. Buyers of standardized products or services can always get alternative suppliers as there is no difference in the product, which encourages customers to demand price reductions, better services or pose a threat of backward integration (Porter, 1985; Pearce & Robinson, 2009). For example, customers who have adequate information about the demand and market price of a product can generally have better bargaining leverage than those buyers who do not have such information (Porter, 1985; 2008; Grant, 2010).

2.3.4 Bargaining Power of Suppliers

Suppliers have labour, raw materials and parts, technology and research and training that they offer to their buyers. Suppliers of resources become powerful by capturing more of the value for themselves through higher prices, lowering service quality or forcing firms to bear much of the costs that they should have borne (Porter, 2008; Altuntas, *et al.*, 2014). Suppliers can have better bargaining power than their customers:

a) if the number of suppliers is small and more concentrated than the industry/sellers,
b) when the suppliers do not largely depend on the industry as a source of revenue,
c) when products or services are unique or differentiated,

d) when the industry faces high switching costs,
e) when there is no substitute for the resources a supplier provides,
f) when there are credible threats of forward integration into the industry's business and
g) when the industry is not an important customer of the supplier (Porter, 2008; Pearce & Robinson, 2009).

2.3.5 Rivalry among Existing Firms

Competitors employ several types of techniques to retain and attract customers and win a better market position among existing rivals. The extent of rivalry among existing firms includes both intensity of competition and dimensions of competition (Porter, 2008). The intensity of competition among existing rival firms becomes severe when

a) competitors are many in number and roughly equal in size and power,
b) industry growth is slow,
c) fixed cost is high and products are perishable,
d) exit barriers are high and
e) products or services lack differentiation or buyers have no switching cost.

Firms, beside price-based competition, can compete and differentiate themselves using such dimensions as product features, new product introduction, delivery time, brand image and advertisement campaign and support service (Porter, 2008; Thompson, *et al.*, 2012). According to Porter (2008), price-based competition is destructive to profitability that results in zero-sum competition if firms are competing on the same dimensions. Price-based competition gets intensified if

> … products or services of rivals are nearly identical and there are low switching costs for buyers which encourage competitors to cut prices to win new customers; fixed costs are high and marginal costs are low, which creates intense pressure for competitors to cut prices below their average costs, even close to their marginal costs, to steal incremental customers while still making some contribution to covering fixed costs, and capacity must be expanded in large increments to be efficient; the product is perishable and when perishability creates a strong temptation to cut prices and sell a product while it still has value (Porter, 2008: 32).

Competition intensity among firms may result in an increase in the profitability of an industry, when each firm has a clear strategy to serve the needs of different market segments with its own unique set of marketing mixes: price, new products, improved products and features, an efficient and strong distribution network, effective services, communications and branding (Porter, 2008; Thompson, *et al.*, 2012).

2.3.6 Threats of Substitutes

Substitute products depend on the buyer's propensity to substitute and the relative prices and performance of substitute products (Porter, 1985; 2008). When buyers consider substitute products as possible need satisfiers, substitute products create competitive pressures on existing products. Substitute products limit industry profitability by putting a ceiling on the prices firms can profitability charge (Porter, 1985). Sellers of substitute products create competitive pressures when

a) substitute products are readily available and attractively priced. If substitute products are cheaper than an industry's product, firms in the industry face competition to reduce prices.
b) buyers view the substitute as being comparable or better in terms of quality, performance, and other relevant attributes.
c) the costs that buyers incur in switching to the substitutes are low (Thompson, *et al.*, 2010; 2012).

In general, prior theory and research in both IO and strategic management have advocated the predominant role of these industry-structural factors in determining profitability (Schmalensee, 1985; McGahan & Porter, 1997). Building on the discipline of IO, Porter's (1980a;1980b; 1981;1985) perspective has made a remarkable contribution to the development of strategic management by changing the earlier SCP view from that of industry level to firm level analysis using the five-forces framework that leads to cost and differentiation-based competitive advantages (Rumelt, Schendel & Teece, 1991; Stonehouse & Snowdon, 2007; Goddard, *et al.*, 2009). The collective impact of the five forces determines the intensity of industry competition, thus affecting the competitive advantage and performance of firms in an industry (Bridoux, 2004; Porter, 2008; Wilson, 2012). Industry forces affect the sustainability of the above-average performance of firms as a result of the bargaining of direct and indirect competitors (Porter, 1991).

According to Porter (1998; 2008), each of the five forces affects and determines the firm's performance created and shared among these forces. Irrespective of the firm's stage of development and degree of regulation, the performance of a firm depends on the five forces that compete to maximize their respective benefits (Porter, 1991; 1998; 2008). Pecotich, *et al*. (1999) and Grimm, *et al*. (2006) state that the five forces of industry structure that sets the rule of the game of an industry, determines the degree of competition among the industry participants and thus affect the competitive advantage and performance of firms.

2.4 CRITIQUE OF THE STRUCTURE-BASED VIEW AND FIVE-FORCES MODEL

Although Porter has advanced the IO view based on the SCP paradigm and explained the determinants of firm performance and competitive advantage from the point of view of the five-forces industry competition, he did not investigate the contribution of internal or firm factors as drivers of competitive advantage (Foss, 1996). Industry rather than firms being the unit of analysis of Porter's (1980b) five-forces model, the model fails to explain intra-industry performance differences among firms. Many empirical studies have revealed performance differences between firms within the same industry (Fahy, 2000). Firm effects contribute more to performance differences among firms than industry effects (Rumelt, 1991; McGahan & Porter, 1997; Hawawini, *et al*., 2003). In response to this criticism Porter (1991; 1998) acknowledged that firm performance is a function of both industry and firm effects. He states that as opposed to the traditional IO view, industry structure is neither wholly exogenous nor stable, but instead is subject to influences by firm actions (Porter, 1991; Spanos & Lioukas, 2001).

Porter's five-forces model has also been criticized for being too static, failing to respond to the dynamic environments of the 1990s (Stonehouse & Snowdon, 2007). Porter's five-forces framework has particularly been criticized by the proponents of the RBV for failing to consider the idiosyncratic nature of firm resources as the predictor of competitive advantage and therefore firm performance (Barney, 1991; 2001b; Peteraf, 1993). Teece (2007) succinctly summarizes the weaknesses of the five-forces model with particular emphasis on

a) the importance and nature of innovation and other factors that change the 'rules of the game',
b) factors inside the business enterprise that constrain choices,
c) factors that impact on imitation and appropriateness issues, and
d) the role of supporting institutions, complementary assets, co-specialization and network externalities or the blurred nature of industry boundaries.

Despite these criticisms, empirical evidence suggests that Porter's five forces are important factors that shape and explain firm strategy and performance (Powell, 1996; McGahan & Porter, 1997; Mauri & Michaels, 1998; Porter, 1998; Chang & Singh, 2000; Spanos & Lioukas, 2001; O'Cass & Julian, 2003; Kim & Oh, 2004.; Galbreath & Galvin, 2008; Short, *et al*., 2009; Gjerde, *et al*., 2010; Kamasak, 2011; Houthoofd & Hendrickx, 2012; Karniouchina, Carson, Short & Ketchen, 2013; Karabag & Berggren, 2014; Takata, 2016).

2.5 THE RESOURCE-BASED VIEW

According to the proponents of the RBV, the five forces of Porter's model are not the only determinants of firm performance (Barney & Hesterley, 2010). Industry structure relies on market power explanations while the RBV focuses on the efficiency of firms as determinants of performance (Barney & Clark, 2007). The five-forces industry analysis model considers firms as having homogenous resources, which can be acquired in a free market. Firm-specific resources therefore cannot be unique and heterogeneous to create competitive advantage as suggested by the RBV (Barney, 1991; Peteraf, 1993; O'Shannassy, 2008). A growing number of empirical studies using the SCP paradigm and Porter's five-forces model of industry analysis or product-market (Wernerfelt, 1984) began to question their validity as determinants of firm performance (Fahy, 2000; Goddard, *et al.*, 2009). As the focus of this industry analysis has been on a firm's external environment, it failed to consider the effects and roles of idiosyncratic internal attributes of firms in explaining their competitive advantage (Barney, 1991).

Based on the weaknesses of Porter's five-forces model of industry analysis, emphasis began to shift, particularly in the late 1980s and during the 1990s, from industry factors or the outside-in view, to internal firm resources or the inside-out perspective, as key determinant of competitive advantage and the performance of firms (Juga, 1999; O'Cass & Julian, 2003; O'Cass & Weerawardena, 2010). The shift from the outward perspective of the firm to the inward perspective as basis of maximizing profitability thus received prominence in the 1990s (Barney, 1991; Grant, 1991; Peteraf, 1993; Short, Ketchen, Palmer & Hult, 2007; Kim, *et al*., 2008). The RBV has thus become one of the most prominent theories of strategic management (Crook, Ketchen, Combs & Todd, 2008). The rationale for the increasing emphasis on the role of resources and capabilities as the basis for strategy and thus superior performance has been attributed to rapidly changing industry environments and the perspective that competitive advantage is better than industry attractiveness as the primary source of superior performance (Grant, 2008; 2010; Goddard, *et al.*, 2009). The proponents of firm-specific factors under the RBV of the firm argue that performance differences across firms depend on whether the firms' resources and capabilities are unique, rare, inimitable and non-substitutable (Barney, 1991; Hitt, Bierman, Shimizu & Kochhar, 2001; Furrer, Sudharshan, Thomas & Alexandre, 2008; Newbert, 2008; 2014). Barney (1995) further included

organization as a complementary resource in addition to unique, rare and inimitable resources to exploit and gain competitive advantage.

Although the importance of internal resources of firms had been attributed to the work of Penrose (1959), it was Wernerfelt (1984) who formally conceptualized the resource-based perspective of the firm as one of the determinants of its profitability. Barney (1986a; 1991) and Peteraf (1993) further expounded the concept of the RBV and its impact on competitive advantage and sustainable performance. Barney and Hesterly (2010: 66) define the RBV 'as a model of firm performance that focuses on the resources and capabilities controlled by a firm as source of competitive advantage.' These resources should be able to take advantage of opportunities and neutralize threats emanating from the external environment (O'Shannassy, 2008). It is an efficiency-based theory explaining competitive advantage and improved performance variations of firms in an industry (Peteraf & Barney, 2003; Barney & Clark, 2007). Unlike Porter's five-forces model, the RBV explains that a firm can generate competitive advantage and superior performance using its resources, even if it is operating in unattractive industry conditions (Barney, 1995; Barney & Hesterly, 2010).

Viewed from the resource-based perspective, firms cannot be similar due to differences in their experience, resources, assets and capabilities (Barney, 2001b; Grant 2008; Ehlers & Lazenby, 2010). The RBV relies on two critical assumptions namely the resource heterogeneity and resource immobility of firms (Barney, 1991; Barney & Hesterley, 2010). Resource heterogeneity assumes that firms control unique bundles of resources even if they compete in the same industry (Barney & Hesterly, 2010) that stems from the rational decisions and actions of firms in order to gain competitive advantage and thus superior performance over their rivals (Bamiatzi, *et al*., 2016). It implies that firm resources that are heterogeneously distributed could lead to performance variations among firms. Resource heterogeneity could be long lasting when these resources are immobile or difficult to copy (Barney, 1991; Bridoux, 2004). Based on these assumptions, the proponents of the RBV assert that firms with homogenous and mobile resources cannot gain competitive advantage and superior performance (Barney 1991; Peteraf & Barney, 2003). Performance differences among firms therefore rely on acquiring and deploying both resources and capabilities (Caloghirou, *et al*., 2004; Barney & Clark, 2007; Grant, 2010; Bamiatzi, *et al*., 2016).

2.5.1 The Concepts of Resources and Capabilities

There is no consensus in the definition and classification of resources and capabilities mainly due to the different views and labels given by various interest groups in the field (Fahy, 2000; Galbreath, 2005; Barney & Clark, 2007). Resources, according to Wernerfelt (1984) are considered as any tangible and intangible assets such as brand names, machinery, capital, in-house knowledge of technology, skilled employees, trade contracts and procedures owned by a firm semi-permanently, that can be considered as strengths and weaknesses. For Grant (1991; 2010) and Pearce and Robinson (2009), resources are inputs or productive assets that are owned by a firm, while capabilities form part of firm resources that include skills and knowledge employed to mobilize and transform those inputs into outputs such as goods or services (Carpenter & Sanders, 2009).

Resources and capabilities of firms can be also classified in four elements namely financial resources, physical resources, human resources and organizational resources (Barney, 1991; 1995; Barney & Hesterly, 2010). Financial resources include cash, securities and the borrowing capacity of firms (Barney & Hesterly, 2010; Grant 2010). Physical resources include technology such as equipment, land, geographic location and access to raw materials (Barney & Hesterly, 2010). Human resources include skills/know-how, training, experience, intelligence, relationships, motivation, capacity for communication and collaboration, while organizational resources include formal reporting structures, planning, controlling and coordinating systems, culture and reputation and informal relations among groups within a firm and between a firm and its environment (Barney, 1995; Barney & Hesterly, 2010).

Based on Hall's (1992) approach, Galbreath (2005) conceptualized firm resources as tangible resources (financial and physical assets), intangible resources that are assets (intellectual property assets, organizational and reputational assets) and intangible resources classified as skills referred to as the capabilities of a firm. Other scholars, including Pearce and Robinson (2005), Galbreath and Galvin (2008) and Ehlers and Lazenby (2010) view organizational resources as well as capabilities as tangible and intangible assets.

2.5.2 Tangible Assets

Tangible assets include financial and physical assets that can be measured in monetary terms in the financial statements of firms (Grant, 2010). They include such assets as production facilities, raw materials, computers, real estate, cash reserves, cash equivalents, equipment and branch offices that can be valued and reflected in financial statements (Galbreath & Galvin, 2008; Pearce & Robinson, 2009; Thompson, *et al.*, 2012).

Tangible resources are fixed and current assets of a firm with a fixed long-run capacity (Wernerfelt, 1989). These assets are transparent and relatively easy to imitate and duplicate by competitors (Grant, 1991; Fahy, 2000). According to Fahy (2000), tangible resources include plants, equipment, land, other capital goods and stocks, debtors and bank deposits. There is little disagreement on the identification of resources under tangible categories as they are measured using financial or physical values in a firm's balance sheet (Andersen & Kheam, 1998; Galbreath, 2005).

2.5.3 Intangible Assets

Intangible resources include human assets and intellectual capital, brands, image, reputational assets, (customer service reputation, service/product reputation, company reputation), technical knowledge, organizational culture, organizational structure and policies, accumulated experiences and employees' morale (Hall, 1992; 1993; Galbreath, 2005; Galbreath & Galvin, 2008; Thompson, *et al.*, 2012). Immaterial resources are more difficult than tangible resources to duplicate, trade and substitute by competitors (Fahy, 2000; Ferna´ndez, Montes & Va´zquez, 2000; Ray, Barney & Muhanna, 2004; Arrighetti, Landini & Lasagni, 2014). Furthermore Ferna´ndez, *et al.* (2000) classify intangible resources as human capital, organizational capital, technological capital and relational capital. They also indicate that while human capital is people dependent, the remaining three are not dependent on people or employees of firms. Such resources are difficult to transfer among firms because of transaction and transfer costs, their tacit knowledge (Teece, *et al.*, 1997) and their difficult characteristics to transfer or trade, substitute and imitate (Villalonga, 2004).

Despite the difficulties in distinguishing between intangible assets and capabilities of firms, Hall (1992; 1993), Galbreath (2005) and Grant (2010) suggest that if the intangible resource is something that the firm owns or has and it is people independent, that resource is an asset. If the intangible resource is something that a firm can do, which is people dependent, it is a skill or capability. People-dependent intangible resources are inseparable from the bearer and those intangible resources that remain under the firm's control even when employees leave, are considered as people-independent resources (Ferna´ndez, *et al.*, 2000).

Even though both tangible and intangible assets are important to create competitive advantage (Carmel & Tisher, 2004; Hoskisson, Eden, Lau & Wright, 2000), intangible resources are more important in services than in manufacturing industries (Clulow, *et al*., 2003; Ray, *et al*., 2004; Galbreath & Galvin, 2008; Liu, Timothy & Gao, 2011). As a result of the changes from the industrial age to the knowledge-age economy, the focus has shifted towards intangible assets (Chareonsuk & Chansa-ngavej, 2008; Andonova & Ruiz-Pava, 2016).

2.5.4 Capabilities

Both tangible and intangible resources are not so productive as to generate competitive advantage unless firms have the capability to deploy them through complex networks of processes and interactions (Grant, 2008; 2010; Ehlers & Lazenby, 2010). These resources are the bases of capabilities that firms can mobilize to achieve their objectives (Grant, 2010).

Unlike resources, capabilities arise from a combination and coordination of various resources such as the coordination between people and between people and other resources (Grant, 1991; Amit & Shoemaker, 1993; Teece, *et al*., 1997). They bind together firm resouces in order to enhance efficency and achieve objectives (Day, 1994). The efficiency of a firm's capabilities thus can only be measured by their capacity to transform or convert inputs to outputs. Core competencies and distinctive competencies are other terms that are similar to or synonymous with capabilities that can be used interchangeably (Prahalad & Hamel, 1990; Carpenter & Sanders, 2009).

Capabilities are complex bundles of skills and accumulated knowledge employed to coordinate and utilize both tangible and intangible resources working together through organizational processes and by combining procedures and expertise of a firm to produce goods and services (Grant, 1991; Day, 1994; Carpenter & Sanders, 2009; Pearce & Robinson, 2009). Similarly, Thompson, *et al*. (2012: 146) define capabilities as 'knowledge-based, residing in the people and in a company's organizational culture, intellectual capital or in organizational processes and systems which embody tacit knowledge.' Because of their tacit nature and causal ambiguity, capabilities are more difficult to imitate and substitute, which creates sustainable competitive advantage in firms (Fahy, 2000).

It is difficult to identify components of capabilities as each firm configures its capabilities based on the context in which it operates, its past commitments and anticipated requirements (Day, 1994). Louw and Venter (2006) and Grant (2010) identify a firm's capabilities using its key functional areas based on Porter's value-chain analysis. Generally, from the above descriptions, there seems to be a general consensus that capabilities reside in employees' know-how, managerial know-how, organizational culture and the ability to build and maintain advantageous external relationships (Amit & Schoemaker, 1993; Fahy, 2000). These capabilities are important sources of sustainable competitive advantage and superior performance of firms because of their scarcity, immobility and inimitability due to their tacit nature and high level of causal ambiguity (Amit & Schoemaker, 1993; Day, 1994; Teece, *et al.*, 1997; Fahy, 2000; Galbreath, 2005; Galbreath & Galvin, 2008).

2.5.5 Dynamic Capabilities

The quest to respond to continuous market changes and the failure of the RBV to cope with environmental changes has resulted in the development of a dynamic-capability approach (Teece, *et al*., 1997). They developed the dynamic-capabilities view as an extension of the RBV of competitive advantage in order to address the static nature of the RBV (Barreto, 2010). The descriptive word dynamic indicates a firm's capacity to renew its competences in order to fit the changing business environment (Teece, *et al*., 1997). The term dynamic, contrary to operational capability implies change (Winter, 2003), referring to renewing and transforming the resources of firms (Ambrosini & Bowman, 2009). Capabilities refer to a firm's ability to adapt to changes, to integrate and reconfigure internal and external organizational skills, resources and functional expertise and competences in order to cope with environmental changes (Teece, *et al*., 1997). Similarly, Eisenhardt and Martin (2000: 1107) define capabilities as 'the firm's processes that use resources–specifically the processes to integrate, reconfigure, gain and release resources–to match and even create market change'.

Augier and Teece (2009) have defined dynamic capabilities as

> … the ability to sense and then seize new opportunities, and to reconfigure and protect knowledge assets, competencies, and complementary assets with the aim of achieving a sustained competitive advantage … (Augier & Teece, 2009: 412).

This definition has clearly incorporated Teece's (2007) sensing, seizing and reconfiguring capabilities of firms. Similar to the conceptualization of Teece (2007) and Winter (2003), Easterby-Smith, Lyles and Peteraf (2009) explain dynamic capabilities as higher-level firm capabilities that enable it to acquire knowledge and make decisions through collecting and sharing, improving operational processes and continuously interacting with the environment. In a similar vein Galunic and Eisenhardt (2001) define dynamic capabilities broadly as the firm's strategic processes where its managers adjust and deploy resources to create new productive assets in a changing business environment.

Viewed from a routines perspective, dynamic capabilities are strategic or higher-order routines that enable firms to reconfigure resources as a result of environmental changes (Eisenhardt &

Martin, 2000; Winter, 2003). Routines are repetitive, learned and patterned capabilities residing in a tacit form of knowledge that support both ordinary operations as well as change and growth using dynamic capabilities (Winter 2003). Dynamic capabilities are also viewed as a firm's capacity to deliberately and intentionally create and modify its resource structure in order to respond to environmental changes (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece & Winter, 2007). Dynamic capabilities are therefore used to build, modify and revise resources and capabilities of firms in order to respond to the changing environment or proactively reconfigure the firm to change the environment (Zollo & Winter, 2002; Carpenter & Sanders, 2009).

Components of dynamic capabilities

Teece, *et al*. (1997) are credited for introducing the dynamic capabilities that view organizational and managerial processes as involving the following components: coordination/integration processes, learning processes and reconfiguration/transformation.

Integration and coordination are the processes that involve how managers are able to effectively and efficiently integrate or coordinate different activities of firms (Porter, 1991; Teece, Rumelt, Dosi & Winter, 1994). Coordinating is a leveraging process that includes integrating capability configurations (Sirmon, Hitt, Ireland & Gilbert, 2011). It is the process of creating alignment and unity among various resources in order to achieve organizational objectives. Managers for instance make strategic decisions and integrate resources by withdrawing different types of skills from various functional areas to introduce profitable products and services (Eisenhardt & Martin, 2000) so as to create, adjust and re-create organizations (Quinn & Dutton, 2005). Coordination focuses mainly on such activities as internal coordination, integration, standardization, formulating and implementing business plans, introducing new management systems and business processes (Caloghirou, *et al*., 2004), creating shared meaning and understanding (communication) among individuals (Crossan, Lane, & White, 1999), creating synergies among resources and tasks (Teece, 2012) and assigning and deploying resources in areas of opportunity (Helfat & Peteraf, 2003; Pavlou & El-Sawy, 2011; Teece, 2012).

Learning is a dynamic concept which deals with repetition of and experimentation with tasks by individuals and groups which lead to higher productivity and improved performances (Teece, *et al*., 1997). Learning involves such organizational learning processes as team-building, shared-communication, on-the-job training, information exchange with customers and suppliers, scanning and evaluating the external environment (Caloghirou, *et al*., 2004).

Reconfiguration and transformation is a transformed concept that deals with changing or reconfiguring a firm's resources to match the changing business environment (Teece, *et al*., 1997). It involves the ability to scan and evaluate the business environment in order to reconfigure its asset structure and deploy new ones in order to meet customers' needs and win the competition (Teece, *et al*., 1997; Teece, 2007). Teece (2007; 2012) further classifies

> … dynamic capabilities as sensing, seizing, and reconfiguring the capabilities of firms to ensure long-term profitability and competitiveness through enhancing, combining, protecting, and reconfiguring or transforming its intangible and tangible assets.

Coordination/integration, learning and reconfiguring processes are parts of sensing, seizing and transforming which can be considered as asset orchestration processes (Teece, 2007).

Dynamic capabilities depend on managers' perceptions of opportunities, willingness and motivation to take advantage of, and the ability (skills and experiences) to implement changes (Zahra, Sapienza & Davidsson, 2006). Depending on their perceptions regarding the environment, top management therefore may initiate internal change processes and respond to the changing business environment. Such changes could be manifested in various forms such as transformation of a firm's operation and processes, resource deployment and utilization (Easterby-Smith, *et al*., 2009). Generally, the various definitions and classifications of dynamic capabilities discussed so far were controversial (Grant, 2010) due to their mainly intangible, tacit characteristics and intertemporal effects (Easterby-Smith, *et al*., 2009). Barreto (2010), for example, identified nine different types of definitions upon reviewing 40 articles that dealt with the concept of dynamic capability. He emphasized that these definitions highlighted dynamic capabilities as processes or routines. While some of the definitions of dynamic capabilities refer to resource integration, reconfiguration and creating new resources, other definitions indicate that dynamic capabilities are

about shedding resources (Ambrosini & Bowman, 2009). Despite these divergent views, different writers suggest that dynamic capabilities have common features involving higher level capabilities that enable firms to provide knowledge gathering and sharing opportunities, continuous improvement and updating of operational processes, interacting with the changing environment and conferring upon management a set of decision-making processes with the purpose of changing the firm's resource base (Winter, 2000; Easterby-Smith, *et al*., 2009). Scholars who have contributed significantly to the development of the dynamic-capabilities perspective such as Helfat, *et al*. (2007: 4) have attempted to develop a commonly agreed definition of dynamic capabilities as 'the capacity of an organization to purposefully create, extend, or modify its resource base'. According to Barney and Clark (2007), dynamic capabilities are 'capabilities that are dynamic'. As various scholars conceptualize dynamic capabilities differently, it is very difficult to arrive at a commonly agreed definition (Grant, 2010). It is evident from the above definitions that a firm's capabilities range from performing daily normal routine activities proficiently to that of accomplishing high level and sophisticated tasks proactively through reconfiguring existing resources and capabilities in order to adapt to and/or shape the changing environment better than others (Carpenter & Sanders, 2009; Thompson, *et al.*, 2012).

In this study, based on the synthesis of the above discussions, dynamic capabilities therefore are considered as sub-sets of firm resources involved in managerial and organizational processes of coordination and integration, learning and reconfiguration or transformation of tangible and intangible assets of firms in order to adapt to and succeed in a changing environment (Teece, *et al*., 1997; Teece, 2007; Caloghirou, *et al.*, 2004; Barney & Hesterley, 2010). A firm's dynamic capabilities, in a manner which extends the RBV, can generate competitive advantage and superior performance through creating, integrating, recombining and releasing intangible and tangible assets (Eisenhardt & Martin, 2000; Ambrosini & Bowman, 2009) and through shaping a rapidly changing business environment using an appropriate strategy (Teece, 2007; 2012). A firm's resources and capabilities have to be managed dynamically in order to create and sustain competitive advantage in an increasingly changing environment (Thompson, *et al.*, 2012). Although dynamic capability evolved to address the changing environment (Teece, *et al.*, 1997), Barney's (1991) definition of resources has already incorporated this concept in the firm's strategy and execution process (Knott, 2009). Following Barney and Clark (2007) and Grant (2010),

despite some differences in the meanings of these terms, firm resources and assets refer to firm capabilities, dynamic capabilities and competencies and are used interchangeably or in combinations as appropriate throughout this thesis. In this study, firm resources and capabilities include tangible assets, intangible assets and dynamic capabilities based on the previously stated classifications (Teece, *et al.*, 1997; Fahy, 2000; Caloghirou, *et al.*, 2004; Galbreath & Galvin, 2008; Barney & Hesterley, 2010).

2.5.6 Critique on the Resource-based View

The resource-based perspective, which uses the value, rareness, inimitability and organization (VRIO) framework for analysing valuable resources, has been widely accepted by academics and practitioners as one of the leading theories in strategic management (Sheehan & Foss, 2007). Despite its popularity and contribution to the strategic management literature, the RBV does not have solid foundations and lacks sufficient clarity to be a theory of strategic management (Priem & Butler, 2001; Foss & Knudsen, 2003). Foss and Knudsen (2003) indicate that since the RBV's assumptions and structure are vague, it is not clear whether it is a theory of competitive advantage or a theory of rent. The tenets of the RBV are tautological in the sense that its claims are correctly defined but cannot be empirically tested (Priem & Butler, 2001). They further assert that the RBV does not lead to value creation or competitive advantage as a firm's value is determined by demand factors, which are not part of the RBV proposition. Barney (2001a) concurs with the exogenous view of value that can be gauged by the competitive environment.

The RBV focuses on internal firm factors and its efficiencies to explain performance variations among firms, but does not consider industry structure as determinants of firm performance (Grant, 1991; Foss, 1998; Spanos & Lioukas, 2001; Peteraf & Barney, 2003). The RBV rather appears to have implicit assumptions about the industry environment. Moreover, Warnier, Weppe and Lecocq (2013) state that the RBV focuses primarily on strategic resources, but fails to consider other resources that are easily available in the factor market as sources of sustainable competitive advantage. The RBV involves methodological challenges making it difficult to apply in identifying unobservable firm resources, forcing researchers to use proxies in measuring resources (Lockett, Thompson & Morgenstern, 2009) and operationalize performance in the absolute instead of relative terms to that of competitors (Newbert, 2007). According to Lockett, *et al*. (2009), the methodological and practical problems of the RBV, which make it difficult to test a direct hypothesis, stem from problems of its tautological nature, resource identification and measurement, and the heterogeneity of each firm causing difficulty for researchers to generate homogenous samples. This makes it difficult to measure competitive advantage by identifying the unique resources in large and complex organizations that could lead to superior performance. It also makes it hard to define competitive advantage and its relationship with the performance differential, as well as to indicate a clear and direct relationship between a certain resource and its

performance. Empirical evidence points to the RBV criticisms arguing that it fails to explain how rent generated is appropriated among various stakeholders (Coff, 1999; Barney, 2001a; Barney & Clark, 2007) or ignore how rents are shared by market competition (Costa, Cool & Dierickx, 2013). Unlike the 98% claims of Barney and Arikan (2001) on the consistency of the RVB based on assessing 166 empirical articles, Newbert (2007) indicated that about 53% of the empirical tests support the RBV. These findings provide further evidence of the RBV's unsettled despute on its applications (Lockett, *et al.*, 2009).

Contrary to the modest support of Newbert (2007), a meta-analysis of 125 studies (Crook, *et al.*, 2008) using the RBV found robust support indicating the relationship between firm resources and performance variations. Moreover, despite its weaknesses, Newbert (2014) asserts that the RBV is still the most important approach in explaining performance variations of firms. In order to address the methodological problems and operationalization of performance as a dependent variable, Newbert (2014) further suggests that the measurement of performance has to be made in relative rather than absolute terms as originally prescribed under the RBV.

2.6 COMPETITIVE ADVANTAGE

2.6.1 The Concept of Competitive Advantage

The concept of competitive advantage emerged in the late 1970s following the success of Japanese firms in the international market (South, 1981). It was Porter (1985) who popularized the core concepts and principles of competitive advantage. A firm that gains competitive advantage charges higher prices and/or enjoys lower costs than competitors which result in its bottom-line (Magretta, 2012). Despite its popularity in the strategic management literature (Porter, 1980b; 1985; South, 1981; Barney, 1986a; 1991; Lado, Boyd & Wright, 1992; Peteraf, 1993; Ma, 2000a; Wiggins & Ruefli, 2002; Peteraf & Barney , 2003: Foss & Knudsen, 2003; O'Shannassy, 2008; Newbert, 2008; Barney & Hesterly, 2010; Sigalas & Economou, 2013), there is apparently little consensus on a conceptually clear definition and the operationalization of competitive advantage (Day & Wensley, 1988; Cockburn, Henderson & Stern, 2000; Ma, 2000b; Flint, 2000; Hoffman, 2000; Foss & Knudsen, 2003; O'Shannassy, 2008; Grahovac & Miller, 2009; Gjerde, *et al.*, 2010; Sigalas & Economou, 2013; Ahmadi, O'Cass & Miles, 2014). The two main strategic management theories, the structural approach and the RBV, use competitive advantage and performance interchangeably rather than as independent constructs (Ma, 2000b).

Using its sources and outputs, Day and Wensley (1988) attempted to define competitive advantage as a firm's superiority in its skills and resources or 'distinctive competencies' and its 'positional-advantage' by delivering value to customers at a lower cost. While the first definition, based on the logic of the RBV, identifies idiosyncratic firm-specific resources as the source of competitive advantage (Barney, 1986a; 1991), the second definition is rooted in a firm's external environment based on Porter's five-forces perspective (Porter, 1985; 1991). Idiosyncratic firm resources that generate competitive advantage also contribute towards creating a competitive position (Hooley, Greenley, Fahy & Cadogan, 2001). Neither Porter's market-led perspective nor the RBV could differentiate competitive advantage from superior performance (Sigalas & Economou, 2013). If competitive advantage and performance are considered interchangeable (Porter, 1985), there is no need to define competitive advantage (Grant, 2010) or it is rather not only redundant but also tautological (Ma, 2000b).

Cognizant of a lack of conceptual clarity between competitive advantage and performance, Sigalas and Economou (2013) did an extensive literature survey to elucidate this ambiguity and suggest two criteria:

> Criterion 1): the construct of competitive advantage must be conceptually robust, by incorporating all the latent characteristics and particulars of the competitive advantage concept.
>
> Criterion 2): the construct of competitive advantage must be completely separated from performance, by not incorporating any latent characteristics of the performance concept (Sigalas & Economou, 2013: 75).

Based on the above criteria and building on Barney (1991) and Newbert's (2008) conceptualization, competitive advantage is defined as '… the above industry average manifested exploitation of market opportunities, neutralization of competitive threats and reduction of costs' (Sigalas, Economou & Georgopoulos, 2013: 335). They further state that above-industry average is explained in terms of full exploitation of all market opportunities and full neutralization of all competitive threats (Sigalas, *et al.*, 2013).

Ghemawat and Rivkin (2006) argue that a firm has competitive advantage when it creates a superior gap between a willingness to pay by its customers and its costs as compared to its competitors, which would ultimately position it to earn superior profits within its industry. The authors further suggest that a firm can create competitive advantage by configuring something unique and valuable from its suppliers, customers and complementors in order to capture added value better than its competitors. In this context, competitors should not be able to replace it perfectly and analyse a full range of activities with the objective of identifying possible areas of change required to widen gaps between costs and customers' willingness to pay.

Irrespective of their different perspectives on competitive advantage, many scholars seem to understand it in line with the conceptualization of Porter (1985), Barney (1991), Peteraf and Barney (2003) and Barney and Hesterly (2010). On the basis of this understating competitive advantage is conceptualized as a firm's ability to create more economic value than its marginal competitors using differentiation and/or cost advantages (Peteraf & Barney, 2003; Barney & Clark,

2007; Magretta, 2012). According to Barney and Hesterly (2010), economic value is the difference between perceived customers' benefits for products or services and a firm's total cost in delivering these products or services. A firm that has competitive advantage with the delivery of more value than its competitors to its stakeholders can achieve economic rent or profit (Fahy & Smithee, 1999). Value created is the difference between customers' perceived benefits and the firm's cost of the offering available to all its internal and external stakeholders. It is a part of these benefits that is appropriated by the firm that leads to its economic rent or profit (Barney & Clark, 2007; Enders, König, Hungenberg & Engelbertz, 2009). Competitive advantage viewed as a system comprises 'firm actions, resources and capability, and market position' (Ma, 2000a; 2000b). Based on the value-based conceptualization of competitive advantage, a firm's ability to gain competitive advantage is therefore determined by factors both endogenous and exogenous to it.

According to Barney and Hesterly (2010), competitive advantage can be categorized into three types: parity, disadvantageous and advantageous. Firms that generate the same economic value as their competitors experience competitive parity. If the economic value of a firm is less than its rivals, then that firm is in state of competitive disadvantage. A firm that creates more economic value than its competitors gains competitive advantage over its rivals.

2.6.2 Origin and Perspectives on Competitive Advantage

Competitive advantage originates from a firm's value in excess of its cost offered to its customers where these customers are willing to pay (Porter, 1998; Barney & Clark, 2007). It emerges from both its proximate environment in which it operates as well as from its internal environment (Porter, 1991; Grant, 2010). According to Porter (1991), competitive advantage stems from a firm's ability to create value for its customers using internal activities and the industry structure in which it operates. Although Porter (1991) acknowledges the interaction of internal firm resources through its actions, the external environment plays a major role in shaping resource choice and activity configuration. Where a firm operates in a stable environment, industry structure creates positional and competitive advantage (Duncan, Gintei & Swayne, 1998; Narver & Slater, 1990. According to Duncan, *et al*. (1998), sustaining competitive advantage in a dynamic business environment is difficult. The success of a firm depends on attractiveness of the industry in which it operates and its relative position that stems from having a sustainable competitive advantage against its competitors in that industry (Porter, 1991). According to Porter, a firm can have competitive advantage through performing activities at lower cost than its competitors or from performing distinctive activities that offer customers value at a premium price.

Summarizing the contributions of various scholars on the increasing importance of competitive advantage, Foon and Nair (2010) divide these in two parts: cost and differential based advantages and the RBV. According to them, the earlier group of scholars from the 1960s to the early 1980s mainly used the theory of IO such as Porter's five-forces industry model as sources of competitive advantage. The second group of scholars, who support the RBV (coined by Wernerfelt, 1984) and expounded by Barney (1991), Grant (1991) and Peteraf (1993), emphasized the importance of firm resources and capabilities as sources of competitive advantage since the early 1990s.

Other scholars state that there are three major perspectives in explaining the sources of competitive advantage of firms (Kim & Oh, 2004; Strandskov, 2006; Wu, 2010). These include the RBV that considers idiosyncratic firm-specific resources as the source of competitive advantage (Barney, 1991), the positional view or Porter's five-forces approach that has evolved from the concepts of IO (Porter, 1979; 1980b; 1985; 1991) and the relational view of firms or the business network

approach that focuses on creating competitive advantage based on business relationships with the firm's stakeholders (Dyer & Singh, 1998; Strandskov, 2006). The relational view has received scant attention in the competitive advantage literature since it is considered as an extension of the RBV (Farjoun, 2002; Douglas & Ryman, 2003; Lavie, 2006). Furthermore, Ma (1999) classifies the origin of competitive advantage in three generic sources: ownership-based (acquiring value resources and having positional advantage), proficiency-based (knowledge, capabilities and competencies of a firm) and access-based advantages (having superior access to factor markets).

Hasen and Wernerfelt (1989) suggest that a firm's profitability is determined by its industry characteristics, its relative competitive position and its resources. Similarly, Carpenter and Sanders (2009) argue that there are three different but complementary perspectives of competitive advantage: the internal, external and dynamic perspectives. The internal perspective is based on the RBV that considers firm resources and capabilities which are unique and inimitable as the sources of competitive advantage. The external perspective stems from the Porter and IO frameworks that take industry structure and positioning as determinants of competitive advantage. The dynamic perspective combines both the internal and external views and explains how competitive advantage could be sustainable through exploiting market opportunities and continuously developing firm resources and its position in a changing environment, which integrates the fields of management and economics to explain competitive strategy and firm performance (Spulber, 2003). The two major perspectives in explaining the origin of competitive advantage and firm performance are the industry-specific factors and firm-specific internal resources based on Porter's five forces and the RBV (Kaleka, 2002; Caloghirou, *et al.*, 2004; Kim, *et al.*, 2008; Daveni, *et al.*, 2010; Ritala & Ellonen, 2010). Taking industry-specific and firm-specific factors as determinants of competitive advantage and firm performance, Gjerde, *et al.* (2010: 278) draw the following conclusion:

> A firm is said to have an industry-based competitive advantage if its industry on average is able to earn a return on equity capital that is larger than the average cost of equity capital determined by the capital market. A firm has a resource-based competitive advantage if it is able to earn a return on its resources that is larger than the industry's average return or/and if the firm has a cost of equity capital below the industry's average cost of equity capital.

While supporters of the competitive strategy or positioning school of thought argue that industry structure is shaped by the five forces and the firm's value chain in an industry (Porter, 1985; 1998; Ghemawat & Rivkin, 2006), scholars subscribing to the RBV such as Wernerfelt (1984), Barney (1991) and Peteraf (1993) assert that internal firm resources that are valuable, unique, inimitable and non-substitutable result in gaining competitive advantage and performance variations among firms. Despite pursuing different routes, both Porter's industry structure and the RBV explain that the sources of competitive advantage and performance variations across firms are not mutually exclusive (Mauri & Michaels, 1998; Ma, 2000a; 2000b; Spanos & Lioukas, 2001; Kim & Oh, 2004; Rivard, Raymond & Verreault, 2006; Sheehan & Foss, 2007; 2009; Kim, *et al.*, 2008; Gjerde, *et al.*, 2010). In an attempt to bring the two views, Ma (200a) suggested advantage-based view where three major integrative components of competitive advanatges i.e., firm resurces and cpabililty, position, and action play integrative roles to create and sustain competitive advantage.

2.6.3 Types of Competitive Advantage

The two routes that lead to competitive advantage are cost and differentiation (Porter, 1985; Kaleka, 2002; Hooley, Saunders & Piercy, 2004). A firm has to pursue any of the three generic strategies namely cost leadership, differentiation or focus in order to gain competitive advantage in an industry. While cost leadership and differentiation strategies result in cost and differentiation-based advantages, a focus strategy can generate either cost advantage or differentiation advantage or both advantages in an industry (Juga, 1999). A firm should be able to influence the industry structure through these generic strategies better than its competitors and position itself as a low-cost producer or provider of unique benefits to its customers (Porter, 1991). Barney and Clark (2007) assert that assets and skills of a firm can be leveraged to create more economic value and achieve greater cost and/or differentiation advantage than its competitors, resulting in a higher market share and profitability (Aaker, 1989). The two types of competitive advantage are discussed below.

Cost advantage

A firm that pursues a cost leadership strategy exploits all possible sources of cost advantages and offer products or services to customers that are better than its competitors (Porter, 1998; Grant,

2010; Thompson, *et al*., 2012). Cost advantage leads to attractive profitability and increased market share through lower prices or charging the same price as competitors retaining the benefits to it thus attracting more customers, increasing overall profit and market share (Porter, 1985; 1998; Thompson & Martin, 2010). A firm generates a cost advantage when its overall relative cost of performing activities is lower than that of its competitors through controlling its cost drivers in the value chain and reconfiguring its value chain differently and more efficiently compared to its rivals (Porter, 1985; 2008). According to Porter, the cost advantage is therefore a function of cost drivers in each activity of the value chain compared to competitors and becomes sustainable if it is not copied by competitors.

Differentiation advantage

Differentiation is defined as the extent to which a firm differentiates itself from its competitors and offers something unique and valuable to its customers (Porter, 1985). It is a customer's perception about a product or service that has unique properties compared to that of competitors (Thompson & Martin, 2005). Differentiation includes every distinctive attribute of a product which a firm associates itself with and its customers who perceive these product attributes more valuable than those of rivals (Porter, 1985; 1998; Barney & Hesterly, 2010). Such unique attributes have to be valuable to customers (Porter, 1985; 1998). Differentiation advantage results in superior performance and commands better customer loyalty than low cost advantage does (Grant, 2010).

A firm can differentiate itself in an industry when its bases of differentiation create customer loyalty and result in charging higher prices (Porter, 1985; Grant, 2010). Differentiation advantage stems from the attributes of a product, firm-customer relationships and internal and external firm linkages (Barney & Hesterly, 2010). According to Porter (1985), differentiation is effective and sustainable when there is technical superiority, better quality, better customer services and more value for the money compared to its competitors. Viewed from a marketing perspective, differentiation advantage can be created using product, pricing, distribution, promotional and brand differentiation (Hooley, *et al*., 2004). A firm enjoying differentiation advantage can create entry barriers as a result of its uniqueness and customer loyalty, which make it difficult for new entrants, minimize the bargaining power of buyers as products of competitors become less attractive to them and protect itself from threats of substitutes (Porter, 2008).

2.6.4 Drivers of Competitive Advantage

Competititve advantage is the reseason for excelling competitors and winning in the market through creating, renewing, changing, and adapting to the business environemt using firm resources and capabilities, position, and actions (Ma, 2000a). According to the RBV, firm resources that have valuable, rare, inimitable and non-substitutable attributes are the key drivers of sustainable competitive advantage (Barney, 1991; 1995; Conner, 1991). Even though not all resources are important, the four attributes should be fulfilled in order to create and sustain competitive advantage (O'Shannassy, 2008).

According to the industry structure perspective, drivers of competitive advantage originate from structural determinants (Porter, 1985; 1991). Competitive advantage stems from aligning the whole set of a firm's activities so that it can do something unique that adds value (Porter, 1996; Ghemawat & Rivkin, 2006). These sets of firm activities are evaluated using a value-chain analysis framework (Porter, 1985). Firm activities are drivers and structural determinants that explain variations among firms in their value creation processes and competitive positions in an industry (Sheehan & Foss, 2009). These drivers help to operationalize and generate the competitive advantage of firms (Pearce & Robinson, 2005). For Porter (1985; 1996), activity drivers are 'levers' that firms can manipulate to enhance their value creation process using drivers to improve the efficiency and effectiveness of individual activities and the alignment and fit of the whole activity at the firm level (Sheehan & Foss, 2007). Performing activities in the value chain and eliminating inefficiencies or avoiding costly activities better than competitors are the two key means of achieving cost advantage (Thompson, *et al.*, 2010). Relative cost and activity variations depend on sets of drivers such as economies of scale, learning and experiences, capacity utilization, linkages with customers and suppliers in the value chain, interrelationships, integration, timing, locations, firm policies and institutional factors, which include government regulations, taxes, unions, tariffs and levies (Porter, 1991). Such factors affect the cost structures of firms more than the costs of unique resources and activities (Porter, 1985; 1991; Hooley, *et al*., 2004). The total cost and value created by the activities of each competing firm determines its position relative to its competitors (Sheehan & Foss, 2007). Therefore, these overall activity drivers determine how a firm generates its relative cost and differentiation advantages due to their effects on cost behaviour, linkages and the configuration of firm activities.

2.6.5 Appraising Competitive Advantage

The two approaches used to appraise the competitive advantage of a firm are value-chain analysis (Porter, 1985; 1998), which resides in the firms' industry analysis and activity-based view and the VRIO framework based on the RBV (Barney, 1991; 2001; Barney & Hesterly, 2010). These two views are considered as two sides of the same coin (Wernerfelt, 1984) that explain how firms can generate competitive advantage and superior performance from the point of view of their external and internal environmental factors (Kim & Oh, 2004; Adner & Zemsky, 2006; Sheehan & Foss, 2007; Enders, *et al.*, 2009; Duhamel, Reboud & Santi, 2014). The two techniques of appraising competitive advantage are discussed below.

2.6.5.1 Value-chain Model

Based on the tenet of IO, industry structure determines the value chain of a firm and how margins are shared among the five forces (Porter, 1985). Value-chain analysis is a technique that 'focuses on how discrete but interdependent activities create value, what determines their cost, giving the firm considerable latitude in determining how activities are configured and combined' (Porter, 1998: 39). Although Porter (1985) suggests the value-chain approach as a generic activity analysis, he later developed the activity-based view as a comprehensive framework to analyse the cost and differentiation of the competitive advantages of a firm using activities as the unit of analysis (Sheehan & Foss, 2009). According to Porter (1991; 1998), competitive advantage stems from linkages of a multitude of interconnected activities that achieve lower cost and unique customer value. A firm in an industry operates in a value system which sequentially comprises a supplier's value chain, a firm's value chain, a channel value chain and a buyer's value chain. It is therefore crucial to understand the importance of each actor in the value system in order to create and sustain competitive advantage (Porter, 1985). The forces in the industry structure affect a firm's value chain and how margins are shared among these forces in the value system such as suppliers, channel members, customers and other stakeholders. Threats of new entrants and barriers to entry also influence the sustainability of a firm's value-chain configuration. Moreover, the threat of substitute products affects the value-related activities of customers. The value-chain model under the activity-based view of the firm is thus a comprehensive tool that diagnoses and configures

activities of a firm in designing, producing, marketing, delivering and supporting its products (Porter, 1985; 1996). For Porter, activities are the building blocks or the DNA of competitive advantage where cost and differentiation advantages reside. Analysing a firm's activities, their drivers and linkages reveal the sources of the cost structure and basis of differentiation among firms (Pearce & Robinson, 2005).

The value chain is defined as 'the set of business activities in which it engages to develop, produce, and market its products or services' (Barney & Hesterly, 2010: 72). It is a systematic way of disaggregating activities of a firm to analyse and understand the sources of cost and differentiation advantages that could generate value for its customers (Porter, 1985; 1998). According to Porter, the generic value-chain analysis categorizes activities of a firm into a sequential chain as primary and support activities. The primary activities include inbound logistics, operations, outbound logistics, marketing and sales and service (Porter, 1998). Inbound logistics include a firm's internal activities related to receiving, storing and distributing inputs to the product such as materials handling, warehousing, inventory control, transportation and returns to suppliers. Operations involve activities related to processing inputs into final goods and services. Such activities include production, machining, packaging, assembly, maintenance and testing. Outbound logistics are activities such as collecting, storing and distribution of finished products to customers. It includes such activities as finished goods storing, material handling, order processing and delivery. Marketing and sales are activities associated with advertising, promotions, branding, selling, pricing, channel selections and relations. Service includes activities such as after-sales service, installations, repairs, servicing warranties, training and the supply of parts.

Each of the primary activities should be able to create value with its associated cost, leading to an aggregated value and total value creation of a firm (Enders, *et al*., 2009). Generic support activities include procurement, human resource management, technology development and infrastructure that support the smooth operations of the primary activities. The value-chain analysis generally depends on the nature of the industry and firm strategy (Porter, 1998).

As opposed to the RBV of firms, activities create the link between factor markets and product positions by connecting cost and differentiation advantages (Porter, 1998). According to Porter, interrelationships and linkages of activities could be within a firm internally or between one firm and another firm externally such as activities with suppliers, channels of distribution and buyers which would create opportunities for optimization and coordination (Porter, 1985; 1991). The interdependence of activities creates internal and external linkages. Internal interdependence of activities includes how the activities of a certain function affect the activities of another function within a firm, which influence the cost structure and the way activities are configured. A firm could have differences in its activities when completing the same activities as its competitors, because of better execution or employing a different arrangement of activities which in turn lead to gaining superior cost advantages or differentiation advantage (Magretta, 2012). All cost and price differences between rivals originate from the many types of different activities they perform.

Industry-structure analysis built around the five-forces model determines the profitability of both an industry and firms within the industry (Porter, 1991). Industry structure and relative firm position, which is the result of differences in value creating activities or competitive advantage, lead to superior financial performance (Magretta, 2012). Value-chain analysis views a firm as a system of interconnected activities with a huge cost structure, exhibiting various cost behaviours that are performed uniquely compared to its rivals in an industry (Sheehan & Foss, 2007; 2009). According to Porter (1991; 1998), performing the internal activities of a firm using human resources, inputs, technology and information, can create tangible assets such as contracts and generate intangible assets like brand images, relationships and networks external to the firm that influence the cost or effectiveness of performing activities continuously. He further argues that both these internal and external assets are not valuable in generating competitive advantage unless they fit the industry structure and are performed effectively and efficiently in a consistent manner.

2.6.5.2 The VRIO Framework

The RBV considers firms as heterogeneous entities that do not have the same access to resources and capabilities even though they are operating in the same industry. According to the RBV, resources and capabilities that are valuable, rare, inimitable and organized properly could lead to competitive advantage and superior performance (Barney, 1995; Barney & Wright, 1998; Peteraf & Barney, 2003; Sheehan & Foss, 2009). Firms should not only have valuable, rare and inimitable resources, but they should be able to exploit the full potential of these resources through proper organization (Barney & Wright, 1998; Barney & Hesterly, 2010). The VRIO framework helps to appraise and respond to the competitive potentials of resources and capabilities in terms of the questions pertaining to these variables (Barney & Wright, 1998; Peteraf & Barney, 2003; Barney & Hesterly, 2010). This framework helps to exploit resources that can create value and reduce costs (Enders, *et al*., 2009).

Valuable resources

A firm should evaluate the strengths and weaknesses of its resources and capabilities in terms of their relevance and importance to exploit opportunities and neutralize threats emanating from its environment (Barney & Wright, 1998; Grant 2010; Barney & Hesterly, 2010). The assessment has to contribute towards improving revenues or lower costs compared to its rivals. Firm resources become valuable when they enhance a firm's efficient and effective strategy execution and generate more economic value by increasing the willingness of customers to pay more, reducing costs of creating that value or creating both advantages better than its competitors (Porter, 1991; Barney, 1991; Barney & Clark, 2007). Other attributes such as rarity, inimitability, and organization cannot be beneficial resources unless they contribute to exploiting opportunities and protecting threats (Barney & Clark, 2007; Carpenter & Sanders, 2009).

Rare resources

Firm resources commonly and widely available cannot generate competitive advantage as competitors can access and exploit those same resources (Barney & Clark, 2007; Barney & Hesterly 2010). In order to create a competitive advantage, valuable resources have to be in the hands of a small or limited number of firms (Thompson, *et al*., 2012). Such valuable resources

need to be scarce and uniquely controlled by a firm or a limited number of rivals in an industry. According to Barney and Hesterly (2010), a firm that has valuable but not rare resources can ensure its survival enjoying competitive parity as no firm can create competitive advantage. A firm with value-creating resources that are uniquely controlled can result in a competitive advantage (Peteraf & Barney, 2003). Moreover, a firm with a first-mover advantage controlling valuable and unique or rare resources can also enjoy competitive advantage as other firms may not have these resources (Barney & Clark, 2007).

Inimitable resources

Valuable resources are rare, scarce and unique in nature and should not be easily copied or substituted by rival firms in order to create competitive advantage (Barney & Clark, 2007). A firm's resources that are valuable and rare lead to competitive advantage when rivals that do not have these resources, aspire to own or develop them and incur more cost compared to firms that control these resources (Barney & Hesterly, 2010). According to Thompson, *et al*. (2012), a firm's valuable and rare resources could be difficult to imitate due to patent protection, a high level of employees' skills, motivation and commitment, high brand equity, a strong network of distributors and dealers, unique location and sound financial strength. Moreover, firm resources can be difficult or costly to imitate because of the following one or combination of reasons:

> …the ability of a firm to obtain a resource is dependent on unique historical conditions, the link between the resources possessed by a firm and a firm's sustained competitive advantage is causally ambiguous, or the resource generating a firm's advantage is socially complex (Barney, 1991: 107).

Organization

Resources that are valuable, rare and inimitable can generate competitive advantage when a firm has proper organizational arrangements such as an organization chart, a reporting structure, management control system, information system, related policies and procedures required to coordinate and exploit its resources and capabilities (Barney & Wright, 1998; Barney & Hesterly, 2010). These components of organization, which are considered as complementary in nature, do not contribute much in creating and realizing competitive advantage on their own, unless they are combined with other resources and capabilities (Barney & Clark, 2007). A firm can therefore gain

competitive advantage through proper organization that facilitates coordination and integration with the exploitation of resources and capabilities (Pan, Tan, Huang & Poulsen, 2007). A firm's resources and capabilities which are valuable, rare, inimitable and properly organized result in sustained competitive advantage (Barney & Wright, 1998; Barney & Hesterly, 2010). If the resources and capabilities of a firm are not valuable, they are considered a weakness that will lead to a competitive disadvantage. Furthermore, Barney and Hesterly (2010) argue that if resources are valuable but not rare, exploiting such resources will result in competitive parity. According to Bowman and Ambrosini (2007) a firm that has valuable and rare resources gains competitive advantage which further results in improved performance.

2.7 FIRM PERFORMANCE

2.7.1 The Concept of Firm Performance

Different scholars view performance based on their functional specializations and experiences. For instance, accountants view performance from the finance perspective, while marketers may understand it from a customer's satisfaction and retention perspective, which makes it difficult to arrive at a unified conceptualization of the term performance and its measurements (Lebas & Euske, 2007). Lusch and Laczniak (1989: 287) define performance as 'the accomplishments or outcomes of an entity' and they further define business performance as 'the total economic results of the activities undertaken by an organization'. It is a firm's achievements or results measured against a prior agreed plan or outputs (Laitinen, 2002). Lebas and Euske (2007) conceptualized firm performance from a management perspective as a total process that enables managers to take the right course of managerial action at present so that the future performance of an organization is managed effectively and efficiently. From the measurement perspective, business performance can be defined as both financial and non-financial or operational (Venkatraman & Ramanujam, 1986). Business or firm performance can be viewed from the point of view of external achievements such as market performance, customer satisfaction, internal achievement using profitability, return on investment, return on assets and wealth creation for shareholders (Spanos & Lioukas, 2001; Strandskov, 2006). More importantly, firm performance as the dependent variable has to be measured and operationalized relative to its competitors in order to test the validity of the construct as originally conceptualized by the RBV, rather than in absolute terms (Newbert, 2014).

2.7.2 Performance Measurement

Many scholars view performance measurement from their respective functional fields which results in little consensus among scholars in arriving at commonly agreed performance measures of firms (Parnell, O'Regan & Ghobadian, 2006; Lebas & Euske, 2007; Rubio & Aragon, 2009). As a result, many researchers have suggested multiple measurement indicators of business performance (Rubio & Aragon, 2009).

Performance measurement of firms can be categorized as objective and subjective, financial and non-financial or both, market-based or qualitative measurements (Parnell, 2010; Venkatraman & Ramanujam, 1986; 1987). Financial measures are accounting-based measures that include return on investment, return on sales, profit, cash flow, return on equity and earnings per share; while non-financial or operational performance measurement indicators employ such measurement criteria as market-share, new product introduction, innovativeness, technological efficiency, marketing effectiveness and product quality (Venkatraman & Ramanujam,1986; Yamin, Gunasekaran & Mavondo, 1999; Parnell, *et al*., 2006; Allen & Helms, 2006). From a strategic performance perspective firms that employ both financial and non-financial measures can achieve better performance since both measures minimize ignoring relevant performance measurement indicators and avoid the sub-optimization of measures (Ittner, Larcker & Randall, 2003).

According to Ittner, *et al*. (2003), adopting a strategic performance measurement system that is supported by the alignment of strategies with their drivers, goals and objectives, resource allocation and performance measurement to these drivers, can enhance performance achievement. Performance measurement can also be viewed from internal and external metric perspectives (Best, 2009). Internal performance measurements include profit margin, revenue, return on assets, return on sales, employee's satisfaction and capacity utilization. Externally, performance can be measured in terms of market share, customer satisfaction, customer retention and product quality. Proponents of the objective measurement of performance assert that objective indicators are more accurate and free from bias when compared to subjective measures (Parnell, *et al*., 2006). However, objective performance measures such as financial indicators do not capture the relative skill in sustainable value creation and fail to highlight the complete picture of a firm's performance unless they are compared with a rival's performance (Hawawini, *et al*., 2003; Allen & Helms, 2006). They also lack cooperation from respondents to furnish financial or quantitative data (Rubio & Aragon, 2009). Allen and Helms (2006) suggest that the availability of objective performance measurement does not even ensure accuracy, particularly when it is applied in different industries. Moreover, financial measures of performance are considered as lag indicators since they focus on past data that do not reflect a firm's performance in a competitive environment (Kaplan & Norton, 1996). According to Kaplan and Norton (1996; 2001), financial measures of business performance respond to short term measurements that do not consider long-term demands of a business in

addition to their failure to measure intangible assets such as brands, intellectual capital and customer satisfaction (Sengun, 2003).

Given the shortcomings of both financial and non-financial performance measures, it is worthwhile to use the measurement indicators in a holistic manner to ensure a more reliable and balanced view of business performance (Sengun, 2003; Zahirul, 2014). Based on the weaknesses of financial measures and in an attempt to use combined performance measures, Kaplan and Norton (1992) developed a comprehensive measurement framework known as the balanced scorecard (BSC). It provides management with a comprehensive view of their businesses and minimizes excessive information generated by using accounting performance measurements. The BSC framework provides a performance measurement tool that translates and cascades from a company's vision and strategy into an integrated set of performance measures (Kaplan & Norton, 2001). According to them, the BSC has four perspectives: financial, customer, internal business and innovation and growth. The BSC is a comprehensive measure of performance that addresses the traditional functional view of performance measurement (Sengun, 2003). The proponents of the framework argue that retaining the financial measure and the lagging indicator to gauge past performances is important, but at the same time the inclusive use of the value drivers, which are the lead indicators, is important for a comprehensive superior, long-term financial and competitive performance measure.

Empirical evidence suggests that by 2001 the BSC had been widely accepted in many countries such as the United Kingdom – 57%, the United States of America (USA) – 46%, and Germany and Austria – 26% (Neely, 2005; 2007). A recent survey by Rigby and Bilodeau (2015) on management tools and trends using 1 067 international executives from ten countries across the world confirms that the BSC average usage rate in 2014 was 38%. Although the usage rate has decreased from 47% in 2010 to 38% in 2014, the BSC is still considered as the most popular management tool. Despite its wide acceptance and popularity, the BSC has failed to incorporate such stakeholders as employees and suppliers, failed to compare a firm's relative performance with its competitors and disregarded features of previous performance measurement models (Neely, 2007). Even though Kaplan and Norton (2006) consider the BSC as adaptable to a firm's context, Voelpel, Leibold and Eckhoff (2006) and Norreklit (2000), criticize the BSC as a 'straightjacket'

measurement technique with a top-down approach with little flexibility that hardly fits a knowledge economy characterized by a changing business environment. Norreklit (2000; 2003) suggests that the BSC framework is based on wrong assumptions that do not have scholarly rigour, thus leading to faulty performance measurements. She argues that there is no cause-effect relationship among the four factors and as suggested by Kaplan and Norton (1996), for example, customer satisfaction may not result in better financial performance.

Although much strategy-performance research in the past has relied on financial as well as market-based performance measurements, recently non-financial measures have become more popular as they are believed to provide better insight into organizational processes and performance (Parnell, *et al*., 2006; Parnell, 2010). Subjective performance measures have been empirically tested by many researchers (Narver & Slater, 1990; Hooley, Greenley, Cadogan & Fahy, 2005; Morgan, Vorhies, & Mason, 2009). Subjective financial measures that reflect economic consequences of actions of firms include profitability, return on asset and revenue growth. Measuring organizational performance from customers' perspectives is one of the outcome measures that include customer satisfaction, customer retention, new customer acquisition and market share. Managers' perceptions of return on sales, return on equity, customers' satisfaction, customers' retention, new customers' acquisition and market share are marketing performance measurements, which are empirically tested and provide similar results to that of performance measurement using objective data (Spanos & Lioukas, 2001; Carmeli & Tishler, 2004; Morgan, *et al*., 2009).

2.8 COMPETITIVE ADVANTAGE AND PERFORMANCE VARIATIONS OF FIRMS

In the operationalization efforts seeking a settlement about the concept of competitive advantage, the interchangeable uses of competitive advantage and performance seem to have taken root (Barney & Clark, 2007). There seems to be a general consensus that both performance and competitive advantage are different constructs (Ma, 2000b; Powell, 2001; Newbert, 2008; O'Shannassy, 2008; Sigalas & Economou, 2013). Performance is seen as the antecedent to competitive advantage of a firm (Powell, 2001; Newbert, 2008). Competitive advantage is a separate construct that could be considered as an indicator of a firm's rent, profitability and market share (Ma, 2000a; 2000b; Peteraf &Barney, 2003; O'Shannassy, 2008). The structural approach based on the industry five forces and the RBV address competitive advantage from positional and resource advantage perspectives (Ma, 2000a; 2000b; Spanos & Lioukas, 2001; Kim &Oh, 2004). Competitive advantage and superior performance originate from a firm's position in an industry based on its relative cost and/or differentiation advantages against its competitors, which further depend on its ability to configure and align a set of activities in a unique manner or at a lower cost (Porter, 1991; 1996) and from owning firm-specific unique resources and capabilities (Barney, 1991).

Peteraf and Barney (2003) linked the concept of competitive advantage to value creation that mediates a firm's rent generation although such generated rent may not be fully captured by the firm in the form of profit due to the bargaining of many stakeholders for appropriating the rent (Coff, 1999; 2003; Barney & Clark, 2007). Firms that are positioned based on superior differentiation and low-cost advantages can create more value than their competitors (Porter, 1991; Peteraf & Barney, 2003; Clulow, Barry & Gerstman, 2007) and that part of the advantage appropriated by firms is rent generated. Performance measured particularly in terms of accounting returns is the size of value appropriated by a firm as a result of its bargaining processes among different parties (Coff, 1999; 2003; Bowman & Ambrosini, 2000; Barney & Clark, 2007). Customers, suppliers, employees, financers and governments are the key contending forces that bargain to capture value (Bowman & Ambrosini, 2000; Coff, 2003; Duhamel, *et al*., 2014; Garcia-Castro & Aguilera, 2015). Based on this argument, value created by a firm does not necessarily result in maximizing a firm's profitability. Even though a firm's performance is affected by various external factors, its competitive advantage could lead to its profit which is part of the rent

appropriated (Newbert, 2008). A firm with competitive advantage generates higher performance than the performance of firms that do not have competitive advantage (Newbert, 2007).

Competitive advantage is all about a firm's ability to create more value than its competitors through differentiation and cost advantages (Peteraf & Barney, 2003; Barney & Clark, 2007; Carpenter & Sanders, 2009). A firm's superior value creation or competitive advantage leads to an expanded market which in turn boosts its performance better than its rivals (Carpenter & Sanders, 2009; Makadok & Ross, 2011). According to Barney and Hesterly (2010), the extent of competitive advantage is the difference between a firm's economic value and the economic value of its competitors. The configuration and coordination of labour and other resources are the sources of value creation (Bowman & Ambrosini, 2000; 2007). Even though the concept of value creation applies to the subjective judgment or perceptions of customers, it is determined by customers' perceptions of whether a product or service provides solutions to their needs in the form of advantages or benefits and at the same time generates profit to shareholders (Hoopes, *et al.*, 2003; Bowman & Ambrosini, 2007; Chatain, 2010).

Competitive advantage is one among many routes that leads to superior performance measured in terms of profitability (Porter, 1991; Makadok, 2011). Ma (2000b) states that the relationship between competitive advantage and firm performance could be explained in three propositions: a) competitive advantage leads to superior performance of a firm; b) a firm enjoys competitive advantage without necessarily gaining superior performance; and c) a firm may have superior performance without generating competitive advantage. Similarly, Carpenter and Sanders (2009) argue that a firm may achieve superior performance without having competitive advantage in the short term via cost cutting or by chance. It may also enjoy superior performance without having competitive advantage due to government or political support (Majumdar & Bhattacharjee, 2014), environmental shock and access to better distribution (Ma, 2000b) and mere luck (Barney, 1986a). In explaining the relationship between performance and competitive advantage, Makadok (2011) states that a firm's performance measured in terms of profitability increases as its competitive advantage increases. In contrast to the RBV's proposition of heterogeneity, firms having identical resources and adopting the same strategies (Foss & Knudsen, 2003) and even without implementing a resource-based strategy (Newbert, 2008), could still generate higher performance

than their rivals when there is industry protection and/or due to high entry barriers. Thus, a firm that enjoys overall superior performance and appropriates its profit does not necessarily gain competitive advantage over its rivals (Barney & Clark, 2007).

Bharadwaj, Varadarajan and Fahy (1993) and Flint (2000) assert that firms can gain competitive advantage assessed by above-average non-financial performance measurements such as market share, customer satisfaction, employee income level and environmental impact. Similarly, Carpenter and Sanders (2009) state that, although a firm may have a competitive advantage over its rivals, it may perform poorer than its competitors in terms of its financial indicators probably due to lower prices or because of other underperforming business units. According to Ma (2000b), there are four conditions under which a firm creates competitive advantage without having superior performance: failure to develop discrete advantage into compound advantage through creating alignment and synergy, inability to recognize and fully exploit sources of competitive advantage that drive superior performance, lack of competitive advantage in one critical area or inability to create the right combination of critical factors to result in superior performance and management's deliberate sacrifices and trade-off on competitive advantage.

2.9 COMPLEMENTARY VIEW OF PORTER'S FIVE-FORCES FRAMEWORK AND THE RBV

The major theories in strategic management that explain competitive advantage and firm performance variations are the industry-based views (Porters' five forces) based on the IO tradition and the RBV (Dyer & Singh, 1998; Juga, 1999; Ma, 2000a; 2000b; Spanos & Lioukas, 2001; Douglas & Ryman, 2003; Caloghirou, *et al.*, 2004; Galbreath & Galvin, 2008; Daveni, *et al*., 2010; Gjerde, *et al.*, 2010; Houthoofd & Hendrickx, 2012).

The tenet of Porter's (1980b; 1985) industry structure-based competitive advantage rooted in the IO model, suggests that competitive advantage is the result of external industry factors and a firm's position in an industry (Gjerde, *et al*., 2010; Gholami & Seyyed-Esfahani, 2012). Industry factors and firm-specific resources are sources of competitive advantage that cause performance variations among firms (Porter, 1991; 1998). The five-forces framework assumes that firms have identical resources and ignores the fact that firms have distinctive attributes (Barney, 1991). The proponents of the industry structure and positioning approach argue that external factors derive competitive advantage, while the advocates of the RBV advance the logic that internal resources and capabilities are determinants of competitive advantage. A firm's competitive advantage and superior performance based on industry structure and the positioning approach originates from differences in performing activities, configuring and aligning resources better than competitors. According to the resource-based perspective, competitive advantage stems from firm-specific valuable, rare, inimitable and non-substitutable resources (Barney, 1991) that involve executing a firm's activities to occupy a favourable position, thus increasing revenue or reducing costs through a differentiation or a cost leadership strategy (Bingham & Eisenhardt, 2008; Magretta, 2012).

In spite of the apparent conflict between the two perspectives, in reality both can co-exist and shape actual firm behaviour and strategy (Spanos & Lioukas, 2001; Kim & Oh, 2004), creating heterogeneity in firms operating in the same industry (Mauri & Michaels, 1998). The RBV is not an alternative to the IO or industry-based view in explaining competitive advantage and firm performance. Instead they are complementary, particularly to advance the discussion on competitive advantage (Raduan, Jegak, Haslinda & Alimin, 2009). The two perspectives complement each other and can be viewed as a composite framework by drawing insights from a

more balanced view (internal and external determinants) of the sources of competitive advantage (Spanos & Lioukas, 2001; Rivard, *et al*., 2006), since both perspectives are two sides of the same coin (Wernerfelt, 1984). The proponents of the resource-based approach, which emphasizes firm-specific efforts in developing and combining resources to achieve competitive advantage, provide the 'strength-weaknesses' dimension, while the industry-analysis model supplies the 'opportunities-threats' dimension (Foss, 1996; Spanos & Lioukas, 2001). Both provide the SWOT analysis framework necessary to formulate firm strategy. Resources can have a rent-producing potential if they contribute (alone or bundled with other resources) to building competitive advantage, i.e. superior differentiation and/or lower costs in comparison with the marginal competitor in the product market (Barney & Clark, 2007).

Given Porter's five-forces model and the RBV explain the same phenomenon, that is competitive advantage and performance variations among firms from different perspectives, both can be applied in an integrated manner in analysing intra-industry performance differences (Husso & Nybakk, 2010) through a comprehensive appraisal of competitive advantage (Enders, *et al*., 2009). A firm's superior performance stems from gaining and sustaining competitive advantage through the combination of product-market positional advantage and configuration of activities (Porter, 1991; Teece, *et al*., 1997; Spanos & Lioukas, 2001; Kim & Oh, 2004; Gjerde, *et al.*, 2010). Spanos and Lioukas (2001) assert that the two views share similarities: a) the RBV perspective and Porter's (1980a; 1980b) framework together hold the view that persistent above-normal returns are possible; b) both Porter's view and the resource-based perspective acknowledge the importance of an attractive strategic position (that is competitive advantage) viewed as an outcome of firm strategy and activities; and c) both perspectives seek to explain the same phenomenon of interest (that is sustained competitive advantage). Both firm and industry effects (Mauri & Michaels, 1998; Short, *et al.*, 2007; 2009; Arend, 2009; Goddard, *et al*., 2009), including their interactions, jointly determine performance variations among firms (Eriksen & Knudsen, 2003).

Porter's five-forces framework considers the interactions of internal and external activities of firms that are arranged in a chain of activities which he referred to as a value chain, while the RBV employs a firm's valuable and rare resources and capabilities to analyse the sources of competitive advantage (Sheehan & Foss 2007; 2009). Although the value-chain analysis rooted in the IO

structure model and the VRIO RBV seem to be rivals, both can be considered as complementary since both of them address the same issue of competitive advantage and firm performance (Sheehan & Foss, 2009; Parnell, 2010). Integrating Porter's value-chain analysis approach with the VRIO framework of the RBV creates a comprehensive explanation of competitive advantage (Sheehan & Foss, 2007). Even Porter (1991), in an attempt to integrate the two approaches, has acknowledged the importance of valuable resources as one of the determinants of competitive advantage in combination with economies of scale, linkage of activities and degree of integration. Despite its popularity, the value-chain analysis is less frequently applied than the VRIO framework (Sheehan & Foss, 2007). The value-chain analysis does not clearly indicate which activities can lead to value creation or competitive advantage (Drnevich & Shanley, 2005).

The VRIO framework of the RBV does not address rent appropriation by different stakeholders (Coff, 1999) due to its Ricardian type of rent that hardly considers the competition and bargaining power of different stakeholders (Chatain, 2010). Although Porter's (1985) value-chain analysis is one of the tools to identify and analyse firm resources (Barney & Hesterly, 2010), it is difficult to apply due to a lack of activity level accounting data (Porter, 1985, 1998). While both the VRIO and value-chain analyses are applied in assessing a firm's value creation and value capturing processes, the five-forces framework is more appropriate as it only focuses on value capturing aspects of competitive advantage (Enders, *et al*., 2009). They further argue that as the effects of the five forces increase, a firm's value-creation ability and profitability will be reduced. Strategy viewed either from an industry or market-based perspective, which focuses on the firm's bargaining power to value appropriation or from the RBV can only explain half the story of performance variations (Bowman & Ambrosini, 2000). Recently, integrating the external industry structure framework and internal firm perspective to predict firm performance directly and indirectly has received increasing emphasis (Spulber, 2003; Hussler, *et al.*, 2012). Studies by Spanos and Lioukas (2001), Oh and Kim (2004), Rivard, *et al.* (2006), Sheehan and Foss (2007), Kim, *et al.* (2008) and Gjerde, *et al.* (2010) provide empirical evidence testing the integrated model of the two perspectives. Thus, the researcher used both the VRIO RBV perspective that focuses on value creation and Porter's five-forces framework that measures value capturing (Enders, *et al.*, 2009; Duhamel, *et al*., 2014) as perceived by top level managers to predict competitive advantage and performance variations among firms.

2.10 EMPIRICAL EVIDENCE OF INDUSTRY EFFECTS AND FIRM EFFECTS ON FIRM PERFORMANCE

The seminal work of Penrose (1959) on firm resources and Porter's (1980b; 1985) contribution on competitive strategy have stimulated many researchers to analyse the impacts of industry structure versus firm resources (Weerawardena, *et al.*, 2006; Kim, *et al.*, 2008; Karabag & Berggren, 2014). The impacts of the two approaches, analysed in terms of industry and firm factors, have been investigated by various scholars as summarized below in Table 2.1

Table 2.1: Empirical Evidence on Industry and Firm Effects on Performance

Contributors	Country of Study	Key Findings
Schmalensee (1985)	USA	Firm effects do not exist, industry effects account for about 20% of firm profitability.
Wernerfelt and Montgomery (1988)	USA	Industry effects explain 12.3% and 19.48% on Tobin's q as a measure of performance with and without correlation of intangible assets.
Hansen and Wernerfelt (1989)	USA	Economic/industry factors estimate 18.5%, while organizational/firm factors explain 37.78% of return on asset (ROA).
Rumelt (1991)	USA	Industry effects explain 4-8%; industry-year effects 45-8%, Corporate-parent explains 1-2% ' Business unit effect explains 44-46% on ROA.
Mehra (1996)	USA	Firm resources explain 59%, 51% and 33% of profitability, productivity and market (expressed in terms of price earnings. multiple) variances; while market effect explains 17% of profitability, 10% productivity variance, and insignificant on market variances respectively.
Roquebert, *et al.* (1996)	USA	Industry explains 10% variance in business unit performance.
Powell (1996)	USA	Industry effect on overall performance 20%, 17% on profitability and 26% on sales growth variance.

McGahan and Porter (1997)	USA	Corporate-parent explains 4.33% Industry effects 19% Business-specific/segment effects 31.71%.
Mauri and Michaels (1998)	USA	Firm effect 36.9%, industry effect 5.03%.
McGahan (1999)	USA	Industry effects held 30% and firm effects accounted for 66% of accounting profit variances.
Chang and Singh (2000)	USA	Industry, corporate and business effects on market share for: - large firms: 19.3%, 9.5%, 47.6%' - medium-sized firms: 40.6%, 27.3%, 8.8% and - small firms: 54.2%, 15.8% and 8.9% respectively.
Claver, *et al.* (2002)	Spain	Firm effects 42.69%; total industry effects 4.84% on ROA variance.
Gonzalez-Fidalgo and Ventura-Victoria (2002)	Spain	Firm effect explains 31%, industry and business group effects 13% and 15% respectively.
Hawawini, *et al.* (2003)	USA	Firm effects are 27.1%, 32.5% and 35.8%; and industry effects are 6.5%, 11.4% and 8.1% estimated in terms of Economic profit (EP)/capital employed (CE), total market value (TMV)/CE, and ROA respectively.
Spanos, *et al.* (2004)	Greece	Industry effect about 7%; firm/strategy effects 15%.
Caloghirou, *et al.* (2004)	Greece	Industry effects and firm effects on profitability are 6% and 16.3%, and 14.6 % and 48.2% in small- and medium-sized enterprises (SMEs) and large firms respectively. Combined firm and industry effects 48.2% and 16.3% in profitability variations in large firms and SMEs respectively.
Hawawini, *et al.* (2005)	USA	Firm effects explained 26.8%, industry effects explained 3.9%.
Bou and Satorra (2007)	Spain	Firm effects are more than 10 times greater than industry effects.
Short, *et al.* (2007)	USA	Firm effects explained 65.82%, industry effects had 19.23% and strategic group accounted 14.95% on ROA.

Galbreath and Galvin (2008)	Australia	Industry factors were at 3%; while firm factors were 6.7%.
Short, *et al.* (2009)	Sweden	Firm effects were 41.31%, industry effects were 14.59% and error (year change) were 44.10%.
Tarziján and Ramírez (2010)	Chile	Industry 11%, corporate 14% and firm 46% and the remaining 29% were unexplained.
Gjerde, *et al*. (2010)	Norway	Firm factors are about 3-4 times higher than industry-specific factors in explaining abnormal stock market returns.
Chen (2010)	Taiwan and Korea	Taiwan: Firm effects measured by variance component approach (VCA) and hierarchical linear modelling (HLM) had 55.8% and 94.7%, while industry effects were 0% and 5.3% respectively.
		Korea: Firm effects and industry effects estimated by VCA had 40.7% and 6.9% , while measured by HLM firm and industry effects had 34.2% and 65.8% respectively.
Holian and Reza (2011)	USA	Firm and industry combined effects on ROA explain 17% of the variation in firm performance. Firm and industry combined effects on EVA explain over 50% of the variation.
Houthoofd and Hendrickx (2012)	Belgium	Firm effects 30%-40%; industry effects 10% on ROA and net profit margin.
Karniouchina, *et al*. (2013)	USA	Corporate effect 15.50%; industry effect 4.2% on ROA.

Source: Own compilation, 2014-2016.

As shown in Table 2.1 above, Schmalensee (1985) reported that firm effects had no impact, while industry effects accounted for about 20% of firm profitability. The remaining 80% of performance variations were not explained. The studies of Chang and Singh (2000), Powell (1996), Roquebert, *et al*. (1996), McGahan and Porter (1997), McGahan (1999), Gonzalez-Fidalgo and Ventura-Victoria (2002), McGahan and Porter (2003), Short, *et al*. (2009) and Tarziján and Ramírez (2010), revealed that the contributions of industry effects on firm profitability were below 10%. Many of

the scholars referred to above examined the importance of industry, corporate and business/firm effects using the variance decomposition method (Bowman & Helfat, 2001). The majority of these studies demonstrated that firm effects have greater contributions compared to industry and corporate effects in explaining performance variations among firms as expressed primarily in terms of ROA. The importance of firm effects in explaining performance variations ranges from 2 to 10 times higher than industry effects as indicated above.

For example, a study by Claver, *et al*. (2002) showed that firm effects had an approximately 8.8 times higher impact and another by Bou and Satorra (2007) revealed a more than 10% higher impact than industry effects in a Spanish study on 679 non-diversified manufacturing firms in 59 industries with 5000 firms. Furthermore, research by Galbreath and Galvin (2008) on 285 Australian manufacturing and service firms for example indicated that the importance of firm resources in predicting firm performance in the service industry could be 4.17 times as high as industry effects. The assessment of Short, *et al*. (2007) of seven years' data, using a sample size of 1 165 firms distributed across 12 industries, showed that firm effects on performance measured using ROA was generally the strongest (65.82%), followed by industry effects (19.23%) and strategic groups (14.95%). Another study by Houthoofd and Hendrickx (2012) on firm effects and intra-industry effects indicated that firm effects explained 30-40%, while intra-industry effects accounted for 10% of firm performance variance.

All the studies except Powell (1996), Caloghirou, *et al*. (2004), and Galbreath and Galvin (2008) used either the Federal Trade Commission's line of business data that have large diversified companies, or the Compustat database that includes many small USA firms and other quantitative historical data analysed using variance decomposition procedures. These studies employed subjective measurement methods based on data on perceptions of managers using structured questionnaires and interviews and their results apparently did not vary from the findings of other studies made using quantitative data.

Most scholars generally concur that the firm factors, as explained in terms of resources and capabilities, have higher effects than industry effects in predicting the performance of firms. Other writers such as Schmalensee (1985), Luo (1999), McGahan and Porter (2003), Chen (2010) and

Karabag and Berggren (2014) all indicated that industry effects contributed more than firm effects. Moreover, other studies by Chang and Singh (2000) support the dominant contributions of firm effects, while industry effects also play a significant role in explaining business performance variations, particularly in medium- and small-size firms, taking market share as a dependent variable. The effects of both industry and firms were three times higher in predicting profitability variances of large firms than for SMEs. Another empirical study (Montgomery & Wernerfelt, 1991) examined the importance of industry factors and market share in estimating performance variations of firms in the USA brewery industry. The findings reported that industry effects explained 15% to 20% of variations in return on stock, which were consistent with the study outcomes of Schmalensee (1985) and Wernerfelt and Montgomery (1988). A survey by Powell (1996) using 54 CEOs (out of 166 respondents) of single-business firms in the USA indicated that three industry factors namely industry maturity, entry barriers and competitive power combined explained 15% of firm performance (10% profitability and 19% sales growth). Another study on the USA banking industry (Mehra, 1996) indicates that firm resources explained 59%, 51% and 33% of profitability, productivity and market (expressed in terms of price earnings multiple) variances, while industry effects explained 17% of profitability, 10% of productivity variance and an insignificant impact on market variance. Another study (Kotha & Nair, 1995) also revealed that the impact of industry factors on firm profitability of the Japanese machine tool industry was very high. Various empirical studies seem to indicate that the results are consistent irrespective of the types of industry.

Some studies on the emerging economies revealed that industry effects seem to have a higher impact than firm effects. For example, in Korea, Chen (2010) observed that industry effects had almost twice (65.8%) the impact compared to firm effects on the performance of IT firms as investigated, using a hierarchical linear modelling approach. Studies of Chinese firms have also reported a strong impact of industry structure on firm performance (Luo, 1999). According to Luo, industry structure plays a bigger role in explaining variations of firm performance. Similarly, in Turkey, Karabag (2008) and Karabag and Berggren (2014) found that industry effects had a larger effect than firm strategy in predicting performance variations across firms. Another Turkish study (Kamasakm, 2011), using a sample size of 259 firms drawn from different industries, indicated that firm-specific resources had a 34.2% impact while the effects of industry factors in predicting

performance variations of firms were close to 20%, which is inconsistent with the findings of Karabag and Berggren (2014). Kamasakm (2011) further argued that these results indicated the shift in Turkey's economic model from heavy state intervention to a more competitive economic system, showing that the role of industry structure in creating advantage had to be replaced by firm-specific resources and capabilities. A recent study in Colombia revealed that firm effects (through intangible assets) explained about 60% of the total firm performance variance measured in terms of ROA, while industry effects predicted were in the range of 4% to 6% (Andonova & Ruiz-Pava, 2016). Their findings indicated the importance of intangible firm resources in driving competitive advantage and profitability.

The complementary theoretical relations between industry structure and the RBV have been well documented (Wernerfelt, 1984; Amit & Schoemaker, 1993; Peteraf, 1993; Spanos & Lioukas, 2001). Particularly, Spanos and Lioukas (2001) developed and empirically tested a composite model on the effects of industry and firms directly and indirectly on firm performance. Their findings indicate that industry effects, measured using the five forces, affect market performance and profitability directly and indirectly, while firm effects, measured using resources and capabilities, influence market performance directly and profitability through market performance indirectly.

A firm's strategic positioning stems from industry structure (industry-based view), while its idiosyncratic, valuable and difficult-to-copy resources and capabilities (RBV) determine the competitive advantage of firms (Kim & Oh, 2004; Rivard, *et al*., 2006; Kim, *et al*., 2008). Moreover, other integrated models have also been developed by Kim and Oh (2004) and Kim, *et al*. (2008). A limited number of empirical studies were done particularly to test the complementary effects of industry and firm effects in explaining firm performance variations (Weerawardena, *et al*., 2006; Kim, *et al*., 2008). Rivard, *et al*. (2006) tested the composite model developed by Spanos and Lioukas (2001) and their findings were consistent with those of Spanos and Lioukas. The only empirical study that attempted to investigate competitive advantage as an antecedent of firm performance using industry-based and resource-based competitive advantages was by Gjerde, *et al*. (2010). Their study, which used 20 years' (1986-2005) data collected from 511 firms listed on the Oslo Stock Exchange, found that the combined effects of both industry-based competitive

advantage driven by industry factors and firm resource-based advantage measured in terms of resources and capabilities, predicted more than 20% of superior stock market returns. Their findings further revealed that the relative effects of resource-based advantage were three to four times higher than the industry-based advantage (Gjerde, *et al.*, 2010).

In general, the above-mentioned studies demonstrated that firm or strategy effects had a greater impact on performance in advanced countries; industry effects were more dominant than firm effects in some emerging economies such as those of China (Luo, 1999), Korea (Chen, 2010) and Turkey (Karabag, 2008; Karabag & Berggren, 2014). Empirical studies based on the integrated or composite model of industry and firm effects on firm performance directly and indirectly through the mediation of competitive advantage were generally limited. Therefore, the need for this research becomes important as further explained below.

2.11 CHAPTER SUMMARY AND LITERATURE GAP

The two strategic management theories and empirical evidence suggest that firm effects expressed in terms of the RBV and industry effects viewed in terms of Porter's five forces are sources of competitive advantage and essential drivers of firm performance, directly and indirectly (Ma, 2000b; Spanos & Lioukas, 2001; Kim, *et al.*, 2008; Arend, 2009; Gjerde, *et al.*, 2010; Houthoofd & Hedrickx, 2012). However, it is not always true that superior performance is the result of competitive advantage (Porter, 1991; Ma, 2000b; Barney & Clark, 2007; Carpenter & Sanders, 2009). Competitive advantage is one of the means of generating superior firm performance (Ma, 2000b; Makadok, 2011). Firms may demonstrate superior performance without gaining competitive advantages. A firm may also have a competitive advantage over its rivals, but still perform more poorly than them due to lower prices or because of other underperforming business units (Ma, 2000b). A firm's ability to create and capture value depends on its internal resources and capabilities and the bargaining power of other stakeholders (Coff, 2003; Grant, 2010). Critics of Porter's view argue that his framework ignores the importance of a firm's idiosyncratic resources by rather emphasizing industry forces as sources of competitive advantage and performance variations. The RBV also fails to explain how profit or rent is appropriated by different stakeholders while Porter's five-forces framework addresses profit appropriation.

Industry and firm effects are basic to the two major approaches that explain performance variations of firms (Ma, 2000a; 2000b; Arend, 2009; Gjerde, *et al.*, 2010; Houthoofd & Hedrickx, 2012). Although both industry effects (through the industry-structure/forces) and firm effects (using the RBV) are important in explaining competitive advantage and performance variations among firms, the majority of the empirical studies in developed countries reveal that firm effects have a much bigger contribution than industry effects in explaining performance variations. Many studies have been done on the impact of industry and firm effects or factors in explaining performance variations among firms, mainly in the context of developed economies since the mid-1980s. Moreover, many studies have also investigated the relationships between firm resources and performance through the mediating effects of competitive advantage. Based on the extensive assessment of numerous studies, there is limited research either considering competitive advantage as a dependent variable or as a mediating factor between industry effects and firm performance and firm effects and firm performance as well. One study (Gjerde, *et al.*, 2010), which analysed the relative effects of industry-based and resource-based competitive advantage on performances (stock market returns) of firms listed on the Oslo Stock Exchange using return on capital, was an exception. The extant literature therefore showed that there exists a clear gap that has to be addressed, particularly in a regulated industry that operates in a developing economy such as Ethiopia.

Moreover, given the conceptualization of competitive advantage and the complementary nature of both Porter's five-forces model and the RBV, there has been little attempt to test the combined contributions of these approaches in the context of emerging economies (Karabag & Berggren, 2013; 2014). The need to pursue this research has been further justified as there has not been any prior study in the context of a developing economy like Ethiopia where the financial services industry is regulated. The study is thus significant in the existing debate on the relative importance of industry versus firm effects on firm performance directly and indirectly in the context of the developing Ethiopian economy. This study was therefore designed to investigate the effects of industry and firm specific factors in predicting the performance variations of financial service firms that operate in a regulated financial services industry in Ethiopia through the mediating effect of competitive advantage. The research framework and hypotheses for this study are presented in the next chapter.

CHAPTER 3: RESEARCH FRAMEWORK AND HYPOTHESES

3.1 INTRODUCTION

This chapter presents a detailed account of the research framework and hypotheses of the study. The problem statement of the research is highlighted, followed by the research framework, based on a synthesis of extensive theoretical and empirical studies presented in Chapter 2 as well as in this chapter. The research hypotheses formulated to direct the research questions are also presented. The final part summarizes the major points presented in this chapter.

3.2 PROBLEM STATEMENT

The Ethiopian financial industry that had been active in the 1960s and early 1970s was nationalized by the socialist regime in 1975. The industry subsequently came under total ownership of the government from 1974 to 1991 (Bezabeh & Desta, 2014). After the change of government and the adoption of a free market system in 1991, the financial industry once again opened up to private investors in 1994. New Banking and Insurance Proclamations No. 84/1994 and No. 86/1994 respectively were promulgated. Existing government-owned banks and the national insurance company gained managerial autonomy. The new proclamations allowed domestic investors to engage in both banking and insurance businesses. However, foreigners were not allowed to also participate. As a result, in part the operations of banks and insurance companies have been limited to major urban areas (NBE, 2014/15), signifying low market coverage and penetration. The financial industry is still in its infancy, operating under a strict regulatory environment (EEA, 2011; Bezabeh & Desta, 2014). Even though the coverage and penetration levels are still low compared to many African countries, there have been surges in revenues of both banks and insurance companies since the liberalization of the financial services industry in 1994.

Many empirical studies have investigated the possible explanations for the performance variations of firms based on industry structure or Porter's five-forces framework (referred to as industry effects of industry factors) and firm specific resources and capabilities (referred to as firm effects), particularly in the context of developed economies. Studies investigating the relevant situation in developing economies have been limited (Karabag & Berggren, 2013; 2014). Similarly, there have been many empirical studies on the mediating effect of competitive advantage between firm effects

and performance variation (Barney 2001; Ray, *et al*., 2004; Newbert, 2008; Tuan & Yoshi, 2010; Gaya, *et al*., 2013; Ahmadi, *et al*., 2014). Many studies did not consider the mediating effect of competitive advantage between industry effects and firm performance and firm effects and firm performance (Spanos & Lioukas, 2001; Rivard, *et al*., 2006; Kim, *et al*., 2008; Sigalas & Economou, 2013), especially in the context developing economies such as Ethiopia.

The main research problem of this study therefore was to use the top management perceptions to investigate the industry and firm effects on the performance of financial service firms through the mediating effect of competitive advantage, in the regulated industry in the developing economy of Ethiopia.

The research specifically addressed the following sub-questions:

1. To what extent do industry effects predict competitive advantage, and the performance of financial service firms in Ethiopia?
2. How do firm effects explain the competitive advantage, and the performance of financial service firms in Ethiopia?
3. How does competitive advantage contribute to the performance of financial service firms in Ethiopia?
4. To what extent does competitive advantage mediate the relationship between industry effects and the performance of financial service firms in Ethiopia?
5. To what extent does competitive advantage mediate the relationship between firm effects and the performance of financial service firms in Ethiopia?

3.3 RESEARCH FRAMEWORK

Differences in competitive advantage and performance variations among firms have been the central research questions of scholars in the field of strategic management (Ma, 2000a; 2000b; Barney, 2001; Galbreath & Galvin, 2008; Gjerde, *et al.*, 2010). Many scholars have been particularly interested in investigating the relative effects of industry-structure and firm-specific resources in explaining performance variations of firms (Porter, 1991; Mauri & Michaels, 1998; Spanos & Lioukas, 2001; Spanos, *et al.*, 2004; Caloghirou, *et al.*, 2004; Bou & Satorra, 2007; Kim, *et al.*, 2008; O'Cass & Weerawardena, 2010; Holian & Reza, 2011; Houthoofd & Hendrickx, 2012; Karniouchina, *et al.*, 2013; Karabag & Berggren, 2014; Takata, 2016).

Competitive advantage and performance variations among firms mainly depend on the advantages driven by industry structural forces – outward looking (Porter, 1980b; 1998; Luo, 1999; Goddard, *et al.*, 2009; Chen, 2010) and internal firm resources – inward looking perspectives (Grant, 1991; Barney, 1991; 2001; Amit & Shoemaker, 1993; Kamasak, 2011; Bamiatzi, *et al.*, 2016). Analysing the structure and characteristics of an industry assists in understanding the nature of competition, profitability of an industry, sources of possible competitive advantage and the performance of firms. According to Clelland, Douglas and Henderson (2006) industry factors determine the extent to which superior value creation can be converted into superior financial performance. Based on the theory of IO, Porter's five-forces framework helps to explain and analyse industry structure and the degree of competition and to better understand the determinants of competitive advantage and performance variations of firms (Kim & Oh, 2004; Kim, *et al.*, 2008; Arend, 2009; Carpenter & Sanders, 2009; Kamasak, 2011; Takata, 2016). The supporters of the RBV stipulate that the sources and drivers of competitive advantage and superior performance of firms depend on having unique resources and capabilities that are valuable and costly to imitate (Barney, 1991; 2001; Peteraf & Bergen, 2003; Barney & Hesterly 2010).

Although the two perspectives on competitive advantage differ, both are interested in explaining competitive advantage and firm performance (Ma, 2000b; Spanos & Lioukas, 2001; Hedman & Kalling, 2003; Galbreath & Galvin, 2008; Kamasak, 2011; Houthoofd & Hendrickx, 2012). Both the RBV and industry structure perspectives explain performance variations through the mediation

of competitive advantage or strategy (Spanos & Lioukas, 2001; Kim & Oh, 2004; Rivard, *et al*., 2006; Kim, *et al*., 2008). Empirical studies revealed that both industry-based and resource-based competitive advantage explain the firm performance in the manufacturing as well service industries **(**Rivard, *et al*., 2006; Kim, *et al*., 2008; Galbreath & Galvin, 2008; Gjerde, *et al*., 2010). Based on a synthesis of the related literature, a research model was formulated as shown in Figure 3.1.

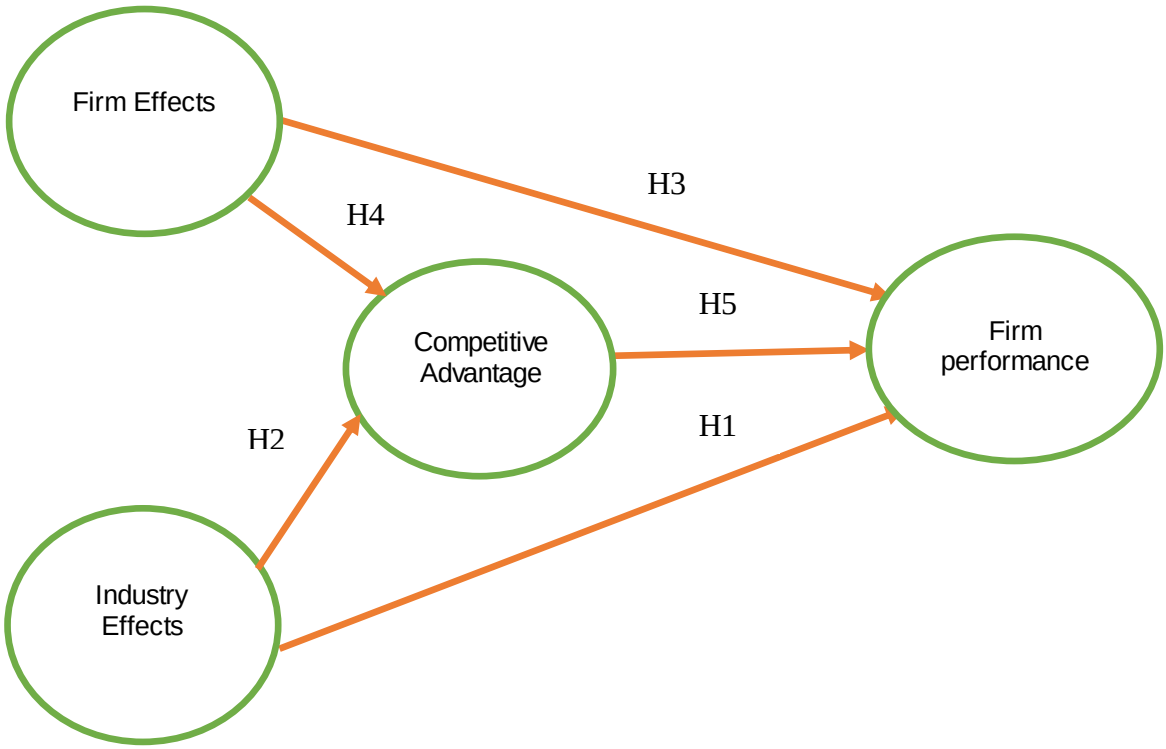

Figure 3.1: Proposed Research Model

Source: Adapted from Kim, *et al*. (2008); Galbreath and Galvin (2008): Caloghirou, *et al*. (2004); Hooley, Greenley, Fahy and Cadogan (2001); Spanos and Lioukas (2001), Porter (1985; 1991; 1998), Kim and Oh (2004) and Bridoux (2004).

Each of the relationships between the constructs indicated in the above figure is discussed in detail under the research hypotheses.

3.4 RESEARCH HYPOTHESES

3.4.1 Industry Effects on Competitive Advantage and Firm Performance

The effects of industry in predicting firm performance have been well recognized and investigated by many scholars (Schmalensee, 1985; Dess, Ireland & Hitt, 1990; McGahan & Porter, 1997; Fahy, 2000; McGahan & Porter, 2003; Houthoofd & Hendrickx, 2012; Andonova & Ruiz-Pava, 2016; Bamiatzi, *et al*., 2016). Available literature predominantly indicates that industry effects on firm performance can be represented by either using Porter's (1980) five-forces industry analysis (Pecotich, *et al*., 1999; Douglas & Ryman, 2003; Kim & Oh, 2004; Rivard, *et al*., 2006; Weerawardena, *et al*., 2006; O'Cass & Ngo, 2007; Galbreath & Galvin, 2008; Kim, *et al*., 2008; O'Cass & Weerawardena, 2010; Kamasak, 2011; Dulcic, Gnjidic & Alfrirevic, 2012; Karabag & Berggren, 2014; Altuntaş, Semerciöz, Mert & Pehlivan, 2014; Takata, 2016) or through industry concentration, entry and exit barriers and growth (Dess & Beard, 1984; Schmalensee, 1985; Spanos, *et al*., 2004; Caloghirou, *et al*., 2004; Clelland & Henderson, 2006; Short, *et al*., 2009; Houthoofd & Hendrickx, 2012; Bamiatzi, *et al*., 2016).

Based on Porter's five-forces framework, which originates from the theory of IO, industry effects predict the impact of industry forces on a firm's competitive position and its performance (Porter, 1991; Spanos & Lioukas, 2001; Kim & Oh, 2004; Galbreath & Galvin, 2008; Kim, *et al*., 2008; Houthoofd & Hendrickx, 2012; Takata, 2016). In investigating the perceptions of top management members regarding industry effects on firm performance this study employed Porter's five-forces model. This model argues that industry structure determines the intensity of competition and it in turn affects the competitive position and advantage and therefore the performance of firms. The industry five-forces framework, as a comprehensive strategic analysis tool, is appropriate to investigate the effects of industry and firm-related factors on firm performance (Porter, 1991; 1998; Powell, 1996; Spanos & Lioukas, 2001). Rooted in the IO tradition, the five-forces framework also includes the traditional IO measure of industry concentration and the entry barrier and growth approach that considers industry as its unit of analysis. Porter's structural analysis using the five-forces framework helps to examine the extent of industry competition in relation to a firm's conduct, while the IO-SCP based view, which uses quantitative data, cannot capture managerial perceptions in addition to its inability to comprehensively explain and measure industry structure (Pecotich, *et al*., 1999; Molina, Pino & Rodrıguez, 2004). The industry effects

measured in terms of the five forces, namely the threat of new entry, bargaining power of buyers, bargaining power of suppliers, rivalry among existing firms and threat of substitute products, determine the extent of competitive advantage and profitability of firms independent of firm effects (Spanos & Lioukas, 2001; Kim & Oh, 2004; Rivard, *et al*., 2006; Arend, 2009; Kim, *et al*., 2008; Porter, 2008; Takata, 2016). It is thus applied to analyse the intensity of competition and explain performance both at industry and firm levels (Porter, 1998; 2008).

Many empirical studies reveal that industry effects account in the range of 3 to 20% of firm performance (Schmalensee, 1985; Powell, 1996; Roquebert, *et al*., 1996; McGahan & Porter, 1997; McGahan, 1999; Chang & Singh, 2000; Gonzalez-Fidalgo & Ventura-Victoria, 2002; McGahan & Porter, 2003; Short, *et al*., 2007; Galbreath & Galvin, 2008; Short, *et al*., 2009; Tarziján & Ramírez, 2010; Houthoofd & Hendrickx, 2012; Karabag & Berggren, 2014; Andonova & Ruiz-Pava, 2016). Further studies by Spanos and Lioukas (2001), Rivard, *et al*. (2006) and Kim, *et al*. (2008), employing the complementary view of industry and firm effects using Porter's five-forces model and RBV, revealed that firm performance variations could be explained by both firm and industry effects. Intense competition, the high bargaining power of both customers and suppliers, the low level of entry barriers with high levels of substitute products result in a negative impact on firm performance (Porter 1980; 1985; O'Shannassy, 2008). Powell (1996) argues that low levels of competition result in inefficiencies and poor performance, which could in turn manifest in a negative impact of industry structure on firm performance. In contradiction to this argument, Kim and Oh (2004) assert that a high level of bargaining power and the intensity of competition oblige firms to examine various strategic options that lead to better competitive advantage than that of their rivals.

Even though industry forces generally affect firm performance negatively (Takata, 2016), the influence of all industry factors on competitive advantage and firm performance particularly in a dynamic environment, cannot be in the same direction (O'Shannassy, 2008). Dulcic, *et al*. (2012) examined the impact of Porter's five-forces on Croatian medium and large firms operating in the food and beverage industry using the *industruct* measurement scale developed by Pecotich, *et al*. (1999) for the measurement of industry structure. Their findings confirm that the relationship

between industry structure and firm performance is significantly positive. They further argued that there could be a positive or negative relationship depending on the dynamic nature of the industry and its time-specific influences on firms. Barney and Clark (2007) argue that the industry structure explanation of performance variations can be applicable in an oligopoly or regulated market settings; while the RBV explanation can be employed in a competitive market situation and when there are no industry entry barriers. In line with this argument, a study in India comparing firm effects and industry effects during the command and control phase (from 1980-1981 and 1984-1985), transition period (1985-1986 to 1990-1991), and liberalization period (from 1990-1991 to 2005-2006) where financial and legal reforms had been undertaken, reveals that industry effects have a greater contribution to performance variations of firms in the manufacturing sector (Majumdar & Bhattacharjee, 2014).

Another study by Spanos and Lioukas (2001) in Greece indicates that industry effects measured using rivalry among competitors and bargaining power of suppliers contributed significantly and marginally significantly to market performance and profitability with direct and negative effects respectively. Douglas and Ryman (2003) found that the bargaining power of buyers and rivalry among existing firms had negatively affected hospital service performance in the USA. Consistent with the theory of industry competitive forces, Galbreath and Galvin (2008) identified that some of Porter's five forces had significant negative effects on the performance among service firms in Australia. Moreover, Rivard, *et al*. (2006) did a study on the role of IT on business performance using a sample size of 96 respondents (CEOs) of SMEs in the province of Quebec, Canada, employing both Porter's five-forces framework and the RBV perspectives. Their findings indicate that industry forces directly and negatively affected firm performance as measured by market performance and profitability, though its effects declined after the command and control phase. In Turkey, Karabag and Berggren (2014) indicated the significant role of industry structure in affecting firm performance more than firm effects. Empirical evidence revealed that industry effects could influence firm performance either positively or negatively depending on the competitive nature of an industry (Pecotich, *et al*., 1999).

Therefore, based on the theoretical framework discussed in Chapter 2, section 2.3, and supported by a large body of empirical evidence, the following null hypothesis (H_{10}) and alternative hypothesis (H_{11}) are postulated:

H_{10}: Industry effects do not influence the performance of financial service firms in Ethiopia.

H_{11}: Industry effects influence the performance of financial service firms in Ethiopia.

Industry structure, operationalized and measured using the aggregate effects of the five-forces framework (Pecotich, *et al.*, 1999; Spanos & Lioukas, 2001; Galbreath & Galvin, 2008; Porter, 2008; Carpenter & Sanders, 2009; Takata, 2016) could result in generating industry-based advantage (Grimm, *et al*., 2006). For Porter (1991), the true source of competitive advantage could stem from a firm's proximate environment. In addition to analysing its effects on the industry environment, the five-forces model shapes the actions and sources of the competitive advantage of firms (Pecotich, *et al*., 1999; O'Shannassy, 2008). The increasing intensity of the industry forces drives firms towards increased cost or differentiation advantages over their competitors that would further lead to above average returns (Porter, 1980b; 1985). Firm performance expressed in terms of profit is part of the competitive advantage or value captured by a firm as a result of its bargaining process with its internal and external forces (Bowman & Ambrosini, 2000; Coff, 2003; Bowman & Ambrosini, 2007; Barney & Clark; 2007). The competitive advantage of a firm and thus its profit depends, among many factors, on the bargaining powers of industry forces for better benefits (Porter, 1998; Coff, 1999; 2003; Bowman & Ambrosini, 2000; O'Shannassy, 2008) and isolating mechanisms, entry barriers (due to legal and/or firm specific VRIO resources) and imitation (Porter, 1980b; Grant, 1991; Barney, 1991; Teece, *et al*., 1997; Makhija, 2003; Lepak, Smith & Tylor, 2007; Barney & Hesterley, 2010; Ritala & Ellonen, 2010). In order to gain competitive advantage and achieve superior firm performance, a firm should have an attractive relative position in an industry stemming from either a cost or differentiation advantage (Porter, 1991; 1998; Juga, 1999; Fahy, 2000; Ritala & Ellonen, 2010).

An empirical study by Gjerde, *et al*. (2010) using a large sample size of firms listed on the Oslo Stock Exchange revealed that the combined effects of both industry-based and resource-based competitive advantages predicted over 20% of firm performance, measured using stock market

returns. Their finding further suggests that resource-based advantages had a three to four times higher effect than industry-based advantage. Even though most studies, done particularly in advanced economies, reveal that competitive advantage stems more from resource-based advantage than industry-based advantage, industry effects also influence the competitive advantage of firms. The findings of Camelo-Ordaz, Martı´n-Alca´zar and Valle-Cabrera (2003) on a study of 130 large Spanish firms indicated that competitive advantage is not only the result of firm resources and capabilities, but also depends on effects of the competitive environment. A survey in Australia using a sample of 293 drawn from different industries engaged in export businesses, revealed that the perceptions of competitive intensity, measured using Porter's five-forces framework, influenced the export performance, strategic posture and adaptation of firms (O'Cass & Julian, 2003). Similarly, a survey result using data collected from 180 firms operating in different industries in Austria indicated that competitive intensity negatively affected the type of strategy a firm pursued (O'Cass & Ngo, 2007). More importantly, following the study of Schmalansee (1985) on the relative effects of firm, market structure and market share in predicting firm profitability, Powell (1996) indicated that about 80% of the variation in firm profitability was not related to industry factors. This encouraged them to further investigate the effects of possible intervening or mediating variables between industry effect and firm performance (O'Cass & Weerawardena, 2010). They further argue that even though the theoretical discourses on industry structure and firm resources have been advancing well in the past, few empirical studies have emerged. Moreover, restricting competition among firms, whether it originates from government or surfaces as a result of collusions, negatively affects the competitive advantage and profitability of firms (Makadok, 2010).

Considering that the financial services industry in Ethiopia is excessively regulated and protected from foreign competition, managements' perceptions of industry effects could affect the competitive advantage and performance of firms. In this regard, Waktola (2015) contends that banks in Ethiopia concentrate more on short-term gains such as earnings per share rather than focusing on crafting long-term directions that ensure a sustainable competitive advantage. He further argues that the legal barrier and prohibition of foreign banks to operate in the financial services industry, besides negatively affecting competitiveness, has created complacency and short-sightedness among commercial banks in Ethiopia. Following the theoretical underpinnings

covered under Chapter 2, section 2.3, and the empirical studies discussed above, a null hypothesis (H_{20}) and alternative hypothesis (H_{21}) are formulated as follows:

H_{20}: Industry effects do not influence the competitive advantage of financial service firms in Ethiopia.

H_{21}: Industry effects influence the competitive advantage of financial service firms in Ethiopia.

3.4.2 Firm Effects on Competitive Advantage and Firm Performance

According to Porter (1991; 1996), a firm's performance depends on industry effects and firm effects through its relative position in the industry in which it operates and the configuration of activities in the value chain. Positioning can be applied at a specific marketing mix level and/or at the overall firm level. It can be defined as 'the position or placement of each competing brand in the mind of the consumer with a set of attributes or criteria of an offer relative to others' (Goldman & McCoy, 2009: 218). Broadly speaking, firm positioning involves deliberate actions that define target markets and decisions on strategies to be pursued through either a differentiation or a cost leadership competitive strategy (Porter, 1980; Hooley, *et al*., 2004; Attia & Hooley, 2007; Kim, *et al*., 2008). This view incorporates strategy, resource mobilization and the alignment of firm activities (Porter, 1991; Hooley & Greenley, 2005; Attia & Hooley, 2007). A firm could adopt either a defensive competitive position against the five-forces framework in its industry or it could pursue an offensive strategic position that shapes and influences these forces and exploits opportunities ahead of its competitors (Porter, 1980a; 1980b; 1991). Positioning therefore plays an important role in influencing the competitive advantage of firms (Ma, 2000b; Spanos & Lioukas, 2001). The effects of industry structure, competitive positioning and firm resources and capabilities provide a comprehensive view that creates a strategic fit between the external and internal environments of firms (Porter, 1996; 1998; Hooley, Broderick & Moller, 1998; Juga, 1999; Sheehan & Foss, 2007; Daveni, *et al*., 2010).

Contrary to the industry effects that reside in the economics tradition, firm effects consider internal firm-specific resources and capabilities as drivers of competitive advantage and performance (Eriksen & Knudsen, 2003; Sheehan & Foss, 2007; Galbreath & Galvin, 2008; Houthoofd &

Hendrickx, 2012). The RBV assumes that the performance variations hold if firms could capture the economic values they generate (Coff, 1999; 2003; Newbert, 2008; Grant, 2010). It explains performance variations based on internal firm resources as valuable, rare, inimitable and proper organization (Barney, 1995; Barney & Clark, 2007; Barney & Hesterly, 2010). Resources should not only be valuable, rare and inimitable in nature, but there has to be an appropriate organization for a firm to exploit these resources (Barney & Wright, 1998; Barney & Hesterly, 2010). Goddard, *et al*. (2009) explain that firm effects affect competitive advantage and performance through internal resources, products, price and non-price related strategies. The RBV is an efficiency-based explanation of performance variations using Ricardian rents (Peteraf & Bergen, 2003). Firm effects based on the RBV of VRIO resources are represented by tangible, intangible and dynamic capabilities that create competitive advantage and cause performance variations among firms (Barney, 1991; Teece, *et al*., 1997; Galbreath & Galvin, 2008; Houthoofd & Hendrickx, 2012) resulting from competitive strategies that enable the favourable positioning of firms in an industry (Juga, 1999; Spanos & Lioukas, 2001; Kim, *et al*., 2008; Grant, 2010). Competitive advantage is thus part of the competitive positioning that specifies how firms compete in their respective target markets, either using differentiation or cost advantage created from firm activities and unique resources and capabilities (Hooley, *et al*., 2001; Sheehan & Foss, 2007; Kim, *et al*., 2008; Daveni, *et al*., 2010).

Empirical studies further confirm the importance of firm effects in explaining competitive advantage and performance variations. A meta-analysis by Crook, *et al*. (2008), on 125 studies that covered over 29 000 firms using the RBV, indicated that firm effects measured by their resources and capabilities predicted 22% of performance variations across firms. They further confirmed that firm resources are positively linked to performance when these resources meet the VRIO criteria under the RBV. Another study by Gjerde, *et al*. (2010), using resource-based advantage, revealed that firm factors explained close to four times more than industry-specific factors. Using the RBV, Liu, *et al*. (2011) examined how bank resources and capabilities (tangible, intangible and organizational capabilities) could predict financial performance variations among commercial banks in Tanzania. Their results supported the view that firm capabilities were the main factors explaining banks' profitability, while other studies based on industry versus firm effects in explaining performance variances revealed that firm effects could predict two to nine

times more than industry effects (Claver, *et al.*, 2002; Galbreath, 2005; Bou & Satorra, 2007; Galbreath & Galvin, 2008; Tang & Liou, 2010; Houthoofd & Hendrickx, 2012).

Thus, the theoretical discussions and empirical evidences presented so far have led to the formulation of this null hypothesis (H_{30}) and alternative hypothesis (H_{31}):

H_{30}: There is no positive relationship between firm effects and the performance of financial service firms in Ethiopia.

H_{31}: There is a positive relationship between firm effects and the performance of financial service firms in Ethiopia.

The positioning by firms based on their idiosyncratic resources and capabilities (Hooley & Greenley, 2005) and through configuring their firm activities driven by industry factors (Porter, 1991; Sheehan & Foss, 2007; Kim, *et al*., 2008) can create competitive advantage. Many empirical studies testing the relationship between firm resources and/or capabilities and competitive advantage have revealed that competitive advantage results in higher firm performance. A qualitative research result on Australia's financial services industry highlighted that the relationship between a firm's intangible assets and capabilities and that of competitive advantage was strong and relevant (Clulow, *et al*., 2003). A further empirical study by Ray, *et al*. (2004) in the USA, with a sample size of 104 different insurance firms, indicated that a firm's intangible resources and capabilities (service climate and managerial IT knowledge) were positively related to their customer service performance. The study further revealed that the service climate and managerial IT knowledge effect on firm performance measured, using return on asset, indicated that competitive advantage may not always lead to improved firm performance (Ray, *et al*., 2004). Another study based on the RBV by Carmeli and Tisher (2004) on the impacts of firm resources and capabilities in explaining performance variations in 93 industrial enterprises in Israel, revealed that intangible resources and capabilities significantly predicted the competitive advantage and superior performance of firms. Furthermore, Peteraf and Reed (2007) state that firms' management capability could generate competitive advantage through cost reduction. Similarly, firms' capability to design and implement appropriate strategies could lead to gaining competitive advantage (Foss & Knudsen, 2003; Powell, 2003; Sheehan & Foss, 2007; 2009).

In another study in Vietnam, using 102 firms operating in the supporting industries, Tuan and Yoshi (2010) demonstrated that firm capabilities were directly and positively related to competitive advantage. Moreover, in Kenya, Gaya, *et al*. (2013) found that firms' tangible resources with attributes such as rarity, value, inimitability and non-substitutability, contributed to creating and sustaining the competitive advantage of the firms that were operating in the motor services industry. A similar study in Taiwan showed that firm resources that were valuable, rare, inimitable and non-substitutable could help to generate competitive advantage, although dynamic capability was more appropriate in creating competitive advantage in a volatile environment (Wu, 2010).

The theoretical framework and empirical evidence presented above gave rise to formulating the following null hypothesis (H_{40}) and alternative hypothesis (H_{41}):

H_{40}. There is no positive relationship between firm effects and the competitive advantage of financial service firms in Ethiopia.

H_{41}. There is a positive relationship between firm effects and the competitive advantage of financial service firms in Ethiopia.

3.4.3 Competitive Advantage and Firm Performance

The interchangeable use and synonymous nature of competitive advantage and superior firm performance seem to have settled following the works of Powell (2001), Ma (2000b), Barney and Clark (2007), Newbert (2008) and Sigalas and Economou, (2013). Competitive advantage is thus considered as an antecedent and predictor of firm performance (Ma, 2000b; Peteraf & Barney, 2003; O'Shannassy, 2008; Sigalas & Economou, 2013). Based on this, Porter's five-forces framework, the RBV and competitive advantage result in improved firm performance through the firm's strategy that aligns its internal resources and a set of linked activities (Hooley, *et al*., 1998; Juga, 1999; Ma, 2000b; Spanos & Lioukas, 2001; Kim & Oh, 2004; Bingham & Eisenhardt, 2008; Daveni, *et al*., 2010). Both industry effects explained by Porter's five-forces model and firm effects represented by the RBV predict competitive advantage and performance variations among firms from external and internal perspectives respectively (Spanos & Lioukas, 2001; Rivard, *et al*., 2006; Sheehan & Foss, 2007; Galbreath & Galvin, 2008; Kim, *et al*., 2008; Gjerde, *et al*., 2010).

Even though a firm's performance can be generated with and without gaining competitive advantage that originates from industry structure (Porter, 1991) or firm resources (Ma, 2000b), empirical evidence supports competitive advantage as an antecedent to performance (Powell, 2001; Peteraf & Barney, 2003; Newbert, 2007; 2008; Tang & Liou, 2010; Sigalas & Economou, 2013). Competitive advantage, stemming from delivering superior value to customers, results in above-average performance measured using both financial and non-financial indicators (Fahy & Smithee, 1999). A firm that enjoys competitive advantage generates better performance in terms of profitability and market share and sustains its growth in the long run (Porter, 1985; Greco, Cricelli & Grimaldi, 2013) provided that the firm has valuable resources that are rare, inimitable and non-substitutable (Barney, 1991), with value creating activities well configured and harmonized (Porter, 1991; Peteraf & Barney, 2003; Ghemawat & Rivkin, 2006), and having causal ambiguity that increases barriers to imitation (Reed and Defillippi, 1990). A firm that has VRIO resources can generate competitive advantage which in turn results in higher performance than the performance of firms that do not have a competitive advantage (Arend, 2004; Newbert, 2008). Employing environmental and firm factors as independent variables, Kim, *et al*. (2008) investigated 133 online and brick and mortar firms in Korea where their findings confirmed that strategic positioning and competitive advantage affected firm performance.

The null hypothesis (H_{50}) and alternative hypothesis (H_{51}) are thus:

H_{50}: Competitive advantage does not have a positive influence on the performances of financial service firms in Ethiopia.

H_{51}: Competitive advantage has a positive influence on the performances of financial service firms in Ethiopia.

3.4.4 The Mediating Effect of Competitive Advantage

Mediation is created when a third variable intervenes between independent and dependent or outcome variables (Miller, Triana, Reutzel & Certo, 2007). Mediation is generally viewed as an internal effect intervening between dependent and independent variables (Baron & Kenny, 1986). A mediating variable creates an indirect effect through playing an intermediary role. When a mediator contributes to the total effect of its outcome variable the direct effect of the independent variable on the dependent variable then becomes zero. This is referred to as complete mediation (Fairchild & McQuillin, 2010). However, if the direct effect of the independent variable on the dependent variable exists, such mediation is termed partial mediation. Partial mediation exists when the predictive variable both directly and indirectly influences the criterion variable (Miller, *et al*., 2007).

According to Preacher and Hayes (2008), a variable is considered as a mediator when:

a) its variation is explained significantly due to an independent variable,
b) the independent variable substantially contributes to variation in a dependent variable,
c) the mediating variable substantially contributes to changes or variations in the dependent variable as a result of controlling the independent variable, and
d) the impact of the independent variable on the dependent variable drops significantly when both the mediating and the independent variables are used to explain the dependent variable.

Empirical studies on the mediating effects of positioning or competitive strategy (expressed in terms of cost leadership, differentiation and focus) on the relationship between both firm effects with firm performance and industry effects with firm performance in the context of developing/emerging economies are generally limited (Kim, *et al*., 2008; Karabag & Berggren,

2013; 2014). Such limitations on the study of the relationship between competitive advantage and firm performance hampers sound managerial decisions in a given situation (Kim, *et al.*, 2008). From the five-forces perspective, industry structure affects a firm's rent generation through its positional advantage as a result of the firm's defensive or offensive strategy (Porter, 1979; Spanos & Lioukas, 2001). An empirical study in various manufacturing firms in Greece indicates that competitive advantage plays a mediating role between superior firm performance and industry effects (Spanos & Lioukas, 2001). Adopting the research model developed by Spanos and Lioukas (2001) and Rivard, *et al*. (2006), who did empirical investigations on the joint effects of industry forces and strategy on firm profitability, revealed that both factors influence profitability positively through the mediating effects of market performance. The findings in the study of the impact of positional advantage on the performance of manufacturing firms in the Netherlands, indicates that the differentiation advantage has a significant and positive effect on their performance, while cost advantage has no significant effect (Langerak, 2003).

A research report by Gjerde, *et al*. (2010) indicated that the joint impacts of both industry-based and resource-based competitive advantage explain more than 20% of superior stock market performance in a large sample of firms listed on the Oslo Stock Exchange. However, competitive advantage based on firm resources accounts for three to four times more than the industry-based advantage. Whether competitive advantage resides in firm resources and capabilities, or in industry structure and its barriers, it mediates the relationship with firm performance (Sigalas & Economou, 2013). Based on the above discussion, the theoretical framework presented in section 2.3, and the subsequent empirical studies covered from 3.4.1 to 3.4.3, the null hypothesis (H_{60}) and alternative hypothesis (H_{61}) are:

H_{60}: Competitive advantage does not mediate the relationship between industry effects and the performance of financial service firms in Ethiopia.

H_{61}: Competitive advantage mediates the relationship between industry effects and the performance of financial service firms in Ethiopia.

Other empirical studies investigating the mediation effects of competitive advantage between firm resources and performance have been done by many scholars (Newbert, 2008; Tang & Liou, 2010;

Tuan & Yoshi, 2010; Gaya, *et al*., 2013; Ahmadi, *et al*., 2014; Ibrahim, Mohmood & Abdullah, 2016). In investigating the causes of firm performance using a sample of 147 semi-conductor companies from the USA, Europe, Japan, Asia and the Pacific region, Tang and Liou (2010) confirmed that firm resources and management capability lead to increased firm performance through the mediation of competitive advantage. Another study by Kamukama, Ahiauzu and Ntayi (2011) in Ugandan micro-finance institutions, revealed that intellectual capital (a firm resource) mediated by competitive advantage enhances the financial performance of firms. A study using the RBV in Vietnam indicates that competitive advantage mediates between firm capabilities and firm performance (Tuan & Yoshi, 2010). Based on the RBV perspective, an empirical study confirms that competitive advantage fully mediates the relationship between the rarity of firm resources and performance (Newbert, 2008). Moreover, Edelman, Brush and Manolva (2005), who studied 192 small firms operating in traditional industries in Organization for Economic Cooperation and Development countries, confirm that strategies mediate the relationship between firm resources and performance. Their findings reveal that neither firm resources nor strategies or competitive advantage explain performance variations of firms separately unless resources are aligned with strategies. They further indicate that human and organizational resources mediated by a differentiation strategy (quality and customer services, innovation) lead to increased firm performance. Lopez-Gamero, Molina-Azorın and Claver-Cortes (2009) investigated competitive advantage measured in terms of cost and differentiation and found that it acts as a mediator variable between environmental protection and financial performance.

Thus, following the theoretical underpinnings discussed in section 2.5 and the empirical evidence presented in sections 3.4.2 and 3.4.3 above, the following null hypothesis (H_{70}) and alternative hypothesis (H_{71}) are postulated:

H_{70}: Competitive advantage does not mediate the relationship between firm effects and the performance of financial service firms in Ethiopia.

H_{71}: Competitive advantage mediates the relationship between firm effects and the performance of financial service firms in Ethiopia.

3.5 CHAPTER SUMMARY

In this chapter, the research problem and its rationale were briefly discussed. The theoretical and empirical reviews in Chapter 2 served to develop the theoretical framework. The research framework and the subsequent hypotheses formulated were further used to investigate the relationships of different variables and direct the process of this study. The proposed research framework included industry and firm effects as exogenous variables predicting firm performance directly and indirectly through the mediating variable of competitive advantage. The hypothesized relationships among these variables were informed by extensive extant literature reviews underpinning industry structure using Porter's five-forces perspective and the RBV of strategic management. Seven hypotheses were then formulated to guide the investigations into the research problem using the proposed research framework.

The next chapter presents details of the research design and methodological approaches employed to investigate the research problem based on the research framework.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This chapter explains the ontological and epistemological views of the study, the major types of research designs, research variables and measurement instruments, the sampling method and sample size, data collection and analysis techniques and research ethics. It is concluded with a chapter summary.

4.2 ONTOLOGY AND EPISTEMOLOGY OF THE STUDY

Good social science research has to be based on certain assumptions of ontology, epistemology, paradigms and philosophical world-views that help to guide and organize the theoretical framework and research procedures (Neuman, 2007; Creswell, 2009). Ontology describes the difference in world-views about the nature and structure of reality, while epistemology deals with the assumptions we make regarding the nature of knowledge, how to acquire it and what it implies (Creswell & Clark, 2011). Following the terminology choice of Creswell (2009), philosophical world-views are used in this study to refer to 'a general philosophical orientation about the world and the nature of the research that a researcher brings to a study' (Creswell, 2014: 6). Such views and orientation arise from a researcher's area of discipline, experience and the interest of the advisor (Creswell, 2014). The researcher's philosophical world-view guides the research design, methods and approaches.

There are four different philosophical world-views that guide a research action: post-positivism, constructivism, transformative and pragmatism (Creswell, 2014). According to the post-positivist paradigm a researcher should identify and examine cause and effect relationships (Neuman, 2007; Creswell, 2014). This view holds that a researcher can understand the world through theory testing and verification, which replicates knowledge (Neuman, 2007). Theory-based hypotheses cannot be proved, but they are accepted or rejected since knowledge is considered as conjectural. This paradigm uses quantitative research methods to address research questions. Moreover, the epistemological view of post-positivism asserts that a researcher has to collect data objectively and impartially (Creswell & Clark, 2011). According to these writers, constructivism understands and creates meanings of a phenomenon from the subjective views of participants using qualitative

research methods. Unlike the post-positivist view, which holds that there is one objective reality of the world, the constructivism world-view claims that there are multiple subjective realities. The constructivist approach is used for developing a theory. The transformative world-view assumes that research should be viewed from the point of view of politics and that its outcome has to lead to a reform agenda in order to change the lives of the participants (Creswell, 2009). In this view, a researcher has to collaborate with marginalized and oppressed groups who are experiencing injustice and his findings are to be negotiated with participants. The pragmatic world-view 'arises from actions, situations, and consequences rather than consequent conditions as in post-positivism' (Creswell, 2014: 10).

From the above discussion of the four possible alternative philosophical paradigms that guide research processes, the post-positivism paradigm was considered the most appropriate to apply during the conduct this study. This paradigm was considered especially appropriate as this research is deductive in nature, investigates objectively the cause and effect relationships between industry and firm effects on firm performance, mediated by competitive advantage. It therefore tests the different hypotheses developed based on the RBV and Porter's five-forces framework used in this study as the theoretical underpinnings.

4.3 RESEARCH DESIGNS

Research designs are approaches for inquiry using qualitative, quantitative and mixed methods that set the strategies and direct the procedures of research (Creswell, 2014). The characteristics of each of these designs are briefly discussed, followed by the rationale for a quantitative design.

4.3.1 Qualitative Designs

According to Leedy and Ormrod (2014), qualitative designs are used for the purpose of describing situations, processes, relationships, systems and people; interpreting a phenomenon of a research interest to gain new insights, to arrive at new perspectives on concepts or theories, or reveal problems; verifying assumptions, claims, and theories and evaluating the effectiveness of principles, policies and practices, among others.

Qualitative designs are thus used to investigate a phenomenon in a natural-social context in order to create and interpret meanings as viewed from different perspectives, which could result in building a theory or describing a phenomenon. Grounded theory, case study, ethnography, content analysis and phenomenological studies are the major types of qualitative research designs (Leedy & Ormrod, 2014). A researcher may choose one or more of these designs and use them creatively in his/her research. Qualitative designs are open-ended and flexible in nature enabling a researcher to use emerging procedures and methods as the research project progresses (Creswell, 2009). Despite its flexibility, qualitative design is more difficult to apply than other designs. Moreover, qualitative design is hardly applicable to investigate cause-and-effect relationships and test hypotheses (Neuman, 2007; Leedy & Ormrod, 2014).

4.3.2 Quantitative Designs

Quantitative research designs are research approaches that explain, predict and test theories and hypotheses by examining the relationships among the constructs (Creswell, 2009). The research constructs that explain the relationships are measured numerically using standardized instruments and analysed using statistical procedures. According to Leedy and Ormrod (2010; 2014), the purposes of quantitative research designs are to explain, predict, confirm or validate the relationships among research variables therefore helping to make generalizations and contribute to the existing body of knowledge.

Quantitative research designs can be categorized as experimental and non-experimental designs. The experimental method employs a positivist approach that applies more stringent causal measurement techniques compared to survey methods. This is particularly true in the context of natural science with a test of the impact of a treatment or an intervention on a research outcome through controlling other factors (Neuman, 2007; Creswell, 2014). However, the experimental method faces ethical limitations in the context of social research, such as research related to human behaviour (Neuman, 2007). In contrast to the inductive nature of a qualitative research design that is employed to build theory, quantitative research is deductive and used to explain a theory and test hypotheses (Creswell, 2009: Leedy & Ormrod 2010; 2014).

4.3.3 Mixed Method Designs

A mixed method design has a mix of both qualitative and quantitative designs in its research process. In contrast to the previous two designs, mixed method designs have emerged more recently (Creswell, 2014). They have enabled researchers to address the weaknesses of both qualitative (such as subjectivity) and quantitative designs (such as leaving information gaps). Both open-ended and closed questions, statistical and text or thematic analysis and interpretations are used under mixed method designs. By employing a mix of both qualitative and quantitative designs, mixed method designs produce more valid outcomes than any self-contained use of either qualitative or quantitative research designs would make possible (Creswell & Clark, 2011). A researcher can also evaluate three options before selecting a mixed method research design. Thus, both qualitative and quantitative designs may have similar importance in addressing a research problem, or quantitative designs may play a more important role than qualitative designs, or qualitative designs could play a better role than quantitative designs.

Based on the timing of the mixing of the two designs, mixed method designs can be divided in three major applications: the convergent parallel design, explanatory sequential design and the exploratory sequential design (Creswell, 2014). The convergent parallel design is a form of mixed design where both qualitative and quantitative designs are administered concurrently during data collection and analysis and thereafter integrated in the interpretations of the overall results (Creswell & Clark, 2011). In employing the explanatory sequential design, a researcher gives priority to the quantitative design, followed by the qualitative design to explain the results of the quantitative design further. The exploratory sequential design is the opposite of the explanatory sequential design which starts with a qualitative design. This design first collects and analyses qualitative data and then employs a quantitative design in order to arrive at a generalization.

The choice among the three alternative research designs highlighted above depends, among other things, on the nature of the research questions, objectives of the study, inclination of the researcher and data availability (Creswell, 2014). This study employed quantitative methods involving a survey design. Based on this design it investigated causes and effects through hypotheses testing. It measured the predictive effects of industry and firms on firm performance directly and indirectly by testing the mediating role of competitive advantages.

4.3.4 Survey Design

The researcher employed the quantitative approach and survey design, since this approach was appropriate to test and explain theoretical relationships and research hypotheses using statistical procedures (Creswell, 2009; 2014). As a deductive and cross-sectional study, this research investigated the relationships between the research constructs and generalized them to the entire target population. A survey design is a 'quantitative or numeric description of trends, attitudes, or opinions of a population [established] by studying a sample of that population' (Creswell, 2014: 155). This design was appropriate for the present research because of its convenience to respondents, its economic advantage and the relatively faster data collection period it made possible (Neuman, 2007; Creswell, 2009; 2014).

The researcher employed survey design to collect, analyse and interpret the relationship among industry effects, firm effects and firm performance using competitive advantage as a mediating variable. The study was a cross-sectional study with Porter's five-forces (1985; 1991; 2008) framework and the RBV (Barney, 1991) guiding the formulation of the research model, predicting industry and firm effects on the performance of financial service firms using competitive advantage as a mediating variable in the context of a developing economy, Ethiopia. The data was collected from top management and was based on the executive perceptions of industry and firm effects on the competitive advantage and performance of the respective firms.

4.3.5 Research Variables and Measurements

The research variables were developed based on Porter's five-forces (1985; 1991; 2008) framework and the RBV (Wernerfelt, 1984; Barney, 1991; Barney & Hesterly, 2010). Based on these two theoretical perspectives and other empirical research, four research variables namely firm effects, industry effects, competitive advantage and firm performance were identified with their respective sub-constructs and indicators. Firm effects and industry effects were treated as independent variables, while competitive advantage and firm performance served as mediating and dependent variables respectively. Firm effects included tangible assets, intangible assets and dynamic capability constructs and they were measured using the measurement scales (with 23 items) developed by Galbreath and Galvin (2008), Teece, *et al*. (1997), Caloghirou, *et al*. (2004) and Teece (2007; 2012). Industry effects had five variables as prescribed by Porter's five-forces model: entry barrier to newcomers (Entry), bargaining power of customers (BPCU), bargaining power of suppliers (BPS), rivalry among existing firms (RIV) and threats of substitute products (TSP). These variables were measured using 32 items adapted from the industry structure (industruct) scale originally developed by Pecotich, *et al*. (1999), Spanos and Lioukas (2001) and Galbreath and Galvin (2008).

Competitive advantage had two constructs measured, based on 12 items identified from the literature by Porter (1985; 1998; 2008), Spanos and Lioukas (2001), Li and Zhou (2010) and Wu (2010). Firm performance was measured using financial and market based performance measures (6 items) as perceived by the top managers of the financial service firms. The perceptual subjective measures were used as they are popular and can provide better insight into organizational processes and performances (Parnell, *et al*., 2006; Parnell, 2010). Subjective performance measures have been applied by many researchers (Narver & Slater, 1990; Hooley, *et al*., 2005; Morgan, *et al*., 2009) and they are as valid as objective measures (Conant, Mokwa & Varadarajan, 1990; Powell, 1996; Cano, Carrillat & Jaramillo, 2004; Carmeli & Tishler, 2004). The financial measures used ROA, profit margin (the ratio of operating profit to sales) and overall profit levels, while the market performance measurements were new customer acquisition, customer satisfaction and market share from empirically tested measures by Spanos and Lioukas (2001), Caloghirou, *et al*. (2004), Hooley, *et al*. (2005) and Morgan, *et al*. (2009).

4.3.5.1 Firm Effects

Firm effects on competitive advantage and performance were measured using its resources and capabilities as conceptualized by Barney and Clark (2007) and Galbreath and Galvin (2008). Resources and capabilities that fulfil such characteristics prescribed by Barney (1991) and Barney and Hesterley (2010) as VRIO, lead to competitive advantage of a firm. The RBV will be used to measure the effects of resources and capabilities taking into account VRIO. Although the operationalization of the RBV constructs is difficult and lack consistency (Carmeli & Tishler, 2004; Hoopes, *et al*., 2003), the researcher categorized resource constructs in terms of tangible assets (TANG) and intangible assets (INTAG), consistent with Barney's (1991) definition of resources and dynamic capabilities (DC) based on the conceptualizations of Teece, *et al*. (1997) and Teece (2007; 2012). The instruments were then adapted based on the ideas of Teece, *et al*. (1997), Caloghirou, *et al*. (2004), Galbreath and Galvin (2008) and Teece (2007; 2012) as presented below.

Tangible assets (TANG)

TANG include financial and physical assets such as real estate, financial investments (such as bonds, stocks, shares, etc.), cash reserves, cash flows, equipment, branches that can be valued and reflected in your balance sheet (Caloghirou, *et al*., 2004; Galbreath & Galvin, 2008). The measurement items are presented in Table 4.1.

Table 4.1: Measures for Tangible Assets

1	Buildings and other physical assets (such as ATM machines, real estate, etc.)
2	Cash reserves and liquidity position of my company
3	Our branches are located in best locations
4	Financial investments (e.g. in interest-bearing accounts, in company shares, in equity positions in other companies, in government instruments), cash (on hand/at bank) earned from operations
5	Raised financial capital (e.g. debt from secured bank loans, equity from the issuance of shares or bonds)

Source: Adapted from Caloghirou, *et al*. (2004) and Galbreath and Galvin (2008).

Intangible assets (INTAG)

INTAG include company reputation and image, customer service reputation, organizational structure, organizational policies and organizational culture, which are not captured in the balance sheet (Caloghirou, *et al*., 2004; Galbreath & Galvin, 2008).

Table 4.2: Measures for Intangible Assets

1	The organizational structure (i.e. the operating and reporting structure) of the company
2	The overall skills, creativity, experiences and know-how of employees of the company
3	Organizational culture such as shared organizational values, norms, beliefs, attitudes, behaviours and team spirit among employees
4	Organizational policies (e.g. recruitment, compensation, reward and training) are designed to acquire, develop and retain the human talent of the firm
5	Relationships that employees and managers have established with external stakeholders (e.g. customers, agents, suppliers, partners) for the benefit of the firm
6	The reputation and image of our company is the best in the financial industry
7	Our company has a good customer service reputation
8	Product/service reputation of our company is better compared to competitors

Source: Adapted from Caloghirou, *et al*. (2004) and Galbreath and Galvin (2008).

Dynamic capabilities (DC)

According to Teece, *et al*. (1997) and Teece (2007; 2012) DC are managerial and organizational processes that include coordination and integration, learning and reconfiguration/transformation. Based on this conceptual classification of DC, this research thus adapted the measurement scale developed by Caloghirou, *et al*. (2004) and Galbreath and Galvin (2008) in order to investigate firm effects using dynamic capability.

Table 4.3: Measures for Dynamic Capability

1	Our company has the ability to systematically monitor changes in the external environment (such as business opportunities and threats)
2	The company develops and implements business plans
3	Coordination of internal processes and operations among departments in the company
4	The company adopts modern management tools and techniques
5	The management can assign and deploy resources to introduce new products or services, improve processes and establish new branches in order to seize opportunities
6	The company has a practice of systematic 'on-the-job' training
7	The company has regular in-house training programs
8	The company has effective team-work
9	Our company responds to competitive strategic moves timely
10	Our company continuously adapts itself to shifting customer needs better than competitors

Source: Adapted from Teece, *et al*. (1997), Teece (2007; 2012), Caloghirou, *et al*. (2004) and Galbreath and Galvin (2008).

4.3.5.2 Industry Effects

Industry effects using the five forces was measured using 32 items adapted from the industry structure (industruct) scale developed by Pecotich, *et al*. (1999), Spanos and Lioukas (2001), Galbreath and Galvin (2008) and literature based on Porter (1985; 1991; 1998; 2008). The five forces i.e. entry, BPCU, BPS, RIV and TSP were applied to measure industry effects as shown below in Table 4.4.

Table 4.4: Measures for Industry Effects

Entery barriers to newcomers (Entry)	
1	In our industry, new competitors have to enter at a highly visible large scale and face or risk strong reaction from existing firms
2	New firms must spend a large amount of capital on risky and unrecoverable upfront advertising and/or for research and development
3	Large capital and/or financial resources are required for entry into our industry
4	New entrants into our industry have to spend heavily on advertisement to build their brand names and to overcome existing brand loyalties
5	Government policy and laws create difficulties and barriers to newcomers into the finance industry/business
6	Newcomers into our industry face strong retaliation by existing companies (e.g. through price cutting, promotion etc.)
7	Our company has economies of scale advantage due to huge capital, intensive advertising, many branches and large-scale operations
8	We have strong business relationships with sister companies that result in better advantage and protection from competitors
Competition/rivalry among existing companies (RIV)	
9	Competitors are many in number with almost same sizes
10	The growth rate of the industry is generally low
11	There is a lack of service/product differentiation among competing companies

12	Competition in the industry is cut-throat and each firm fights to increase its market share
13	In our industry, firms have the resources for vigorous and sustained competitive action and for retaliation against competitors
14	In our industry, advertising battles occur frequently and are highly intense
15	Competition is highly price-based (frequent price-cutting to match competitors)
16	In our industry, competitive moves from one firm have noticeable effects on other competing firms and thus incite retaliation and counter moves
Bargaining power of customers (BPCU)	
17	Customers can easily switch or change to other competitors since the customers incur low cost of switching or changing
18	There are high numbers of customers relative to companies serving in the financial industry
19	The services we sell to our customers are not unique/differentiated from our competitors
20	Customers have high negotiation power for price reduction and other benefits
21	Customers usually engage in backward vertical integration (they move to invest in the service they used to buy)
22	Customers incur high costs when they want to switch to buy from our competitors
23	Our customers are usually well-informed about the price and services of our company
Bargaining power of suppliers (BPS)	
24	The suppliers' product quality can affect the final quality in this industry's product
25	It is difficult or costly to switch suppliers of inputs/resources from one supplier to another since they sell highly differentiated products/inputs to our company
26	Industry suppliers of inputs/resources are limited or few in number
27	The suppliers of our industry's products can and do demand and gain concessions
28	Suppliers can pose threats of forward integration with our competitors
29	Suppliers are powerful to us, thus charging higher prices or reducing quality of inputs

Threats of substitute products (TSP)	
30	Our services can easily be substituted by other cheaper services
31	Customers can easily buy or use other substitute services at little or no extra cost
32	The products of the industry in which we compete have intrinsic characteristics for which it is difficult to find substitutes

Source: Adapted from Pecotich, *et al*. (1999), Spanos and Lioukas (2001) and Galbreath and Galvin (2008).

4.3.5.3 Competitive Advantage

Competitive advantage is a company's advantage over its competitor or group of competitors in a given market or industry. There are many ways in which a firm can gain competitive advantage that will lead to superior performance (Ma, 2000b). The most widely accepted means of gaining competitive advantage are cost advantage and differentiation advantage as outlined by Porter (1985). Twelve measurement items were developed to estimate the competitive advantages of financial service firms based on the literature of Porter (1985; 1998; 2008), Spanos and Lioukas (2001), Li and Zhou (2010) and Wu (2010). Top managers were requested to measure the relative competitive advantage of their firms against their competitors as indicated in Table 4.5 below.

Table 4.5: Measures for Competitive Advantage

Cost advantage (CA)	
1	Our company achieves economies of scale so as to reduce unit cost better than competitors
2	Our company has employed process innovation and automation of operations to reduce cost of service delivery
3	Our company has established and created interrelationships with sister companies and shares marketing and other costs better than competitors
4	Our company applies tight cost control mechanisms better than competitors
5	We have achieved a cost leadership position in the industry

6	The company has gained CA due to its early entry and actions or has a pioneering cost advantage better that its competitors
Differentiation advantage (DA)	
7	Our company provides more emphasis to marketing promotion and invests higher than competitors to differentiate the company and build awareness and favourable image
8	Our company provides prompt customer services (such as loan request approval/claim settlement, etc.) better than competitors
9	Our services are unique and offer superior benefits to customers
10	The company responds to market needs faster than competitors
11	The company has a better rate of new product/service innovations than competitors
12	Our branches' locations are convenient with easy access to customers, better than competitors

Source: Adapted from Porter (1985; 1998; 2008), Spanos and Lioukas (2001), Li and Zhou (2010) and Wu (2010).

4.3.5.4 Firm Performance

Firm performance was measured using top managers' perceptions of financial and marketing performance based on Powell (1996), Caloghirou, *et al*. (2004), Carmeli and Tishler (2004) and Galbreath and Galvin (2008) using structured questionnaires. Top managers were requested to rate their relative financial and marketing performance measures against their competitors based on subjective measures. The results were consistent with objective measures (Conant, *et al*., 1990; Cano, *et al*., 2004; Carmeli & Tishler, 2004). Accordingly, financial performance measurements were assets (ROA – which is a ratio of income to assets), profit margin (the ratio of operating profit to sales) and overall profit levels. The market performance measurements were new customer acquisition, customer satisfaction and market share as adapted from Spanos and Lioukas (2001), Caloghirou, *et al*. (2004), Hooley, *et al*. (2005) and Morgan, *et al*. (2009).

Table 4.6: Measures for Firm Performance

Marketing performance (MP)	
1	Rate of acquiring new customers compared to competitors
2	Level of customer satisfaction compared to competitors
3	Market share compared to competitors
Financial performance (FP)	
4	Return on assets (ROA) compared to competitors
5	Profit margins compared to competitors
6	Overall profit levels achieved compared to competitors

Source: Adapted from Spanos and Lioukas (2001), Caloghirou, *et al*. (2004), Hooley, *et al*. (2005) and Morgan, *et al*. (2009).

For the complete survey questionnaire see Appendix II.

4.4 SAMPLING METHOD AND SAMPLE SIZE

It is important to follow appropriate sampling approaches in order to achieve the expected research results. Although there is no consensus on the sample size for the partial least square-structural equation modelling (PLS-SEM), its proponents such as Reinartz, Haenlein and Henseler (2009) argue that such a model is appropriate, particularly when the sample size is small. According to Chin (1998), there are two options in determining sample size under the PLS-SEM approach using the rule of thumb of 10 times per case i.e., either the largest number of formative indicators in a construct (the largest measurement equation in a formative measurement or Model B condition) or the largest number of structural paths (the endogenous variable with the largest number of exogenous variables directing to it).

Besides the 10 times rule, sample size can be better determined by using the rule of thumb suggested by Cohen (1992) that can provide a better statistical power, subject to the outer loadings with a minimum threshold value of 0.70 (Hair, Hufit, Ringle & Sarstedt, 2014). Cohen (1992) suggested that with minimum R^2 values of 0.10, 0.25, 0.50 and 0.75 in the endogenous variables, at the significance level of 5% and at the 80% statistical power, the minimum sample sizes needed could be 147, 70, 45 and 36 respectively. The rule of thumb of 10 times per case is a general recommendation of minimum sample size that does not guarantee sufficient stability in parameter estimates (Marcoulides & Chin, 2013). Furthermore, the nature of the distribution of data, missing data, psychometric properties of the variables and the degree of relationships among variables are important factors to consider. In determining the sample size of research involving the use of the PLS-SEM strategy, the nature of data, statistical power requirement and model background are also issues to consider (Hair, Ringle & Sarstedt, 2011). Chin and Newsted (1999) assert that small sample sizes such as 20 observations cannot help to identify path coefficients with small values unless there is a large sample size that ranges from 150 to 200 observations. Similarly, Reinartz, *et al*. (2009) suggest that subject to the measurement model quality, the PLS-SEM can be used with a sample size of 100 cases, which will enable the generation of better or the same statistical power as that of the covariance-based SEM approach. Although it could be possible to use smaller sample sizes as suggested by many scholars, this study employing the PLS-SEM approach collected 215 observations in line with the recommendations of Chin and Newsted (1999) and Reinartz, *et al*. (2009).

According to the annual report of the NBE (2014/15) the total number of banks and insurance companies operating in the country were 19 and 17 respectively. Of the 19 banks, 15 were appropriate for the study as they had three or more years of performance in the business. Three of the banks were established after 2012 and thus did not have the required three years' performance data. One bank did not operate as a commercial bank, but as a development bank and was therefore not relevant to this study. Of the 17 insurance companies, 11 were used in this study. Five of them were established very recently and therefore did not have the required three years' performance data. From a total of 36 financial service firms, 27 (15 commercial banks and 12 insurance companies) were appropriate to conduct this research. Two of the banks and one insurance company are state-owned, while the rest of the banks and insurance companies operate as share companies.

All the headquarters of banks and insurance companies in Ethiopia are located in Addis Ababa. This research investigated the industry effect and firm effect on firm performance directly and indirectly using competitive advantage. Therefore, such relationships demand strategic attention by the top management of banks and insurance companies at headquarters level. As the unit of analysis can be either individuals, groups, organizations, social classes or institutions (Neuman, 2007), this study used an 'individual firm' as the unit of analysis, while the respondents were top management members at the head office level who were responsible for formulating, implementing and evaluating performances of their respective firms. Since the target population involved less than 300 top management members, a census was used to collect data from the 27 (15 banks and 12 insurance companies) financial institutions who had 287 top management members: 180 and 107 respondents from banks and insurance companies respectively. No sampling was thus done.

4.5 DATA COLLECTION AND ANALYSIS TECHNIQUE

4.5.1 Data Collection Procedure

After receiving the research cooperation letters from the University of South Africa addressed to each firm, the researcher went in person and contacted offices of presidents or CEOs in order to obtain their consent as appropriate. Upon getting their consent, the personal assistant or secretaries of presidents and CEOs, as well as additional contacts established by the researcher, were involved in distributing and collecting the questionnaires centrally. As the respondents were top management members with busy schedules, the researcher had to continuously follow-up both in person and by telephone. The questionnaires were categorized by the research constructs and each construct was defined to create further clarity. Each item in the questionnaire was rated using a 5-point response scale (Likert scale) in a continuum where the assigned values were arranged in an increasing order from 1, strongly disagree to 5, strongly agree (Meyers, Gamst & Guarino, 2006). Since the Likert scale was developed in the 1930s by Rensis Likert, it has been the most widely used in measuring opinions and attitudes in survey designs (Neuman, 2007). It was therefore the most appropriate technique to collect data about top management perceptions of industry and firm effects on performance variations of firms in the financial services industry.

The data collection was carried out in two phases. The first phase involved data collection for the pilot test, while the second phase involved data gathering for the main study. Before the pilot test, the survey questionnaire with 69 items was prepared based on a careful and thorough review of available literature. After the questionnaire construction, a one-to-one discussion was held with three bank managers and two senior executives of insurance companies who were based in their respective headquarters in Addis Ababa. This was an effort to ensure the contents was comprehensive and relevant and the structures of the questions were in order. Based on the suggestions of these executives, four additional questions were included, raising the number of items to a total of 73. Their recommendations to briefly define the dimensions of firm effect, namely TANG, INTAG and DC were also included. After incorporating the suggestions of the executives, the questionnaires were revised and piloted involving 34 top leaders of 3 banks and 2 insurance companies. The pilot survey was distributed and collected by the researcher in order to ensure timely response. The data was then analysed using SPSS to test for the reliability of each of the lower-order constructs. The SPSS outputs of the reliability results of the pilot survey

indicated that three lower-order constructs of INDUE had Cronbach's alpha values which were below the recommended threshold value of 0.70. Since Cronbach's alpha is considered as the bottom bound estimate of reliability (Chin, 2010) for a newly developed measurement scale, the item reliability score of 0.30 (Meyers, *et al.*, 2006) or 0.40 (Hulland, 1999) could be considered. As a low level of reliability could stem from wrong or poorly coined statements, some of the items that were negatively worded or lacked clarity were changed to improve the reliability of the measures. One negatively worded item was positively rephrased. The remaining measurement items of the questionnaires were retained as the minimum individual item reliability score above 0.40 was obtained. The revised questionnaires were then ready for administration in the main survey.

The second phase was the main survey during which questionnaires were distributed by the researcher. The number of the top management members of all bank and insurance companies covered in this study were identified by the researcher prior to administering the questionnaires. The selection was based on information on top management members from each firm. In some cases, recommendations from other competing institutions had been used to approach key top management participants. A contact person in each bank and insurance company was identified for subsequent follow-up and notifications for collecting the questionnaires. The questionnaires were collected with the assistance of a data collector with concurrent strict follow-up of the data collection process by the researcher. As the respondents were top management members with busy schedules, continuous reminders and follow-ups were important safeguards. Every survey questionnaire collected was checked for completeness before entry into an excel spread sheet and subsequent export into the SPSS statistical program for analysis. Out of the total 73 measurement items (as depicted in Table 5.5 in Chapter 5), 54 of them were employed for the analysis of this study. The remaining 19 items were dropped as they could not meet the minimum threshold for individual reliability.

4.5.2 Data Analysis Technique

SEM using the PLS was applied to analyse and predict the structural and measurement models of the study as discussed below.

4.5.2.1 Structural Equation Modelling

SEM is a second-generation multivariate statistical technique that measures complex relationships between one or many exogenous or independent variables with other endogenous or dependent variables (Tabachnick & Fidell, 2007; Hair, *et al.*, 2014). Although SEM has been in existence since the early 20th century, its importance has surged more particularly in the last thirty years (Hoyle, 1995). Researchers who have used univariate and bivariate analysis, are now able to analyse a set of interrelated latent variables or factors and observed or indicator variables using modern multivariate statistical techniques such as SEM, assisted by user friendly software programs (Hair, *et al*., 2014). Latent variables are defined as hypothetical constructs or factors of a study that cannot be measured directly except through observed or manifest variables indirectly. Observed or manifest or measured variables are a set of indicator variables that are used to measure and represent the latent constructs (Schumacker & Lomax, 2010).

SEM can be divided into covariance-based SEM and PLS-SEM or variance-based approaches that can be used to test and confirm theories and explain effects of an endogenous variable of a research model respectively (Hair, *et al.*, 2014). The covariance-based SEM

> … estimates model parameters so that the discrepancy between the estimated and sample covariance matrices is minimized,…
>
> … PLS-SEM maximizes the explained variance of the endogenous latent variables by estimating partial model relationships in an iterative sequence of ordinary least square (OLS) regressions… (Hair, Sarstedt, Ringle & Mena, 2012: 415).

The covariance-based SEM employs the maximum likelihood procedure to estimate path relationships. The PLS-SEM is a variance-based procedure appropriate to predict and explain variances. It is also an important approach for testing and confirming theories using both reflective and formative indicators (Chin, 1998; Gotz, Liehr-Gobbers & Krafft, 2010; Tseng, Lan, Lu & Chen, 2013).

SEM employs inferential statistical techniques and measures complex variables simultaneously to test research hypotheses (Byrne, 2010). SEM is a combination of a structural model depicting visually theoretical variables or hypothetical constructs in a path diagram and a measurement model that indicates the relationships between the constructs and the measurement variables (Haenlein & Kaplan, 2004). This study therefore used the general SEM as a data analysis technique because of its

a) ability to measure multiple relationships among latent and observed variables and test hypotheses leading to acceptance or rejection of a research model (Hoyle, 1995);
b) applicability in measuring direct and indirect relationships among the research variables thereby explaining their effects on the dependent variables: competitive advantage and performance variations of firms, and
c) increased capability to analyse complex models with many theoretical variables as in this study, which cannot be handled by other statistical methods (Schumacker & Lomax, 2010).

In a situation where a study involves examining complex and multidimensional variables, 'SEM is the only analysis that allows complete and simultaneous tests of all the relationships' (Tabachnick & Fidell, 2013: 684).

4.5.2.2 Partial Least Square Structural Equation Modelling

PLS-SEM as a component-based statistical technique is used to analyse causal linear relationships among multiple latent and manifest variables, therefore estimating variances of endogenous constructs (Vinzi, Trinchera & Amato, 2010; Henseler, Ringle & Sinkovics, 2009). PLS-SEM is viewed as an alternative model to covariance-based SEM which uses OLS multiple regressions to explain and predict variations of dependent variables as a result of the independent variables (Chin, 1998). Reinartz, *et al*. (2009), argue that PLS-SEM is a powerful statistical technique that provides robust model estimations for both normal and abnormal data distributions. They further assert that covariance-based SEM is better than variance-based SEM (PLS-SEM) when the sample exceeds 250 observations, while PLS-SEM can generate better statistical power than covariance-based SEM with a sample size of 100 observations. PLS-SEM is the preferred statistical technique to the confirmatory or covariance-based SEM tests of hypotheses (Chin, 1998; Ngo & O'Cass, 2012).

PLS-SEM is better than covariance-based SEM because of its strength in predicting or explaining structural relationships and it maximizes variances of endogenous latent variables, besides theory confirmation (Chin, 1998; Hair, *et al*., 2014).

PLS-SEM's popularity as the viable alternative to the covariance-based approach, particularly in marketing and other management fields, has been increasing (Hair, *et al*., 2012). Their survey of the top 30 marketing journals, covering the period from 1981 to 2010, reveals that the empirical application of PLS-SEM has been growing. Highlighting the increasing applications of PLS-SEM, they further indicated that 51 empirical studies that employed PLS were published in 2010 alone in the field of marketing. Moreover, its empirical application in strategy has also been increasing. For example, empirical studies on performance effects of firm and environmental influences (O'Cass & Julian, 2003); the RBV and competitive strategy (Rivard, *et al*., 2006); industry structure and organizational learning in innovation (Weerawardena, *et al*., 2006); external adaptation and internal effectiveness (O'Cass & Ngo, 2007); industry competitive intensity and marketing capabilities (O'Cass & Weerawardena, 2010); competitive strategy and structure (Pertusa-Ortega, Molina-Azorín & Claver-Cortés, 2010); industry structure, strategy type, organizational characteristics (Hajipour, Talari & Shahin, 2011); market-based knowledge resources and market orientation (Ngo & O'Cass, 2012); competitive strategy and intellectual capital (Tseng, *et al*., 2013); dynamic capabilities and performance (Wilden, Gudergan, Nielsen & Lings, 2013); dynamic capabilities on operational marketing and technological capabilities in a turbulent environment (Wilden & Gudergan, 2015) indicate the increasing applications of PLS-SEM in the field of strategy. Empirical evidence reveals that researchers in strategic management employ reflective measures more frequently than formative measures due mainly to a lack of knowledge about the technique in relation to formative models (Podsakoff, Shen & Podsakoff, 2006).

In this study, PLS-SEM was generally more appropriate as the major research objective was to predict and explain structural relationships and maximize variances of endogenous variables, and theory confirmation; to handle both reflective and formative measures of variables and analyse data with and/or without normal distribution (Chin, 1998; 2010; Hair, *et al*., 2013; 2014). Under the general framework of SEM and following the recommendations of Chin (1998; 2010),

Henseler, *et al*. (2009) and Hair, *et al*. (2014), the PLS-SEM algorithm was employed using SmartPLS software, version no. 2. SmartPLS software helps to generate output reports and evaluate path coefficients, loadings, validity and reliability, etc. The PLS-SEM involves structural and measurement model specifications, data collection and examination, PLS path estimation, measurement model assessment, the structural model evaluation, data analysis and interpretations of results and drawing conclusions (Chin, 2010; Hair, *et al*., 2014).

4.5.2.3 Structural Model Specification

The PLS-SEM consists of a structural model and a measurement model which in PLS parlance are referred to as inner and outer models respectively (Hair, *et al.*, 2010). The structural model depicts the inner relationships between constructs, while the measurement model indicates the relationship between the constructs and the manifest variables.

The SEM-PLS approach is conceptualized as a path model with relationships between constructs of a study based on theory, prior experience and knowledge (Hair, *et al*., 2014). In this framework, the relationships between the latent constructs are referred to as the structural or inner model (Hair, *et al*., 2011). The model can then be evaluated using empirical data to decide on the fit between the empirical data and the model. The structural model further displays 'the directional predictions among a set of independent or a set of dependent variables, and it permits modeling of indirect effects' (Ho, 2006: 284). The structural model is a visual path diagram that connects each hypothetical exogenous and endogenous latent construct, including mediating variables in an unidirectional manner.

The other consideration in specifying the structural model is how to determine the hierarchies or layers of major constructs and their related sub-constructs. Such layers are termed as hierarchical component models or higher-order models with many first-order or lower-order constructs, which could create a higher level of abstract second-order construct (Hair, *et al.*, 2014). Higher-order constructs are not directly related to manifest variables, but represent many constructs, which are related to other constructs (Chin, 1998). The lower-order or first-order constructs have single layer or unidimensional constructs, while a higher-order or second order construct refers to a latent

construct with two or more layers with multidimensional constructs (Becker, Klein & Wetzels, 2012; Hair, *et al.*, 2014). Even though Becker, *et al*. (2012), argue that an hierarchical relationship does not imply causality, a higher order construct causes a lower-order construct (Chin, 1998; Hair, *et al*., 2013). Modelling structural constructs using hierarchical latent constructs minimizes the complexity of a research model and advances theoretical parsimony (Hair, *et al.*, 2014).

4.5.2.4 Measurement Model Specification

A measurement model 'specifies the rules governing how the latent variables are measured in terms of the observed variables, and it describes the measurement properties of the observed variables' (Ho, 2006: 283). It defines the directional relationship and each latent construct, and its observed variables based on relevant measurement theory. Such a directional path relationship relies on two measurement models namely the reflective (Model A) and formative (Model B) measurement models (Henseler, *et al.*, 2009).

Under a reflective measurement model, a construct is considered as the cause of the indicator variables and thus the direction of the arrow goes from the latent construct to the indicator variables (Hair, *et al*., 2010). Constructs measured reflectively determine or cause their corresponding indicator variables and the indicator variables are considered as effects. According to Kline (2011) and Hair, *et al.* (2014), reflective measurement assumes that any indicator can be substituted or cancelled without affecting the meaning of the construct provided the construct has acceptable reliability. It assumes that indicators have high correlations and co-varies, and constructs are unidimensional latent variables.

Formative measurement models assume that each indicator variable causes the latent construct (Hair, *et al*., 2014). Unlike the case with reflective measures, the direction of the arrow points towards the construct which indicates that each indicator variable causes its latent variable. Formative constructs are considered as indices rather than latent variables as the items clearly conceptualize the construct (Hair, *et al.*, 2010). Formative indicators of a construct can have positive, negative or zero correlation with one another (Hulland, 1999). In contrast to reflective measures, indicator variables in formative measures are not replaceable and hardly co-vary.

The decision to use reflective or formative or a combination of the two measurements is difficult since constructs as such are not reflective or formative in nature (Hair, *et al*., 2010). The understanding is that the conceptualization of the constructs and objectives of the research determine the choice and applications of the measurements. Moreover, Coltman, Devinney, Midgle and Venaik (2008) suggest that decisions on reflective or formative measurement models depend on both theoretical and empirical considerations. According to them, theoretical considerations include the nature of the construct, direction and causality between indicators and the latent construct and the characteristics of indicators that measure the constructs. Empirical considerations include indicator inter-correlation, indicator relationships with construct antecedents and consequences, and measurement error and collinearity as summarized below.

The relationship among first-order constructs and their indicator variables and that of second-order constructs and their first-order constructs can be modelled using four types of hierarchical latent variable models namely reflective-reflective Type I, reflective-formative Type II, formative-reflective Type III and formative-formative Type IV models (Jarvis, MacKenzie & Podsakoff, 2003; Becker, *et al.*, 2012). According to Becker, *et al.* (2012), lower-order constructs using Type I measurement models are measured reflectively, while when using reflective-formative Type II models, lower-order constructs are measured reflectively and the constructs mediate the effects of the endogenous construct. The higher-order construct serves many formative lower-order constructs when Type III is applied. In the case of the Type IV model, both the lower-order and higher-order constructs are measured formatively.

Although the PLS-SEM employs both reflective and formative measures, empirical evidence suggests that the reflective measurement is the most popular and widely used model in management and other social sciences (Coltman, *et al.*, 2008). Studies using SEM generally measure constructs using reflective indicators ignoring formative measures (Chin, 1998). The availability of covariance-based SEM analysis software such as LISREL, EQS and AMOS has increased the popular acceptance of reflective measures (Diamantopoulos & Winklhofer, 2001). Given the complexity of the research model and nature of the constructs, this study employed hierarchical component models using reflective-formative measurement modelling. Following O'Cass and Ngo (2007) and O'Cass and Weerawardena (2010), all the first-order and second-

order latent constructs of firm effects, competitive advantage and firm performance of the study were measured reflectively; industry effects were measured using formative measures through its first-order sub-constructs namely entry barriers, rivalry among existing firms, bargaining power of customers, bargaining power of suppliers and threats of substitute products as these sub-constructs hardly co-vary. Based on the work of O'Cass and Weerawardena (2010), each of the five forces causes the industry effects and is measured reflectively as indicated in the proposed PLS-SEM in Figure 4.1 below.

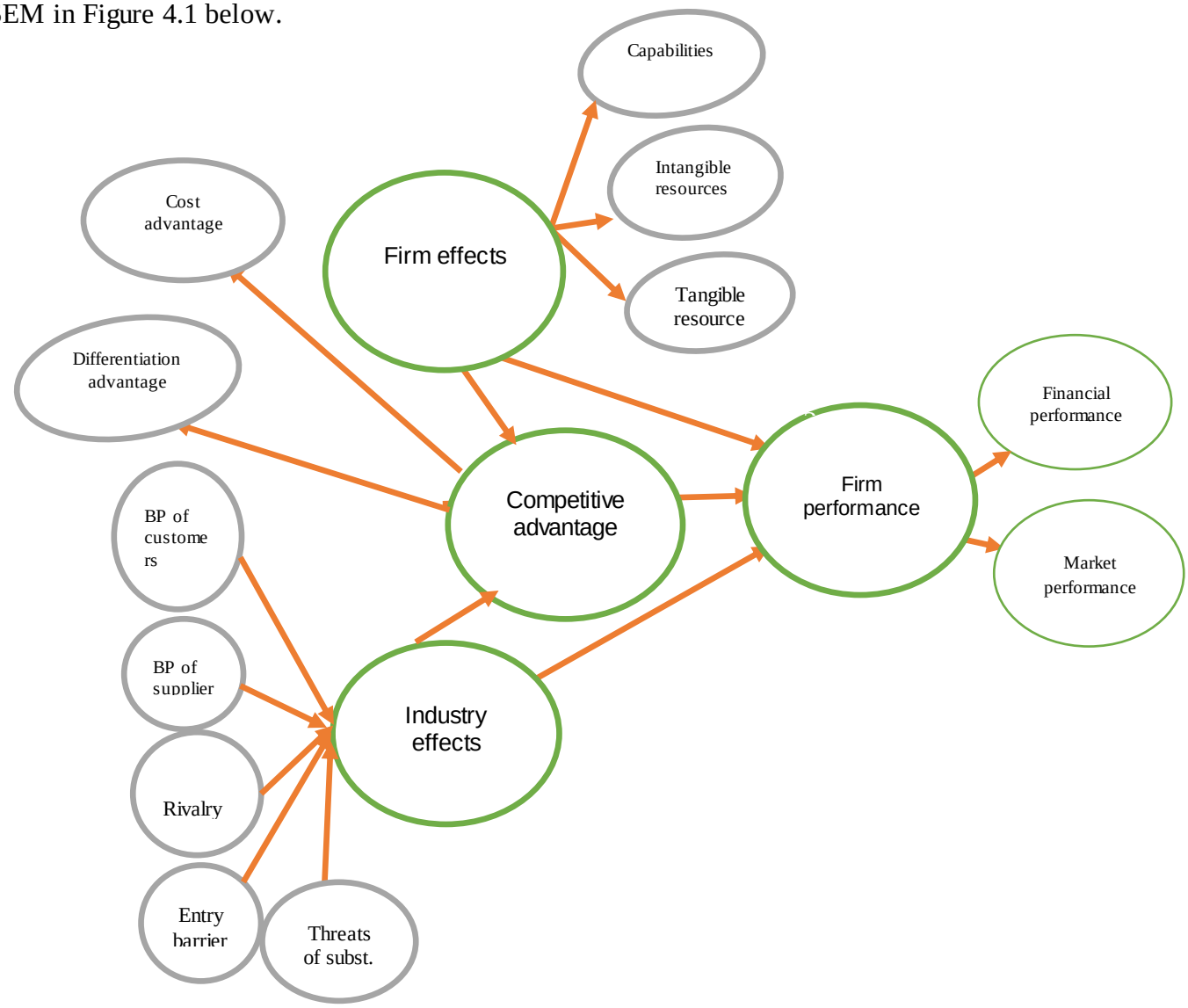

Figure 4.1: The Proposed PLS-SEM

Source: Adapted from Kim, *et al*. (2008), Galbreath and Galvin (2008), Caloghirou, *et al*. (2004), Hooley, *et al*. (2001), Spanos and Lioukas (2001), Porter (1985; 1991; 1998), Kim and Oh (2004) and Bridoux (2004).

The structural relationships of variables under the PLS-SEM path are recursive in nature, dictating unidirectional structural arrows between constructs (Hair, *et al*., 2011). The above path model indicates the hypothetical relationships among inner latent constructs and its sub-constructs represented as circles. The indicator variables are items that measure the latent constructs and their sub-constructs indirectly. The path diagram includes two error terms with circles indicating unexplained variances reflectively on both competitive advantage and firm performance (endogenous constructs).

4.5.2.5 PLS Path Model Estimation

Path model estimation involves calculating the values of latent constructs as well as the relationships between the observed variables and their constructs using simple and multiple regressions (Henseler, 2010). Based on the work of Wold (1982), Hair, *et al.* (2011), suggest two major stages of estimating a path model: iterative estimation of latent construct scores and estimates of the weights and coefficients of the structural model. The iterative estimation of latent construct scores further includes four steps: estimation of the outer scores of latent constructs, estmation of proxies for the structural model relationships between latent constructs, approximating the scores of the inner latent constructs, and estimating proxies for coefficients of the measurement midels (Henseler, *et al*., 2009; Hair, *et al.* (2011).

The estimation of proxies for structural model relationships between latent constructs involves computing outer proxy values of latent constructs using standardized linear combinations of scores of their measurement indicators and outer loadings between the construct and its measurement variables from step four of stage one indicated above (Henseler, 2010). The PLS-SEM algorithm uses standardized data inputs with z-standardization of each indicator having a mean of 0 and 1 as variance (Hair, *et al.*, 2014). As listed in above paragraph, the estimation of proxies for structural model relationships between latent constructs is the second step of stage one in which the inner weights or structural model is estimated using a path weighting scheme which minimizes the R^2 of the endogenous latent construct. This is as recommended by Hair, *et al*. (2014) for a PLS-SEM algorithm that has higher-order constructs. During this step the strength of a latent construct as related to another latent construct is estimated (Henseler, *et al*., 2009).

The inner approximation of latent construct scores involves computing the inner proxies of the latent construct scores as linear combinations of the outer proxies of their respective adjacent latent variables as stated under step one, using the inner or structural weights indicated in step two above (Hair, *et al*., 2011; 2014). The estimation of proxies for coefficients in the measurement models requires calculating the final outer weights or relationships between the measured variables and latent variables using the scores from step three above (Hair, *et al*., 2011). These estimations of latent variable scores depend on whether the model is measured in a reflective (Model A) or formative (Model B) manner. The estimation of the outer loadings of a reflectively measured construct is computed as co-variances of each latent variable and its manifest variables. The estimation of a latent construct measured formatively is calculated as outer weight using ordinary least square regression of the inner proxy of each latent construct on its respective measured variables (Henseler, *et al*., 2009; Hair, *et al*., 2011).

Unless the PLS-SEM algorithm converges and stabilizes, the four steps could be repeated. According to Hair, *et al*. (2014), the PLS-SEM estimation algorithm could be run for as high as 300 iterations until reaching the recommended threshold value or stop criteria of 1.10^5 (0.00001). At this point the sum of the outer weights that change between two iterations drops to the recommended threshold level indicating the converging of the PLS-SEM algorithm (Hair, *et al*., 2011). After reaching convergence, the final outer weights are used to apply ordinary least square regression methods to calculate the path coefficients that are structural model relationships, outer weights and loadings of each latent variable as stated under stage two above (Hair, *et al*., 2011; 2014).

Indicator variables are not directly connected with higher-order latent variables and thus do not estimate their scores (Chin, 1998; Becker, *et al*., 2012). Higher-order latent constructs are linked with many first-order latent constructs, which are in turn connected to measured indicators. According to Becker, *et al*. (2012) such types of hierarchical models with many latent constructs under PLS-SEM can be estimated by the repeated use of manifest variables (Wold, 1982), the sequential latent variable score method or two-stage approach (Wetzels, Odekerken-Schröder & Oppen, 2009) or the hybrid approach (Wilson & Henseler, 2007). The types of hierarchical models depend on the relationships between the higher-order construct and first-order constructs, and the

first-order constructs and their observed indicators (Hair, *et al.*, 2014). The nature of the relationships between higher-order and lower-order constructs should be specified as either reflective-reflective, reflective-formative, formative-reflective or formative-formative types before estimating the model.

The repeated indicator approach measures a higher-order latent construct indirectly through its lower-level constructs and their associated indicator variables. The indicator variables are used to primarily measure the first-order latent constructs and secondly same indicator variables again measure the second-order latent constructs (Wetzels, *et al.*, 2009). As a result, the indicator variables measure twice what is both the first-order and second order constructs (Becker, *et al.*, 2012). Higher-order constructs can be estimated using the indicators of the first-order constructs. Becker, *et al.* (2012: 365) summarize the hierarchical relationships as

> … having specified the outer model (measurement model) in this way, the inner model (structural model) accounts for the hierarchical component of the model, as the path coefficients between the first-order and second-order constructs represent the loadings/weights of the second-order latent variable.

The sequential latent variable score method, or two-stage approach involves the following: once the latent variable scores of lower-order constructs, in the first stage, separate from the second-order constructs are obtained, the construct scores of the first-order constructs are used to measure the higher-order constructs separately in the second-stage (Becker, *et al.*, 2012). The hybrid approach was conceptualized by Wilson and Henseler (2007) in addition to the two techniques discussed above. It involves using half of the indicator variables to compute first-order latent constructs and the remaining half to measure the second-order latent constructs. In contrast with the repeated indicator approach, the hybrid approach uses a manifest variable only once (Wilson & Henseler, 2007).

The repeated use of the indicator approach is a better approach with ease of application since it estimates all constructs simultaneously as opposed to the sequential latent variable approach (Hair, *et al.*, 2014). Although critics argue that this approach is appropriate for first-order constructs with the same number of measurement indicators, the pitfalls have not been empirically supported

(Becker, *et al.*, 2012). This study employed the repeated indicator approach based on the recommendations of Wetzels, *et al.* (2009) and Becker, *et al.* (2012). Following the suggestions of Becker, *et al.* (2012), the formative industry higher-order construct has to be measured through the total effect which is the sum of the effects on the five forces first-order constructs multiplied by the effect of these lower-order constructs on second-order industry effects. Such formative relationships between the five forces as first-order constructs and the industry effects as second-order constructs depict the relative causal influence of every single force in explaining the industry effect (Hair, *et al*., 2014). The industry effects as a second-order construct would therefore be evaluated using the manifest variables of the five forces.

4.5.2.6 Measurement Model Evaluation

Once both the measurement and structural models are estimated, the next step is to evaluate the quality of the outputs or how well a theoretical framework fits with empirical data (Hair, *et al.*, 2014). The PLS-SEM measurement evaluation depends on the types of models that are either reflective, formative or a combination of both models.

The PLS-SEM is analysed using two sequential steps: at the measurement level where the relationships between indicators and constructs are assessed using reliability and validity measures and at the structural level where the relationship among constructs are examined (Hullan, 1999). The measurement model has to be assessed before the structural model evaluation takes place. Model assessment involves estimating the applicable reliability and validity measures. Reliability or construct reliability refers to the extent to which the measure of a construct is consistent and dependable demonstrating that the measurement result does not vary due to the measurement instrument or the process itself (Neuman, 2007). The internal consistency can be evaluated using Cronbach's alpha based on the internal correlations of manifest variables and/or the composite reliability method. Cronbach's alpha is a traditional method that considers if all measurement indicators have equal loadings or reliability on their respective constructs (Henseler, *et al.*, 2009). They further assert that this method, besides its sensitivity to the number of measurement items in the scale, undermines internal consistency reliability of latent variables of PLS-SEM path models. Validity or construct validity 'refers to how well an idea about reality "fits with actual reality"'

(Neuman, 2007: 115). It is the degree to which an item or construct measures what it is supposed to measure. Construct validity can be established using theories that assess face and content validity (translational validity) or by reference to empirical evidence that measures criterion-related validity (Bhattacherjee, 2012).

The types of PLS-SEM measurement models i.e. reflective-formative determine the choices of reliability and validity measures (Henseler, *et al.*, 2009; Gotz, *et al.*, 2010). The PLS-SEM presupposes assessment of the accuracy (reliability) and validity (particularly convergent and discriminant) of measures before progressing to the next stage (Chin, 2010).

Reflective measurement is an evaluation approach in which the measurement model is conceptualized reflectively, and this is shown in arrows pointing towards each measured indictor (Henseler, *et al*., 2009). Such measurement type is affected by default through measurement errors. The assessments of reflectively measured items using the PLS-SEM include composite reliability, indicator reliability, convergent validity and divergent validity (Henseler, *et al*., 2009; Hair, *et al*., 2011).

Composite reliability measures reflective construct reliability or internal consistency through its manifest indicators (Gotz, *et al.*, 2010). Due to the limitations of the Cronbach's alpha measure of reliability, composite reliability–which does not consider equal loadings of all measurement items–is a better measure of internal consistency in the PLS-SEM evaluation (Hair, *et al*., 2011; 2014). The acceptable values of composite reliability range from 0.60 to 0.95 (Hair, *et al*., 2014). Since the reliability of each measurement item is different, the individual item reliability has to be checked. Each indicator has to have a minimum loading of 0.70 (Hair, *et al*., 2011). Hulland (1999) recommends a cut-off of 0.40 and above, while Meyers, *et al*. (2006) suggest a value as low as 0.30, particularly for a newly developed measurer. The higher the loadings, the better the reliability since the share of the error variance would be low (Reinartz, *et al*., 2009). Indicator loadings below the minimum threshold could be eliminated if the removal of an item results in raising a composite reliability value above 0.50 (Hair, *et al*., 2014). Although indicators with low level outer loadings should be deleted, such loadings could be retained as long as they are relevant to the content validity (Hair, *et al*., 2011).

Convergent validity refers to the unidimensional representation of all measurement indicators to their respective construct (Henseler, *et al*., 2009). It 'can be established by comparing the observed values of one indicator of one construct with that of other indicators of the same construct and demonstrating similarity (or high correlation) between values of these indicators' (Bhattacherjee, 2012: 59). Indicators that measure specific constructs reflectively have to converge or are expected to share variances significantly (Hair, *et al*., 2014). The outer loadings (individual reliability) and average variance extracted (AVE) are recommended measures of convergent validity. AVE measures convergent validity through the mean of the squared outer loadings of measurement indicators of their respective constructs. An AVE of 0.50 indicates sufficient discriminant validity (Hair, *et al*., 2011).

Divergent validity measures the dissimilarity of measurement items of a particular construct from those of another construct (Henseler, *et al*., 2009; Bhattacherjee, 2012). As suggested by Chin (1998; 2010) the discriminant validity of constructs assesses the uniqueness of each construct in representing a phenomenon of interest that is not captured by another construct. The methods of assessing discriminant validity include loadings of indicators and the Fornell-Larcker criterion (Henseler, *et al*., 2009; Hair, *et al*., 2011). The Fornell-Larcker criterion assesses the AVE value of each construct and compares it with the squared correlations of other constructs. The general rule of thumb to assess discriminant validity requires that the outer loading of an indicator on its construct has to be greater than its cross loadings on other constructs. The AVE value of each construct also has to be greater than its highest squared correlational value with any other construct (Hair, *et al*., 2011).

Formative measurement evaluation does not employ reliability and validity (both convergent and discriminant) measures since formative indicators do not correlate and are considered to be error-free (Chin, 1998; Diamantopoulos, 2006; Hair, *et al*., 2011). Like reflective measurement models, formative measurement models have to be assessed using their indicators' weights, loadings or redundancy analysis (Hair, *et al*., 2013; Chin, 1998). Since formative constructs are effects of their indicators, exhaustive theoretical reviews and conceptual clarity checks need to be done. Indicators identified, based on a sound review of the literature to assess formatively measured constructs, cannot be removed simply because of their insignificant statistical values as such removal could

alter the essential content of the construct (Henseler, *et al.*, 2009). The recommended measures include content validity examination to ensure that all relevant variables are theoretically supported before data collection takes effect and estimating the path model, examining collinearity and the significance of outer weights and loadings (Hair, *et al.*, 2014).

Collinearity exists when there is a strong correlation between two indicators and multicollinearity is a situation where more than two predictors are highly correlated (Meyers, *et al*., 2006). As a result of multicollinearity, the affected indicators become redundant and insignificant (Chin, 1998; Hair, *et al.*, 2011). In order to address multicollinearity problems in the formative indicators, various scholars suggest using the variance inflation factor (VIF) with a threshold value of less than 5 as a diagnostic strategy (Ringle, Sarstedt & Zimmermann, 2011; Hair, *et al.*, 2014). As suggested by Henseler, *et al*. (2009) and Hair, *et al*. (2011), the significance of outer weights and their loading of indicators should be assessed using bootstrapping procedures with a resample size of 5 000 or 1 000 at a critical t-value of 1.96, and 5% significance level (Chin, 2010).

4.5.2.7 Structural Model Evaluation

The PLS-SEM approach is conceptualized as a path model that indicates the relationships between constructs of a study based on theory, prior experience and knowledge (Hair, *et al.*, 2014). The path model that indicates the hypothesized relationships between the latent constructs is referred to as the structural or inner model. The structural model can be evaluated using empirical data to determine the correspondence between theory-based hypotheses and empirical evidence. As an added quality, the structural model 'permits modeling of indirect effects' (Ho, 2006: 284). This statistical technique is used both to test hypotheses and develop a new theory. According to Henseler, *et al*. (2009) and Hair, *et al*. (2014), a structural model can be evaluated using the following: evaluation of collinearity, path coefficients, coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2) and predictive relevance effect size (q^2) as explained below.

Collinearity evaluation

The issue of collinearity in assessing the inner model follows the same measure and procedures as the formative measurement using tolerance levels of less than 0.20 and a VIF value of 5.00 (Hair,

et al., 2014). Furthermore, any construct evaluated based on these criteria is subject to elimination, merging predictors into one or developing higher-order constructs to address the issue of collinearity.

Path coefficients

Path coefficients indicate the hypothesized relationships among latent/exogenous and endogenous constructs in the inner model with standardized values ranging from -1 to +1 indicating strong negative and positive relationships respectively. The values of the paths in the structural model have to be assessed using the algebraic signs, magnitude and significance of the relationships as stated in hypotheses a prior (Chin, 1998; Henseler, *et al.*, 2009). Bootstrapping is an important procedure to assess the significance of path coefficients and identify standard errors (Preacher & Hayes, 2008; Hair, *et al.*, 2011). The bootstrap standard error is further used to calculate the t-value at a significance level of 5% to measure the goodness of the path coefficients (Hair, *et al.*, 2014). The critical t-value for two-tailed tests is computed as the ratio between path coefficient and the standard error and this critical value has to be greater than 1.65, 1.96 and 2.58 at significance levels of 10%, 5% and 1% respectively, which indicate the acceptable magnitude of paths (O'Cass & Weerawardena, 2010; Hair, *et al.*, 2011). Similarly, a researcher can use probability (p) values to assess the relationships of a structural path model and test hypotheses (Hair, *et al.*, 2014).

Coefficient of determination (R^2)

The coefficient of determination (R^2) measures the predictive capability of the exogenous constructs on the endogenous construct in the structural model (Chin, 2010). It is the squared correlation between actual and predicted scores of an endogenous construct. In other words, R^2 measures the degree of variance of endogenous constructs, whether it is mediating or dependent. There is no acceptable level of R^2 since it varies depending on the research complexity and context of the research (Hair, *et al.*, 2013; 2014). Suggested rules of thumb for R^2 values according to Chin (1998) are 0.67, 0.33 and 0.19, labelled as substantial, moderate and weak measures respectively. Hair, *et al*. (2011) suggest endogenous construct R^2 values of 0.75, 0.50 and 0.20 in the structural model as substantial, moderate and weak respectively. Furthermore, Hair, *et al*. (2014) indicate

that a scholarly study particularly in marketing may have R^2 values of 0.75, 0.50 and 0.25 as indicative of substantive, moderate and weak values respectively.

Effect size (f^2)

Besides evaluating the inner path model using R^2, effect size (f^2) is used to assess the change in the R^2 value as a result of dropping an independent variable that can be used to estimate if the construct dropped may result in a high impact on the endogenous constructs (Chin, 2010). The change in the R^2 value by estimating the path model is computed twice with and without the exogenous construct to get R^2_{included} and R^2_{excluded} (Gotz, *et al.*, 2010; Hair, *et al.*, 2014). Effect size (f^2) is thus computed using the formula below:

$$f^2 = \frac{R^2\text{included} - \text{R}^2 \text{ excluded}}{1 - \text{R}^2 \text{ included}}$$

Where:

R^2_{included} is a determination coefficient of a latent endogenous construct when an exogenous predicting construct is included, and

R^2_{excluded} is a determination coefficient of a latent endogenous construct when an exogenous predicting construct is excluded.

Chin (2010) and Hair, *et al*. (2013) suggest values of 0.02, 0.15 and 0.35 representing small, medium and large effect sizes respectively as the threshold levels to evaluate the effects of an exogenous construct on a particular endogenous construct.

Predictive relevance (Q^2) and predictive relevance effect size (q^2)

The structural model has to be able to predict every indicator variable of an endogenous latent construct (Hair, *et al*., 2011). Q^2 tests the model's predictive validity and parameter estimates in reproducing the observed values using resampling procedures (Chin, 1998). The measure coined Q^2 by Geisser (1974) as well as Stone (1974) Q^2 is used to compute the predictive relevance of the model and the procedure applied is referred to as blindfolding (Tenenhaus, Vinzi, Chatelin & Lauro, 2005). The blindfolding procedure is a resampling technique involving omission of a

distance (d^{th}) of a particular data point of an endogenous construct's indicator, predicting the parameters using the rest of the data points (Chin, 1998; Henseler, *et al.*, 2009). The Q^2 measurement method applied using blindfolding procedures predicts the data points of an endogenous construct's indicator variables in a reflective measurement type (Hair, *et al.*, 2014). It calculates each endogenous construct's predictive relevance of a structural model by omitting every selected data point and then using this result to estimate the missing part of the parameter (Hair, *et al.*, 2012). Although there are two forms of predictive relevance measures, namely cross-validated redundancy and communality methods, Hair, *et al.* (2012) recommend the cross-validated redundancy method as it estimates data prediction based on information from both measurement and structural models. It therefore differs from the communality approach that does not include structural model data, except for construct scores. If the Q^2 value is greater than 0, it could be considered that the explanatory latent construct has predictive relevance (Henseler, *et al.*, 2009; Hair, *et al.*, 2014).

As the outcome of a cross-validation and function fitting, which assesses the predictive relevance of every construct excluding the selected path coefficient in the structural model, Q^2 is also used to calculate changes in the endogenous construct or predictive relative effect size (q^2) (Chin, 1998; 2010). In line with the effect size (f^2) estimation, the relative effects of the Q^2 can be computed using predictive relevance effect size (q^2). It is calculated using the Q^2_{included} and Q^2_{excluded}, and this result is used further to compute the q^2 value using the formula indicated suggested by Chin (1998; 2010) below:

$$q^2 = \frac{Q^2_{\text{included}} - Q^2_{\text{excluded}}}{1 - Q^2_{\text{included}}}$$

Predictive relevance effect size (q^2) considers values of 0.02, 0.15 and 0.35 as weak, moderate and strong (Hair, *et al.*, 2014).

4.5.2.8 Mediation Analysis

Mediation exists when a variable intervenes between independent and outcome variables. Analysing such an intervening variable can further result in direct and indirect effects (Fairchild & McQuillin, 2010). According to Baron and Kenny (1986) testing a mediation model using regression analysis must satisfy the following three conditions: the predictive variable must affect the mediating variable; the predictive variable has to directly influence the dependent variable; and the mediating variable should in turn affect the dependent variable. Once these assumptions are met and directions are set as initially proposed, mediation exists when the effect of the independent variable on the dependent variable is greater than the effect of both the independent variable and mediating variable on the dependent variable.

There are many approaches for testing mediating effects. The major statistical mediation tests are causal steps, product coefficients, distribution coefficients and bootstrapping (Miller, *et al*., 2007; Preacher & Hayes, 2008). The following equations apply to all of these methods (MacKinnon, 2008):

$$Y = i1 + cX + e1$$

$$Y = i2 + c'X + bM + e2$$

$$M = i3 + aX + e3$$

Where, Y = dependent variable, X = independent variable, M = mediating variable, c =refers to the total effect which links the independent variable to the dependent variable in the first equation; c'= direct effect indicates the parameter connecting the independent variable to the dependent variable when the mediator (m) is controlled; b is the path coefficient connecting the mediator to the dependent variable adjusted for the effects of the independent variable, a is the parameter linking the independent variable to the mediating variable, $e1$, $e2$, and $e3$ specify error variables and $i1$, $i2$, and $i3$ represent the intercepts.

The first equation estimates the total effect model, while the second and third equations specify the mediation or indirect effects. Total effect is the summation of direct and indirect effects. Direct effects (c') is the effect of X on Y after accounting for M. Mediation exists when a hypothesized

indirect path coefficient through a mediating variable (M) is significant (Preacher & Hayes, 2008). Mediation effect or indirect effect therefore equals the difference between the c and c' parameters, $c - c'$ (Preacher & Hayes, 2008). Similarly, mediation can always be estimated as the product of ab which is equal to $c - c'$ (MacKinnon, 2008).

Causal steps

Causal steps approach tests for mediation through the regression equations of an independent (X) variable, mediating (M) variable and dependent (Y) variable (Fairchild & McQuillin, 2010). According to them, following Judd and Kenny (1981), three steps are involved in testing mediation effects using causal steps: firstly, there has to be a significant overall effect of X on Y; secondly M should influence Y, and X has to affect M. Both path coefficients linking M and Y and X and M should be significant; and thirdly, the total effect of X on Y has to be larger than the direct effect of X on Y after a partial mediating effect. This approach fails to accommodate many mediating variables and does not compute point estimates of mediating effects (Preacher & Hayes, 2008; Fairchild & McQuillin, 2010). In addition to employing unstandardized regression coefficients that do not have statistical power and its failure to test indirect effects, causal steps depend on the assumption of distribution normality (Hair, *et al*., 2014).

Product of coefficients

The product of coefficients estimates mediation effects using the products of path coefficients of indirect effects of X on Y in a path model (Miller, *et al*., 2007). This method examines the indirect effects of individual mediators and the total indirect effects of mediating variables as the summation of the specific indirect effects (Preacher & Hayes, 2008). Using this approach

> … the mediated effect depends on the extent to which the independent variable changes the mediator and on the extent to which the mediator subsequently affects the outcome variable… (Fairchild & McQuillin, 2010: 72).

The significance test of a mediating effect can be assessed using the Sobel (1982) test, on which basis the product of the mediating path coefficients is divided by its standard error and the result has to be compared with standard normal distribution for a test of significance (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002). This approach, stemming directly from path analysis,

addresses many mediating variables and estimates both mediating effects and its standard errors. However, the product of coefficients does not assume a normal distribution of data and the testing of hypotheses is quite complex (MacKinnon, *et al*., 2002).

Difference in coefficients

This approach employs comparing the relationship between the predictor and outcome variables before and after adjusting for the mediating variable (MacKinnon, *et al*., 2002). According to MacKinnon, *et al*. (2002) various regression and correlation coefficients are compared. According to Miller, *et al*. (2007), when the regression coefficient is applied, the difference in coefficients of the total effect and the direct effect is computed. The difference in correlation coefficients is calculated by deducting the correlation coefficients between the predictor variable and the outcome variable and the mediated partial correlation coefficients between the predictor variable and the outcome variable. This approach is not well tested empirically in evaluating mediation besides its weakness to cater for estimating multiple mediators and categorical variables (Preacher & Hayes, 2008; Fairchild & McQuillin, 2010).

Bootstrapping

Bootstrapping is the resampling technique with replacements that solve multiple statistical problems using computer programs. Unlike the other methods discussed above, bootstrapping does not assume the normal distribution of data since fixed sample data can hardly be normally distributed (Preacher & Hayes, 2008). According to Hair, *et al*. (2014) testing mediating effects using the bootstrapping procedure in the PLS-SEM model involves 1) estimating direct effect significance controlling for the mediating variable in the path model; if there is a significant direct effect, then there is mediation; 2) testing the significance of the indirect effect by incorporating the mediating variable in the path model; if the indirect effect is significant, then mediation exists; 3) determining the variance accounted for (VAF) of the indirect effect by dividing the value over the total effect. VAF measures the significance of direct and indirect effects of the independent and mediating variables explaining the variances in the dependent variable. VAF percentages of less than 20% and greater than 80% are characterized as no mediation and full mediation respectively, while VAF percentage values above 20% and below 80% are considered partial mediation (Hair, *et al*., 2014). Due to its better statistical power than causal steps, bootstrapping is more appropriate

to test mediation in studies that employ distribution free PLS-SEM (Hair, *et al*., 2014; Preacher & Hayes, 2004; 2008). Furthermore, Hair, *et al*. (2013), recommend that researchers have to analyse and report both the direct and indirect effects, which add up to the total effects using bootstrapping procedures so that cause-effect relationships are clearly indicated.

Based on the recommendations outlined, this study investigated the effects of firm and industry factors on firm performance through the partial mediation effects of competitive advantage. The PLS-SEM technique was used to analyse the effects of the two exogenous latent variables on the latent endogenous construct (firm performance) directly and through the latent endogenous construct (competitive advantage) indirectly. The mediation of competitive advantage was analysed using the SPSS macro-bootstrapping procedure as recommended by Preacher and Hayes (2004; 2008) and Hair, *et al*. (2014).

4.6 RESEARCH ETHICS

The major ethical issues in this research were related to the confidentiality of data and information, strategies and policies, voluntary participation and the informed consent of respondents. Since banks and insurance companies are required by law to publish their performance, including the opportunities and challenges faced annually, confidentiality related to financial performance data was not an issue. Even though names of individual persons or firms were not included in the questionnaires, respondents could still mention their names or organizations. In this regard, respondents were advised not to mention their names or the names of their organizations in the introductory part of the questionnaires. Moreover, the researcher presented a research cooperation letter that stated the responsibility of the student as well as the university to maintain confidentiality. (See Appendix III for the research cooperation letter.) In order to solicit their voluntary participation and gain consent, each of the respondents was requested to cooperate in completing the questionnaires. Moreover, questionnaires were analysed and reported in aggregate. Anonymity was thus maintained in this thesis. The researcher had applied for and obtained an ethical clearance certificate from the University of South Africa, Graduate School of Business Leadership Ethics Committee, before proceeding to the data collection stage of the study. (See Appendix I for the Ethical Clearance Certificate.) All the reference material used and measurement items adopted in this thesis were duly acknowledged.

4.7 CHAPTER SUMMARY

In the fourth chapter, the post-positivist paradigm was identified as the ontology and epistemological framework of this research. The post-positivist paradigm was deemed appropriate since the objective of this study involved examining cause and effect relationships between two independent variables and a dependent variable, mediated by an intervening variable. Moreover, the paradigm was relevant to test and explain the hypotheses of this research. A survey questionnaire was developed, tested and administered. The unit of analysis of the study was individual firms, while respondents were top management members of 27 financial service firms (15 banks and 12 insurance companies). A census of 287 respondents was covered in the data collection, of which 215 responded and 206 of the questionnaires collected and used for analysis. Ethical issues relating to the confidentiality of the respondents' identities and views were maintained. All resources referred to were duly acknowledged.

The PLS method, a variance-based technique of SEM, was found appropriate and relevant to achieve the objective of this study. Since the major objective of this research was to analyse the perceptual predictive effects of both industry and firms on the performance of financial service firms with the mediation of competitive advantage, the PLS-SEM was more appropriate than the co-variance-based SEM approach. Its relevance to this research stemmed from its superior predictive capability of cause and effect relationships of the structural models. It was also appropriate to analyse constructs of the study that were measured both reflectively and formatively. The next chapter of the thesis presents the data analysis and results of the research.

CHAPTER 5: DATA ANALYSIS AND RESULTS

5.1 INTRODUCTION

This chapter presents the data analysis and results of the research. It particularly covers the sample characteristics and response rate using descriptive statistics, data cleaning and preparation protocols. It also discusses the measurement and structural models of the study based on the PLS-SEM approach.

5.2 SAMPLE CHARACTERISTICS AND RESPONSE RATE

The sample used in this study included 27 firms (15 banks and 12 insurance companies), operating in the financial services industry in Ethiopia. The respondents were individuals who held top leadership positions at the head office level such as presidents, vice presidents, CEOs, deputy CEOs, department directors or executives or managers who directly reported to a president, vice president, CEOs or to deputy CEOs who were in charge of formulating, implementing and evaluating performance of their companies. There were 19 banks and 17 insurance companies operating in the country. Of the 19 banks, three were state-owned, while 16 were owned privately in the form of share companies. There was one stated-owned insurance company.

The researcher did a census of all commercial banks and insurance companies that were established before 2012 since the respondents had to consider at least three years of performance data. According to the information collected, of the 19 banks, 15 of were eligible for the study. Three of the banks were established after 2012 which meant they would not have the required three year's performance data. One of the other banks did not operate as a commercial bank, but as a development financial institution and was thus ineligible for inclusion in the study. Of the 17 insurance companies, 12 were used in this study. The other five were dropped as they were established recently and would not have the required three year's performance data. A total of 27 financial institutions (15 banks and 12 insurance companies) operating in a regulated environment were therefore used to conduct the study. All the 15 banks and 11 insurance companies responded to the survey questionnaires. One insurance company did not respond.

Table 5.1: Respondents' Response Rate Summary

Financial Institutions	No of Companies Questionnaires		Percentage	Total No of Questionnaires		
	Distributed	Responded		Distributed	Collected	Response Rate
Insurance	12	11	92%	107	76	71%
Bank	15	15	100%	180	139	77%
Total	**27**	**26**	**96%**	**287**	**215**	**75%**

Of the total of 287 questionnaires distributed to the top management of these financial institutions, 215 (75%) were collected from the 15 (100%) banks and 11 (92%) insurance companies as indicated in Table 5.1 above. Of the 215 questionnaires collected 9 were discarded as they were not properly completed. A net total of 206 usable questionnaires were used for analysis.

Table 5.2: Response Rate by Names of Firms

Sr No	Name of Company	No of Questionnaires		
		Distributed	Collected	Response Rate
	Banks			
1	Bank of Abyssinia SC	10	10	100%
2	Cooperative Bank of Oromia	9	8	89%
3	Commercial Bank of Ethiopia	15	12	80%
4	Dashen Bank SC	15	11	73%
5	Awash International Bank	15	9	60%
6	Lion International Bank SC	8	6	75%
7	Buna International Bank SC	15	12	80%
8	Berhan International Bank SC	10	7	70%
9	Wegagen Bank SC	10	6	60%

10	Zemen Bank SC	12	12	100%
11	United Bank SC	13	10	77%
12	Construction and Business Bank	13	12	92%
13	Oromia International Bank	8	5	63%
14	Nib International Bank	17	11	65%
15	Addis International Bank	10	8	80%
	Insurance Companies			
1	Lion Insurance SC	10	9	90%
2	Awash Insurance SC	10	9	90%
3	Ethio-Life and General Insurance	5	4	80%
4	Nyala Insurance SC	10	8	80%
5	United Insurance SC	12	10	83%
6	Nile Insurance SC	15	13	87%
7	Africa Insurance SC	8	5	63%
8	Ethiopian Insurance Corporation	7	5	71%
9	National Insurance Companies of Ethiopia	8	3	38%
10	Nib Insurance SC	7	4	57%
11	Oromia Insurance SC	8	0	0%
12	Global Insurance SC	7	6	86%
	Total	**287**	**215**	**75%**

Of the total of 287 questionnaires distributed, 206 were used, representing a valid response rate of 71% enabling the researcher to proceed to the analysis stage (Chin & Newsted, 1999; Reinartz, *et al*., 2009).

5.3 DATA CLEANING AND PREPARATION

Following the data collection using the survey questionnaires, inspecting and verifying missing data, outliers and normality should be completed before proceeding to data analysis (Meyers, *et al.*, 2006). Accordingly, the data collected were checked for missing data, outliers and normality problems as discussed below.

5.3.1 Missing Data

Once the questionnaires were checked for their completeness and were properly encoded into the SPSS program, further analysis was done using SPSS frequency statistics before proceeding to data analysis. The missing data analysis was done based on the number of missing variables and items. Except 4 (33%) variables or cases (TANG, INTAG, DC and MP) from a total 12 variables, the remaining 8 (67%) variables had various levels of missing values ranging from 1 (0.5%) to 10 (4.85%) values as depicted in Table 5.3 below.

Table 5.3: Variable Missing Data

		TANG	INTANG	DC	Entry	RIV	BPCU	BPS	TSP	COA	DA	MP	FM
N	Valid	206	206	206	205	205	205	196	203	205	204	206	205
	Missing	0	0	0	1	1	1	10	3	1	2	0	1
Mean		3.7523	3.8569	3.6108	3.4134	3.3567	3.4569	3.0946	2.7972	3.1396	3.0645	3.3878	3.6045
Std. Deviation		.77274	.68981	.65070	.58122	.54100	.44268	.62815	.85036	.64754	.70210	.73827	.97915
Skewness		-.701	-.779	-.229	-.353	-.463	-.398	-.162	.221	-.082	-.058	-.236	-.724
Std. Error of Skewness		.169	.169	.169	.170	.170	.170	.174	.171	.170	.170	.169	.170
Kurtosis		.132	.390	-.634	-.409	.818	1.140	-.026	-.232	.130	-.477	-.667	-.177
Std. Error of Kurtosis		.337	.337	.337	.338	.338	.338	.346	.340	.338	.339	.337	.338
Minimum		1.00	1.50	1.90	1.83	1.38	1.67	1.00	1.00	1.33	1.33	1.67	1.00
Maximum		5.00	5.00	5.00	4.63	4.88	4.57	4.75	5.00	5.00	4.83	5.00	5.00

Key*: TANG: tangible asset; INTAG: intangible asset; DC: dynamic capability; ENTRY: threat of new entry; BPS: bargaining power of supplier; BPCU: bargaining power of customers; RIV: rivalry among existing firms; TSP: threat of substitute product; DA: differentiation advantage; COA: cost advantage; FP: financial performance; MP: marketing performance.*

The accepted general rule of thumb to address missing data problems in a large sample situation is to ignore the data if a single variable or case has a missing value of below 5% (Meyers, *et al*., 2006; Kline, 2011). The maximum missing data observed was in the BPS that had 10 missing cases representing 4.85% as indicated in Table 5.3 above. The 10 cases with missing values that had less than the threshold percentage of 5% were thus not sufficient to pose a threat to data adequacy.

As presented in Table 5.4 below, further analysis was done on the number of missing items in the questionnaires. Of the total of 73 items of the questionnaires, 92% had missing values of less than 5%. However, six items of the BPS had missing values ranging from 6.3% to 9.7%. Based on the suggestions of Hair, *et al*. (2014), if the missing data in a questionnaire is below 15%, it can be removed. The missing data can be ignored or replaced by its mean value if the missing data in a variable is less than 10%, occurring randomly (Hair, *et al*., 2010). They further suggest that when the extent of the missing data is small (less than 10%), the mean substitution method can be used to address the issue. Means substitution is one of the imputation techniques, despite its weakness in distorting data distribution. It is a simple, attractive and a preferred method of estimating missing data due to its conservative nature of value estimation (Tabachnick & Fidell, 2013) using SmartPLS 2.0 software (Hair, *et al*., 2010; 2014).

Table 5.4: Items Missing Values

Percentage Ranges of Missing Items	No of Missing Items	%
0%	4	5%
0.01% - 0.09%	8	11%
1% - 2%	34	47%
2.1% - 3%	14	19%
3.1% - 4%	4	5%
4.1% - 5%	3	4%
5.1% - 6%	0	0%

6.1% - 7%	3	4%
7.1% - 8%	1	1%
8.1% - 9%	1	1%
9.1% - 10%	1	1%
Total	**73**	**100%**

Given that the respondents of the questionnaires were top leaders of banks and insurance companies who had busy schedules, it was understandable that they sometimes might not have had adequate time to complete some of the items in the questionnaires. Thus, these missing values were not deliberate, but rather occurred unintentionally. Since the extent of data missing was less than 10%, following the recommendations of Hair, *et al*. (2010) and Kline (2011), the mean substitution method using SmartPLS 2.0 software was applied to address the missing data. This resulted in having 206 usable questionnaires for further analysis.

5.3.2 Outliers

The standard practice is that before running the PLS-SEM, outliers that could distort observations should be removed from the data set. They involve extreme values having a single score (univariate) or with two and above scores (multivariate) that affect the data statistics (Tabachnick & Fidell, 2013).

Univariate outliers can be detected using frequency distribution, histograms and box plots (Meyers, *et al*., 2006). If the outliers are negligible, it is possible to delete them from the data (Hair, *et al*., 2014). If the number of outliers is significant, the transformation of univariate outliers can be conducted before considering the identification of multivariate outliers (Tabachnick & Fidell, 2013). Multivariate outliers can be detected using the Mahalanobis distance (D^2) statistical measure (Meyers, *et al*., 2006; Hair, *et al*., 2010). Mahalanobis D^2 'indicates the distance in standard deviation units between a set of scores (vector) for an individual case and the sample means for all variables (centroid), correcting for inter-correlations' (Kline, 2011: 54). It measures the distance of each case from the mean of predictor variables and provides a value for an

observation among a set of observations (Field, 2009). The statistical test with a conservative *p* value of less than 0.001 can be used as the cut-off point to label data as outliers (Tabachnick & Fidell, 2013). Moreover, D^2 values divided by the number of variables (D^2/df) could be considered as t-values with the threshold values of 2.5 and 3 or 4 for small and large sample sizes respectively to be considered as outliers (Hair, *et al*., 2010). The SPSS program using frequency distribution is a useful technique to detect outliers.

As suggested by Kline (2011) and Hair, *et al*. (2010), z-score statistics and box plots were used to detect and address possible univariate outliers. Multivariate outliers were identified and handled (Meyers, *et al.*, 2006; Hair, *et al*., 2010; Tabachnick & Fidell, 2013). The Mahalanobis distance (D^2) statistical measure was employed using linear regression. Accordingly, multivariate outliers were assessed using SPSS descriptive statistics and the stem and leaf plot. The SPSS descriptive analysis indicated that there was one extreme case (case no 198) with a Mahalanobis distance of 29.76. In addition, the stem and leaf plot indicated that there were 11 extreme cases with Mahalanobis values $\geq$8.1. This showed that the Mahalanobis distance values of these 11 extreme values were less than the critical chi-square value of 115 for df 73 items at $p<0.001$. Thus all 11 extreme values were retained. It transpired that there was no significant multivariate outlier problem in the data set. (See Appendix IV for the multivariate outlier analysis.)

5.3.3 Normality

Despite the robustness of PLS-SEM under extreme data non-normal conditions, it is necessary to check for data distribution in order to improve the statistical power and minimize standard errors (Hair, *et al.*, 2012; 2014). Skewness and kurtosis are the two types of normality measures that indicate the shape of distribution of a single variable as well as many variables using statistical and graphical methods (Kline, 2011). If the values of both skewness and kurtosis are close to zero, the data are said to be normally distributed (Hair, *et al.*, 2014). It is expected that in a large sample size (greater than 200) there could be higher z-scores of skewness and kurtosis (Field, 2009). To address such problems, Kline (2011) suggests that absolute scores of skewness greater than 3.0 and a kurtosis index value greater than 10 can be considered as extreme values.

Therefore, the distribution of data normality had to be checked. The data normality was assessed using skewness and kurtosis values through SPSS frequency statistics. Seven cases (3.4%) were negatively skewed with values of between 1.00 to 1.33 and z-scores of 5.94 (DC 15) to 7.846 (BPCU 40) respectively. Besides the statistical evidence, the histogram generally indicated that the overall data were negatively skewed. Moreover, 13 cases (6.3%) had kurtosis absolute values in the range of 1.007 to 2.230 with z-scores of 3.07 (TANG 2) and 6.62 (BPCU 40) respectively. Of the 13 cases 5 (2.4%) had positive kurtosis values between 1.036 and 2.220, while the other 8 (3.9%) had negative absolute kurtosis values in the range of 1.007 to 1.299 with z-scores of 3.072 and 3.855 respectively. Following the suggestions of Kline (2011), the absolute skewness values were less than 3.0 and the kurtosis values less than 8, indicating the distributions of the data of the study were approximately normal. (See Appendix V for Skewness and Kurtosis Statistics.) Since one of the advantages of the PLS-SEM is to handle non-normal data (Chin, 1998; 2010; Hair, *et al*., 2014), such negligible departures from normality were not an issue in the analysis of this study.

5.4 EVALUATION OF THE MEASUREMENT MODEL RESULTS

The study employed a hierarchical order latent variable and repeated indicators approach as recommended by Chin (2010) and Becker, *et al*. (2012). The evaluation of the measurement or outer model involves assessing the indicator reliability, composite reliability, convergent validity and divergent validity using the PLS algorithm (Henseler, *et al*., 2009; Chin, 2010; Hair, *et al*., 2014). The PLS procedure produced the outer weights or loadings as presented in Table 5.5.

5.4.1 Individual Item Reliability

Hair, *et al*. (2011) and others recommend a Cronbach's alpha value of 0.70 as the minimum threshold outer loading value of individual item reliability. Despite this, Hair, *et al*. (2011) and Hulland (1999) suggest an outer loading value of 0.50 and above to evaluate individual item reliability when a newly developed measurement scale is used. A total of 39 items, that is the 5 (83%) measurement items of firm performance, 16 (70%) items of firm effects, 12 (38%) items of industry effect and 6 (50%) items of competitive advantage, had Cronbach's alpha values of 0.70 and above. Twelve items (16.4%) had outer loading values between 0.60 and 0.69 (three items of industry effect, three items of competitive advantage, five items of firm effects and one item of firm performance). Two items of firm effects and one item of competitive advantage had outer loading values between 0.54 and 0.59. Based on the suggestions of Hulland (1999) and Hair, *et al*. (2011), 19 outer loading items that had below 0.50 loadings were dropped, while 54 items that had 54 and above item loadings were retained for further analysis as presented in Table 5.5.

Table 5.5: Individual Item Reliability

Higher Order Constructs	Lower-order constructs	Measurement Item Reliability	
Firm Effect (FIRME)	TANG	TanG1_1	0.72
		TanG2_1	0.76
		TanG3_1	0.80
		TanG4_1	0.73
		TanG5_1	0.54
	INTANG	Intang10_1	0.74

		Intang11_1	0.79
		Intang12_1	0.75
		Intang13_1	0.69
		Intang6_1	0.61
		Intang7_1	0.80
		Intang8_1	0.80
		Intang9_1	0.71
	DC	DC14_1	0.73
		DC15_1	0.60
		DC16_1	0.73
		DC17_1	0.75
		DC18_1	0.66
		DC19_1	0.60
		DC20_1	0.58
		DC21_1	0.80
		DC22_1	0.82
		DC23_1	0.76
Industry Effect (INDUE)	BPCU	BPC43_1	0.83
		BPC44_1	0.72
	BPS	BPS47_1	0.77
		BPS49_1	0.80
		BPS50_1	0.67
	ENTRY	Entry24_1	0.63
		Entry25_1	0.77
		Entry27_1	0.72
		Entry29_1	0.72
	RIV	Rivalry33_1	0.64

		Rivalry35_1	0.71
		Rivalry35_1	0.71
		Rivalry38_1	0.81
		Rivalry39_1	0.70
	TSP	TSPS55_1	1.00
Competitive Advantage (COMPA)	COA	CA56_1	0.79
		CA57_1	0.74
		CA60_1	0.66
		CA61_1	0.67
	DA	DA62_1	0.60
		DA63_1	0.78
		DA64_1	0.77
		DA65_1	0.80
		DA66_1	0.74
		DA67_1	0.58
Firm Performance (FIRMP)	FP	FP71_1	0.91
		FP72_1	0.96
		FP73_1	0.95
	MP	MP68_1	0.84
		MP69_1	0.67
		MP70_1	0.79

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance; TANG: tangible asset; INTAG: intangible asset; DC: dynamic capability; ENTRY: threat of new entry; BPS: bargaining power of supplier; BPC: bargaining power of customers; RIV: rivalry among existing firms; TSP: threat of substitute product; DA: differentiation advantage; COA: cost advantage; FP: financial performance; MP: marketing performance*

5.4.2 Composite Reliability and Cronbach's Alpha Results

Composite reliability and Cronbach's alpha measure construct reliabilities. Some SEM scholars argue that composite reliability is better than Cronbach's alpha in terms of its accuracy as it does not take into account equal loadings or error terms among measurement variables (Henseler, *et al.*, 2009; Chin, 2010; Gotz, *et al*., 2010). Cronbach's alpha is a conservative measure of internal consistency, often serving as the lower limit while composite reliability can be used to estimate the population parameter accurately (Chin, 2010). Composite reliability, unlike Cronbach's alpha, assumes that each indicator has a different reliability or outer loading and involves actual loadings to measure a construct's reliability reflectively (Henseler, *et al*., 2009; Gotz, *et al*., 2010). It measures the internal consistency or reliability of constructs and values between 0.60 and 0.90 is the acceptable range of measurement (Hair, *et al*., 2014). All the constructs had above 0.70 composite reliabilities and Cronbach's alpha values as indicated in Table 5.6 below.

Table 5.6: Composite Reliability and Cronbach's Alpha Results

Constructs	Composite Reliability	Cronbach Alpha
INDUE	0.75	0.70
COMPA	0.86	0.80
FIRME	0.92	0.91
FIRMP	0.89	0.85

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

The outputs of the PLS algorithm depicted in Table 5.6 above, indicate all reflectively measured constructs have a composite reliability of 0.75, which is above the minimum threshold value of 0.70. The Cronbach's alpha values of this study ranged from 0.70 to 0.91 as shown in Table 5.6. A similar test of three variables of industry effect i.e. rivalry, bargaining power of customers and entry barriers measured reflectively by Tavitiyaman (2009) respectively had 0.76, 0.74 and 0.75 composite reliabilities, which were lower than the results reported in this study. Moreover, his composite reliability for financial performance was 0.77 which was much lower than the test result (0.95) of this study, indicating better reliability.

5.4.3 Construct Validity

Construct validity assesses the extent and adequacy of a measurement item as operationalized representing its construct. Validity 'addresses the question of how well the social reality being measured through research matches with the constructs researchers use to understand it' (Neuman, 2007: 115-116). It mainly includes content validity, convergent validity and discriminant validity. The content validity of the measurement items of this study was thus specified using systematic reviews of related theories a prior. Each of the constructs was conceptualized and its relationships among other constructs and its measurement items were carefully determined using related theories and empirical studies. Besides the conceptual validation of constructs, convergence and discriminant validity were empirically performed. Convergent validity measures the extent of relatedness or high degree of correlation of measures to a specific construct, while discriminant validity measures the degree of dissimilarity of measurement items from another construct. The convergent validity of this study was established using AVE, which is the mean value of indicators' squared loadings of a related construct and each indicator's reliability (Hair, *et al*., 2014). As suggested by Hair, *et al*. (2011), the rule of thumb to assess discriminant validity includes greater outer loading values of an indicator on its construct than its cross loadings on other constructs. It also provides a greater AVE value of a construct than its highest squared correlational value with any other construct. The relevant values are presented in Table 5.7 below.

Table 5.7: Average Variance Explained

Constructs	AVE
BPCU	0.60
BPS	0.56
COA	0.52
COMPA	0.51
DA	0.51
DC	0.50
ENTRY	0.50
FIRME	0.51
FIRMP	0.59
FP	0.88
INDUE*	0.11
INT	0.54
MP	0.59
RIV	0.51
TAN	0.52
TSP	1.00**

** Formatively measured construct*

*** Measured using single item*

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance; TANG: tangible asset; INTAG: intangible asset; DC: dynamic capability; ENTRY: threat of new entry; BPS: bargaining power of supplier; BPCU: bargaining power of customers; RIV: rivalry among existing firms; TSP: threat of substitute product; DA: differentiation advantage; COA: cost advantage; FP: financial performance; MP: marketing performance*

As shown in Table 5.5 earlier, all other outer loading values of the items in the measurement model had an individual indicator reliability of over 0.50 (Hulland, 1999; Hair, *et al.*, 2011). Moreover,

the computed values of AVEs for all the first-order and second-order constructs ranged from 0.50 to 0.88, meeting the minimum threshold value of 0.50 as indicated in Table 5.7 above (Hair, *et al*., 2014). Since all the values except the INDUE (Type II: reflective-formative measure) had AVE values of 0.50 and above, it indicates that the constructs were able to explain higher variances of their respective indicators. As the measurements of both the individual indicators' reliabilities and the overall AVEs had above minimum threshold values, the results suggest the presence of convergent validity for all the constructs. However, TSP being measured with one indicator, both the AVE and cross loading were not the appropriate measures as their outer loading was fixed at one (Hair, *et al*., 2014).

The discriminant validity is assessed at both indicator and construct levels. The indicators' cross loadings are shown in Table 5.8 below. Details show that all items of the indicators' loadings on their respective constructs were higher than their loadings on other constructs, showing there was no discriminant validity problem.

Table 5.8: Cross Loading of Items

Items	BPC	BPS	CA	COMPA	DA	DC	ENTRY	FIRME	FIRMP	FP	INDUE	INT	MP	RIV	TANG	TSP
BPC43_1	0.83	0.02	-0.25	-0.15	-0.04	-0.08	0.08	-0.08	-0.09	-0.02	0.52	-0.06	-0.17	0.51	0.06	0.20
BPC44_1	0.72	0.18	0.08	0.07	0.07	0.05	0.16	0.03	0.09	0.07	0.42	0.01	0.10	0.19	0.11	0.10
BPS47_1	0.04	0.77	0.18	-0.02	-0.09	-0.08	0.10	-0.02	0.10	0.07	0.32	0.00	0.11	0.08	0.04	0.09
BPS49_1	0.14	0.80	0.12	0.04	0.03	0.09	0.07	0.10	0.16	0.13	0.35	0.08	0.17	0.08	0.08	0.13
BPS50_1	0.07	0.67	0.09	0.08	0.09	0.15	0.02	0.23	0.15	0.10	0.28	0.22	0.17	0.02	0.01	0.16
CA56_1	-0.14	0.11	0.79	0.64	0.45	0.35	-0.02	0.36	0.42	0.34	-0.06	0.28	0.44	-0.14	0.17	0.00
CA57_1	-0.14	0.14	0.74	0.62	0.40	0.42	-0.01	0.45	0.31	0.24	-0.07	0.39	0.33	-0.17	0.10	0.00
CA60_1	-0.01	0.14	0.66	0.44	0.42	0.36	0.07	0.36	0.35	0.34	0.04	0.28	0.28	-0.10	0.25	0.00
CA61_1	-0.04	0.15	0.67	0.37	0.31	0.29	0.04	0.30	0.34	0.29	0.06	0.21	0.33	-0.02	0.18	-0.08

DA62_1	0.07	0.13	0.32	0.45	0.60	0.31	-0.01	0.27	0.42	0.35	0.07	0.20	0.41	-0.01	0.21	0.09
DA63_1	-0.01	-0.02	0.39	0.75	0.78	0.48	-0.07	0.54	0.47	0.40	-0.03	0.52	0.44	-0.01	0.26	0.02
DA64_1	-0.03	-0.04	0.36	0.72	0.77	0.40	0.03	0.43	0.35	0.30	0.00	0.38	0.32	-0.03	0.15	0.06
DA65_1	-0.02	-0.01	0.51	0.80	0.80	0.52	0.07	0.50	0.53	0.47	0.01	0.37	0.47	-0.04	0.18	-0.06
DA66_1	0.04	0.04	0.46	0.73	0.74	0.39	0.04	0.40	0.45	0.38	0.05	0.34	0.45	-0.02	0.13	0.18
DA67_1	0.05	0.00	0.34	0.44	0.58	0.39	-0.04	0.39	0.40	0.31	0.02	0.35	0.43	0.06	0.31	-0.05
DC14_1	-0.09	0.11	0.46	0.52	0.51	0.73	0.08	0.69	0.48	0.42	0.09	0.51	0.44	0.01	0.33	0.03
DC15_1	-0.06	-0.08	0.19	0.25	0.26	0.60	-0.17	0.48	0.28	0.24	-0.09	0.40	0.26	-0.03	0.32	-0.07
DC16_1	0.04	0.06	0.25	0.34	0.36	0.73	-0.05	0.69	0.26	0.21	0.10	0.57	0.26	0.11	0.43	0.02
DC17_1	0.01	0.10	0.48	0.49	0.46	0.75	-0.03	0.72	0.35	0.31	0.01	0.54	0.31	-0.06	0.23	-0.09
DC18_1	-0.16	0.01	0.33	0.40	0.37	0.66	0.01	0.55	0.29	0.20	-0.09	0.48	0.34	-0.15	0.33	-0.03
DC19_1	0.00	0.01	0.21	0.29	0.30	0.60	0.08	0.45	0.24	0.21	0.07	0.35	0.22	-0.02	0.25	-0.04
DC20_1	0.07	-0.01	0.37	0.39	0.35	0.58	0.09	0.47	0.25	0.21	0.10	0.41	0.24	0.08	0.34	0.03
DC21_1	-0.01	0.05	0.41	0.52	0.50	0.80	0.03	0.77	0.33	0.28	0.07	0.61	0.31	0.02	0.31	0.03
DC22_1	-0.02	0.06	0.38	0.45	0.45	0.82	0.08	0.73	0.40	0.34	0.08	0.49	0.38	0.00	0.29	-0.08
DC23_1	0.03	0.12	0.39	0.51	0.50	0.76	0.08	0.72	0.40	0.32	0.10	0.49	0.41	0.00	0.23	-0.02
Entry24_1	0.00	0.06	0.01	-0.05	-0.07	-0.04	0.63	-0.03	0.02	0.03	0.29	-0.02	0.00	0.01	0.02	0.07
Entry25_1	0.12	0.02	-0.04	0.00	0.01	0.05	0.77	0.04	-0.04	-0.03	0.46	0.02	-0.04	0.15	0.07	0.01
Entry27_1	0.05	0.09	-0.03	-0.03	-0.01	-0.05	0.72	-0.03	0.07	0.10	0.43	-0.04	0.02	0.12	-0.01	0.18

Entry29_1	0.19	0.08	0.09	0.07	0.06	0.09	0.72	0.05	0.20	0.22	0.54	0.03	0.12	0.27	0.21	0.01
FP71_1	0.06	0.10	0.35	0.46	0.48	0.39	0.14	0.35	0.83	0.91	0.17	0.26	0.50	0.09	0.28	-0.02
FP72_1	0.00	0.15	0.43	0.50	0.49	0.38	0.12	0.37	0.90	0.96	0.18	0.28	0.58	0.11	0.26	0.04
FP73_1	0.01	0.13	0.39	0.46	0.47	0.34	0.10	0.34	0.89	0.95	0.15	0.26	0.56	0.07	0.25	0.06
Intang10_1	-0.09	0.03	0.23	0.29	0.29	0.53	-0.01	0.67	0.21	0.17	0.03	0.74	0.21	0.04	0.43	-0.02
Intang11_1	-0.06	0.14	0.39	0.46	0.43	0.52	-0.01	0.73	0.40	0.30	0.04	0.79	0.44	-0.05	0.35	-0.01
Intang12_1	-0.02	0.20	0.39	0.48	0.43	0.50	0.01	0.71	0.33	0.25	0.06	0.75	0.36	-0.09	0.35	0.15
Intang13_1	-0.09	0.09	0.41	0.46	0.44	0.53	-0.02	0.68	0.28	0.19	-0.05	0.69	0.33	-0.10	0.37	0.01
Intang6_1	0.03	0.04	0.20	0.24	0.25	0.48	0.01	0.52	0.17	0.14	0.17	0.61	0.16	0.21	0.54	0.00
Intang7_1	-0.02	0.10	0.30	0.45	0.40	0.49	-0.03	0.70	0.26	0.19	0.02	0.80	0.29	0.00	0.37	0.02
Intang8_1	-0.03	0.05	0.31	0.36	0.33	0.54	0.05	0.71	0.27	0.21	0.07	0.80	0.28	0.01	0.40	0.11
Intang9_1	0.09	0.07	0.14	0.36	0.42	0.50	0.00	0.59	0.26	0.21	0.16	0.71	0.26	0.21	0.54	0.08
MP68_1	-0.10	0.17	0.39	0.44	0.44	0.38	0.03	0.37	0.66	0.43	-0.01	0.30	0.84	-0.11	0.19	0.05
MP69_1	0.00	0.24	0.35	0.54	0.54	0.41	-0.02	0.48	0.56	0.37	0.05	0.45	0.67	-0.06	0.18	0.06
MP70_1	-0.04	0.07	0.37	0.37	0.37	0.27	0.08	0.27	0.70	0.53	0.06	0.20	0.79	-0.01	0.23	-0.10
Rivalry33_1	0.29	0.07	-0.14	-0.08	-0.01	-0.05	0.13	-0.03	-0.01	0.03	0.46	0.03	-0.07	0.64	0.24	0.03
Rivalry35_1	0.30	0.07	-0.11	-0.04	0.01	0.05	0.06	0.07	0.07	0.11	0.51	0.11	-0.01	0.71	0.22	0.07
Rivalry35_1	0.30	0.07	-0.11	-0.04	0.01	0.05	0.06	0.07	0.07	0.11	0.51	0.11	-0.01	0.71	0.22	0.07
Rivalry38_1	0.41	0.03	-0.22	-0.10	-0.01	0.00	0.15	-0.02	-0.03	0.03	0.57	-0.01	-0.11	0.81	0.18	0.00
Rivalry39_1	0.35	0.08	-0.01	-0.04	-0.04	-0.02	0.26	-0.05	0.05	0.09	0.59	-0.05	-0.03	0.70	0.14	0.14
TSPS55_1	0.20	0.16	-0.02	0.04	0.06	-0.03	0.09	0.02	0.02	0.03	0.25	0.06	0.00	0.08	0.06	1.00

TanG1_1	0.04	-0.02	0.09	0.02	0.04	0.19	0.02	0.19	0.09	0.13	0.12	0.27	0.01	0.15	0.72	0.03
TanG2_1	0.08	0.01	0.15	0.17	0.19	0.28	0.10	0.35	0.17	0.18	0.16	0.45	0.12	0.14	0.76	0.03
TanG3_1	0.02	0.03	0.23	0.27	0.31	0.38	0.06	0.46	0.29	0.23	0.11	0.53	0.31	0.10	0.80	0.00
TanG4_1	0.22	0.11	0.11	0.06	0.12	0.28	0.11	0.29	0.21	0.22	0.37	0.31	0.14	0.40	0.73	0.08
TanG5_1	0.04	0.08	0.17	0.20	0.21	0.31	0.13	0.31	0.25	0.21	0.26	0.30	0.24	0.23	0.54	0.09

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance; TANG: tangible asset; INTAG: intangible asset; DC: dynamic capability; ENTRY: threat of new entry; BPS: bargaining power of supplier; BPC: bargaining power of customers; RIV: rivalry among existing firms; TSP: threat of substitute product; DA: differentiation advantage; COA: cost advantage; FP: financial performance; MP: marketing performance*

Following the recommendations of Chin (1998; 2010) and Hair, *et al*. (2014), the constructs' discriminant validities were computed using Fornell-Larcker's criteria. This involved a comparison between the square root of the AVE value of each construct and its correlations with other constructs. The square root of the AVE of each construct is shown diagonally in Table 5.9 below.

Table 5.9: Constructs' Correlations

Constructs	Competitive Advantage (COMPA)	Firm Effect (FIRME)	Firm Performance (FIRMP)	Industry Effect (INDUE)
COMPA	**0.714**			
FIRME	0.6287	**0.714**		
FIRMP	0.5979	0.4667	**0.7681**	
INDUE	-0.0207	0.0732	0.1368	**0.3316**

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

As indicated in Table 5.9 above, the square root of the AVE value of each of the constructs in the diagonal is greater than the correlation values of any of the constructs in its rows and columns, indicating the construct's discriminant validity.

5.5 STRUCTURAL MODEL EVALUATION

Since the primary goal of the PLS-SEM model, as opposed to the covariance-based SEM approach, is to predict or explain the maximization of variance explained (R^2) in the endogenous variables (Hulland, 1999; Hair, *et al.*, 2011), the global criteria for goodness-of-fit (GoF) measures as suggested by Tenenhaus, *et al*. (2005) cannot be applied. The GoF measure, which assesses reflectively measured constructs, does not evaluate research constructs that are formatively measured (Henseler & Sarstedt, 2012; Hair, *et al*., 2012). Moreover, because of the PLS-SEM's assumption of distribution-free variance, the traditional covariance-based SEM fit measures are not appropriate for model evaluation (Hair, *et al*., 2012). The major criteria to assess the quality of a variance-based structural model therefore are coefficient of determination (R^2), effect size (f^2), the predictive relevance (Q^2) and the q^2 effect size (Hair, *et al*., 2013; 2014).

This section therefore evaluates the results of the structural path model that represents the basic theoretical framework and indicates whether it could confirm the empirical data. Following Hair, *et al*. (2014) and Henseler, *et al*. (2009), the PLS-SEM results were analysed using SmartPLS 2.0 software and the structural relationships were assessed for collinearity, path coefficients, R^2, effect size (f^2), predictive relevance (Q^2) and predictive relevance effect size (q^2).

5.5.1 Collinearity Assessment

The reflective measurement or outer model constructs had robust reliabilities and validities as discussed above. Moreover, the formatively measured constructs also had acceptable levels of convergence and significant weights with minimal collinearity issues.

In this section, the two formatively measured constructs, namely industry effects and firm performance, had to be assessed for collinearity based on the suggestions of Hair, *et al*. (2014). They argue that collinearity exists in a formatively measured construct where its measurement variables co-vary due to sharing the same types of measurement information. The first collinearity assessment was made on industry effects, postulated as a second-order construct, and specified as a Type II (reflective-formative) model using the five-forces formative first-order constructs, were measured reflectively. These formative relationships indicate that the five forces, as lower-order

constructs, serve as indicative variables to measure, through the repeated indicator approach, the industry effect, which is a higher-order construct. Each lower-order construct that predicts the higher-order construct in the model has to be assessed for its collinearity. Collinearity in formatively measured constructs is checked by computing tolerance level values or the VIF using SPSS (Henseler, *et al*., 2009). The recommended rule of thumb to check for collinearity is to have a tolerance level value of above 0.20 and VIF value lower than 5.0 (Hair, *et al*., 2014). Henseler, *et al*. (2009) argue that a VIF value higher than 10 suggests collinearity problems.

The tolerance level or VIF value indicates the extent of variance of an indicator that is not accounted for by the remaining indicators in the same construct of a formative model. A formative indicator that has multicollinearity problems should be deleted if

> … the level of multicollinearity is very high (as indicated by a VIF value of 5 or higher), the indicator's formative measurement model coefficient (outer weight) is not significantly different from zero, and the remaining indicators sufficiently capture the domain of the construct under consideration (Hair, *et al*., 2011: 147).

Following the suggestions of Hair, *et al*. (2014) and Marcoulides and Chin (2013), the coefficient of every lower-level construct (five forces) that causes the second-order (INDUE) construct was then assessed for multicollinearity using the SPSS based regression analysis. Multiple linear regression analysis was performed using SPSS to evaluate the significance levels of collinearity issues on each of the five forces as a predictor of INDUE as indicated below in Table 5.10.

Table 5.10: Collinearity Diagnosis and t-values and *p* value of the Five Forces (first-order constructs) on INDUE (second-order construct)

The Five Forces (first-order constructs) on INDUE (second-order construct)					
Construct	Beta	t	Sig	Collinearity Statistics	
				Tolerance	VIF
BPC	0.300	13.296	0.000	0.749	1.335
BPS	0.270	13.589	0.000	0.962	1.040
RIV	0.526	23.491	0.000	0.761	1.315
TSP	0.075	3.726	0.000	0.936	1.069
ENTRY	0.374	18.705	0.000	0.953	1.049

Key*: ENTRY: threat of new entry; BPS: bargaining power of supplier; BPC: bargaining power of customers; RIV: rivalry among existing firms; TSP: threat of substitute product*

The second assessment of collinearity was done on the inner model using tolerance levels and the VIF. To this end, the PLS-SEM scores were exported into SPPS to run linear multiple regression analysis and assess for multicollinearity firstly on the FIRME and INDUE as predictors of COMPA and secondly the effects of FIRME and INDUE on FIRMP as indicated in Tables 5.11 and 5.12 respectively.

Table 5.11: The Regression Coefficients and Multicollinearity Results of Firm Effects, Industry Effects and Competitive Advantage on Firm Performance

Construct	Beta	Collinearity Statistics	
		Tolerance	VIF
FIRME	0.13	0.598	1.672
INDUE	0.14	0.985	1.016
COMPA	0.52	0.599	1.670

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage*

Table 5.12: The Regression Coefficients and Multicollinearity Results of Firm Effects and Industry Effects on Competitive Advantage

Construct	Beta	Collinearity Statistics	
		Tolerance	VIF
FIRME	0.63	0.996	1.004
INDUE	-0.08	0.996	1.004

Key*: FIRME: firm effect; INDUE: industry effect*

As depicted in Tables 5.11 and 5.12 above all tolerance levels (above 0.20) and VIF (less than 5) were below and above the threshold values respectively, indicating that there is no significant level of collinearity between each set of predictor variables.

5.5.2 Path Coefficients

The hypothesized structural relationships among constructs in the inner model were examined using the PLS algorithm and bootstrapping. The values of the standardized path coefficients were estimated using the PLS algorithm to determine the directions, signs and significance of the structural relationships (Chin, 1998; Henseler, *et al*., 2009). The significance tests for each of the path coefficients of both the reflective and formative models were assessed using bootstrapping of 206 observations with 1 000 resampling procedures as suggested by (Hair, *et al*., 2013; 2014). Table 5.13 below presents the significance of the structural path coefficients of all first- and second-order constructs used to calculate the mean, standard deviation, standard error and t-values.

Table 5.13: Significance Test Results of the Structural Model

Constructs	Measurement Model	Path Coefficient	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics
First-order Constructs						
FIRME -> TANG	Reflective	0.48	0.50	0.06	0.061	7.77***
FIRME -> INTAG	Reflective	0.91	0.91	0.02	0.018	50.47***
FIRME -> DC	Reflective	0.90	0.91	0.02	0.018	50.58***
ENTRY -> INDUE	Formative	0.45	0.40	0.18	0.180	2.47***
BPCU -> INDUE	Formative	0.27	0.23	0.08	0.082	3.25***
BPS -> INDUE	Formative	0.30	0.31	0.17	0.169	1.78**
RIV -> INDUE	Formative	0.50	0.43	0.17	0.171	2.89***
TSP -> INDUE	Formative	0.06	0.05	0.08	0.078	0.83
COMPA -> COA	Reflective	0.75	0.75	0.05	0.050	15.15***
COMPA -> DA	Reflective	0.93	0.93	0.01	0.013	71.55***
FIRMP -> FP	Reflective	0.93	0.93	0.02	0.015	63.12***
FIRMP -> MP	Reflective	0.84	0.84	0.03	0.029	29.01***
Second-order Constructs						
FIRME -> FIRMP	Formative	0.13	0.13	0.11	0.111	1.12+
INDUE -> FIRMP	Formative	0.14	0.12	0.14	0.135	1.16+
FIRME -> COMPA	Formative	0.63	0.62	0.08	0.082	7.75***
INDUE -> COMPA	Formative	-0.07	-0.045	0.16	0.163	0.41+
COMPA -> FIRMP	Formative	0.52	0.49	0.11	0.11	4.66***

Notes: *** t-value >1.96, ** t-value >1.65., *1.28 at p<.10, + not significant.

Key*: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance; TANG: tangible asset; INTAG: intangible asset; DC: dynamic capability; ENTRY: threat of new entry; BPS: bargaining power of supplier; BPCU: bargaining power of customers; RIV: rivalry among existing firms ; TSP: threat of substitute product; DA: differentiation advantage; COA: cost advantage; FP: financial performance; MP: marketing performance*

Table 5.13 demonstrates that the loadings of reflectively measured first-order constructs had a minimum path coefficient value of 0.48 and a maximum value of 0.93, while the formative first-order construct measures had path weights ranging from 0.06 (single measure) to 0.50. The path coefficients of all higher-order constructs had weights ranging from -0.07 to 0.63. The results of the directions and algebraic signs of all constructs except INDUE-FIRMP (positively related) were estimated in line with the hypothesized relationships originally postulated. The hypothesis of the actual INDUE-FIRMP relationship was reported as positive as shown in Table 5.13 above.

The empirical t-values presented in Table 5.13 indicated that direct effects of all the independent constructs on their respective dependent variables except BPS -> INDUE, FIRME -> FIRMP, INDUE -> FIRMP, and TSP -> INDUE, that had greater critical values than the theoretical threshold value of 1.96 at the 5% significance level, while BPS -> INDUE had a t-value higher than 1.65% at the 90% confidence interval for two-tailed statistics. The relationships of FIRME -> FIRMP, INDUE -> FIRMP, TSP -> INDUE and INDUE -> COMPA, did not have significant t-values. The greater majority of the path coefficients of the model were statistically significant and consistent as postulated in the hypothesized model a priori, indicating the quality of the structural model.

As suggested by Hair, *et al*. (2014), the structural model standardized path coefficients should also be evaluated by comparing them. The purpose of assessing the path coefficient is to determine the degree of association or significance between exogenous and endogenous constructs. The higher the path coefficient, the greater its direct effect in predicting an endogenous construct. It was found that FIRME had a 0.63 beta value on COMPA, followed by the effect of COMPA on FIRMP with a path coefficient value of 0.52. FIRME on FIRMP and INDUE on FIRMP had relatively less direct effect with beta values of 0.13 and 0.14 respectively. The lowest effect (-0.07) was generated on the path between INDUE and COMPA, which indicates that INDUE has the lowest magnitude to explain COMPA.

Under the formatively measured construct (INDUE), the four paths linking RIV, entry of newcomers, BPS, and BPCU with INDUE (endogenous higher order construct) had beta values of

0.50, 0.45, 0.30 and 0.27 in their order of importance respectively as indicated in Table 5.13 above and Figure 5.1 below.

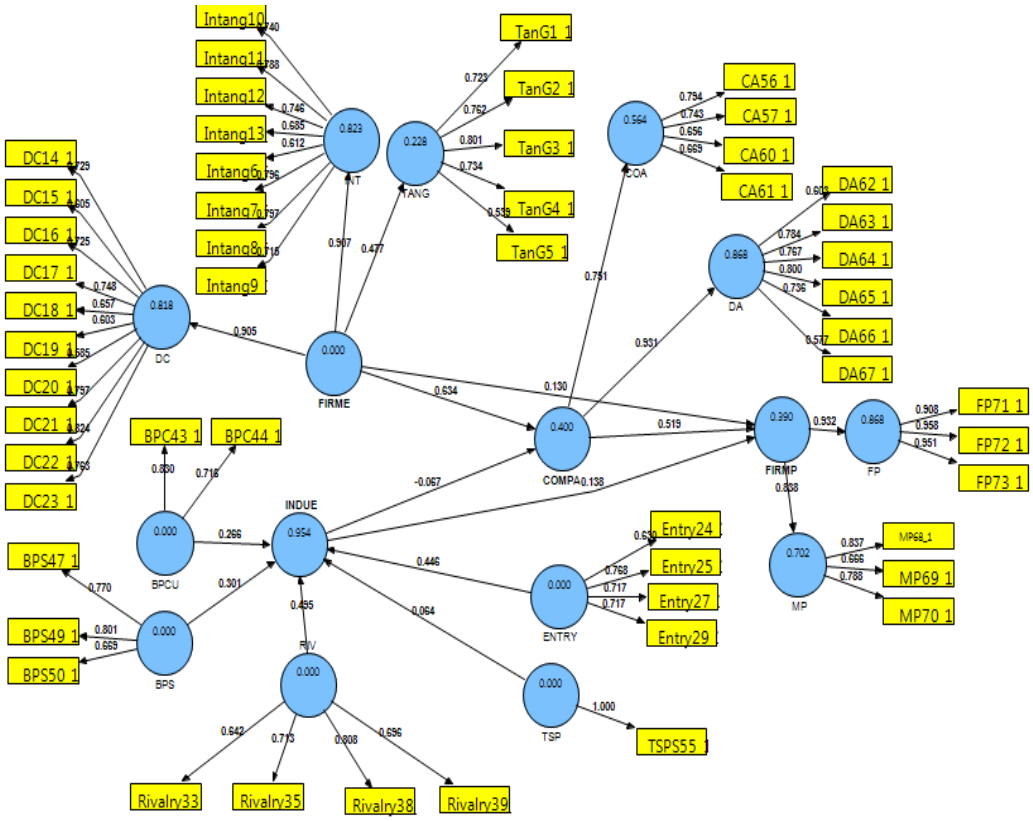

Figure 5.1: Path Coefficients

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance; TANG: tangible asset; INTAG: intangible asset; DC: dynamic capability; ENTRY: threat of new entry; BPS: bargaining power of supplier; BPCU: bargaining power of customers; RIV: rivalry among existing firms; TSP: threat of substitute product; DA: differentiation advantage; COA: cost advantage; FP: financial performance; MP: marketing performance*

5.5.3 Direct, Indirect and Total Effects

The relationships among variables specified in the structural model involved direct and indirect effects that add up to total effects. Total effect is the summation of direct and indirect effects (Tabachnik & Fidell, 2013). A direct relationship represents the path that connects an independent variable and the dependent variable adjusting for a mediating factor. An indirect relationship exists when the independent variable is related to the dependent variable through a mediating variable. In evaluating the structural model quality, total effect is preferred to direct effect to assess the relationships of constructs since its size remains somehow constant with a bigger size compared to the direct effect which declines and becomes insignificant when an indirect relationship is added into the model (Henseler, *et al.*, 2009).

The relationship between FIRME-COMPA, INDUE-COMPA and COMPA-FIRMP represented direct relationships, while FIRME-FIRMP and INDUE-FIRMP had both direct and indirect relationships. The results of direct, indirect and total effects of these constructs are summarized below in Table 5.14.

Table 5.14: Summary of Direct, Indirect and Total Effects

Path	Direct Effect (β)	Indirect Effect (β)	Total Effect (β)
FIRME-COMPA	0.63		0.63
INDUE-COMPA	-0.07		-0.07
FIRME-FIRMP	0.13	0.33	0.46
INDUE-FIRMP	0.14	-0.04	0.10
COMPA-FIRMP	0.52		0.52

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

Although the direct effects of both FIRME and INDUE on FIRMP were not strong, the overall total effect of FIRME on FIRMP with the indirect effect of COMPA was quite strong. This result demonstrates that the relationship between FIRME and FIRMP was significantly mediated by COMPA. When the indirect effect of COMPA was added to INDUE, the total effect decreased, suggesting that INDUE to FIRMP is not mediated by COMPA. The total direct effects of the exogenous higher-order constructs in the structural path model on predicting both endogenous

latent constructs namely FIRME and INDUE on COMPA, and FIRME and INDUE on FIRMP, and COMPA's effect on FIRMP were assessed using the bootstrap procedure. The outputs of the bootstrapping in Table 5.15 below indicated that the total effect of COMPA-FIRMP, FIRME-COMPA and FIRME-FIRMP had a critical t-value of 2.58 at less than 1% level of significance for a two-tailed test, i.e. above the recommended threshold. However, the total INDUE effect on FIRMP was not significant.

The total effect of FIRME on COMPA was the highest (t=7.75, p<0.001) followed by FIRME's predictive impact on FIRMP (t=5.33, p<0.001). COMPA also had quite a high impact on FIRMP with a significant t-value (t = 4.66, p<0.001) as shown in Table 5.15 below. Even though the direct effect of FIRME on FIRMP (t = 1.12) was not significant, its total effect on FIRMP was highly significant (t = 5.33). These results therefore met the first conditions of mediation between FIRME and FIRMP. The direct effects of INDUE on COMPA and INDUE on FIRMP were not significant.

Table 5.15: Significance Test Results of Direct and Total Effects

Path	Direct Effect (β)	T Statistics	Sig level	Total Effect (β)	T Statistics	Sig level
COMPA -> FIRMP	0.52			0.52	4.66	***
FIRME -> COMPA	0.63			0.63	7.75	***
FIRME -> FIRMP	0.13	1.12	NS	0.46	5.33	***
INDUE -> COMPA	-0.07			-0.07	0.41	NS
INDUE -> FIRMP	0.14	1.16	NS	0.10	0.58	NS

Note: ***p<0.001, NS: not significant

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

The indirect effects of FIRME and INDUE on FIRMP are further discussed in the mediation analysis section 5.5.8.

5.5.4 Coefficient of Determination (R^2)

The coefficient of determination (R^2) assesses the predictive power of the endogenous constructs in the structural model (Chin, 1998; 2010). The inner model of the study was examined based on Chin's (1998) cut-off of R^2 values of 0.67, 0.33 and 0.19 to estimate the predictive power of endogenous latent constructs as substantial, moderate and weak respectively. As presented in Table 5.16, there were three endogenous variables namely FIRMP, COMPA and INDUE with R^2 values of 0.39, 0.40 and 0.95 respectively. The R^2 values of FIRMP (0.39) and COMPA (0.40) were higher than the recommended moderate threshold value of 0.33 (Chin, 1998). Both R^2 values moderately explained their latent endogenous constructs. The five forces (first-order constructs) that measured the INDUE formatively, substantively explained the construct with an R^2 value of 0.95 in line with the criterion set by Chin (1998) and Hair, *et al*. (2011; 2012). As suggested by Henseler, *et al*. (2009), when an endogenous higher-order construct is measured by many exogenous constructs, the value of R^2 should be substantial, which lends support to the R^2 value of INDUE. The overall R^2 values indicated that the structural model path coefficients were robust in predicting and explaining the endogenous constructs.

5.5.5 Effect Size (f^2)

In addition to R^2, the structural path model was evaluated using effect size (f^2) to assess changes in the R^2 values and estimate the effect of every exogenous construct on the endogenous construct (Chin, 2010) using the formula indicated below:

$$f^2 = \frac{R^2_{included} - R^2_{excluded}}{1 - R^2_{included}}$$

As suggested by Chin (2010) and Hair, *et al*. (2013), the values for f^2 of 0.02, 0.15 and 0.35, which represent small, medium and large effect sizes respectively, were used as threshold levels to assess the predictive power of every exogenous construct on the endogenous construct.

Table 5.16: Predictive and Relative Predictive Power (R^2 and Effect Size)

		Endogenous Constructs	
		COMPA	FIRMP
Constructs	R^2	f^2	f^2
FIRME		0.65	0.02
INDUE		0.01	0.03
COMPA	0.40		0.27
FIRMP	0.39		
INDUE	0.95		

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

As summarized in Table 5.16 above, the predictive effect size of FIRME on COMPA was the largest with an f^2 value of 0.65. In contrast, the effect size of INDUE on COMPA was 0.01, which was small (0.02) and below the minimum threshold. This result indicates that firm effect is the only factor that influences competitive advantage while the role of industry effect in affecting competitive advantage was not significant.

Moreover, the f^2 value of FIRMP was estimated by dropping each of the exogenous variables i.e. FIRME, INDUE and COMPA. The PLS algorithm was run twice with and without each of these exogenous constructs in order to generate the changes in the R^2 values. The values of R^2 were then applied in the f^2 formula to calculate the f^2 values. The computations of the f^2 values of FIRME on FIRMP, INDUE on FIRMP and COMPA on FIRMP were estimated as 0.02, 0.03 and 0.27 respectively. The impact of FIRME on FIRMP was at the minimum predictive threshold value of 0.02. The predictive effect size of COMPA on FIRMP (0.27) was way above the medium threshold value of 0.15, while the effect of INDUE on FIRMP had an f^2 value (0.03) higher than the recommended value of 0.02. The results of the PLS estimation of predictive effect sizes in general showed that competitive advantage had the highest impact, followed by the low effect level of industry on firm performance.

5.5.6 Predictive Relevance of the Model - Q^2

Predictive relevance (Q^2) measures the model's capability in the prediction of endogenous constructs measured reflectively using a blindfolding algorithm of SmartPLS 2.00 software (Henseler, *et al*., 2009; Hair, *et al*., 2014). The predictive power (Q^2 values) of each exogenous variable on the endogenous variables was computed using the suggestions of Stone (1974) and Geisser (1974) through blindfolding procedures (Chin, 2010; Hair, *et al*., 2014). According to Chin (2010) the value of Q^2 of a particular construct greater than zero indicates that the model has properly reproduced the manifest values specifying its predictive relevance.

Table 5.17: The Predictive Relevance Q^2 Value

Endogenous Constructs	Q^2
COMPA	0.20
FIRMP	0.23

Key: *COMPA: competitive advantage; FIRMP: firm performance*

The predictive relevance of this model was assessed for the two endogenous variables, namely COMPA and FIRMP that were reflectively measured using the blindfolding procedures following the suggestions of scholarly experts (Chin, 2010; Hair, *et al*., 2012). The Q^2 results of COMPA and FIRMP as shown in Table 5.17 above were 0.20 and 0.23 respectively. These values were above the threshold value of zero, confirming the predictive power of the model.

5.5.7 Q^2 Effect Size - q^2

The relative effect of the Q^2 was computed using the predictive relevance effect size (q^2). It is used to estimate changes in Q^2 values and measure the relative effects of the inner or structural model on indicators of a particular endogenous latent variable (Chin, 1998; 2010) using the formula indicated hereunder:

$$q^2 = \frac{Q^2_{included} - Q^2_{excluded}}{1 - Q^2_{included}}$$

The predictive relevance effect size values of competitive advantage and firm performance were computed and compared against the recommended threshold values of 0.02, 0.15 and 0.35, which represent weak, moderate and strong predictive relevance (Hair, *et al.*, 2014). A blindfolding procedure was applied to estimate the Q^2 included values of the two endogenous variables. This was followed by running the same procedure to determine the Q^2 excluded values for every exogenous variable without the presence of the related predictor variable. As indicated earlier, both the Q^2 included and excluded values were used in the q^2 formula to calculate the value of q^2 of every structural path connected to the endogenous variable. The results of the q^2 values are presented in Table 5.18 below.

Table 5.18: The Predictive Relevance Effect Size (q^2)

	Endogenous Constructs	
	COMPA	**FIRMP**
Constructs	q^2	q^2
FIRME	0.25	0.01
INDUE	-0.01	0.02
COMPA		0.12

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage*

As depicted in Table 5.18 above, the relative predictive relevance (q^2) values of FIRME on COMPA and COMPA on FIRMP were 0.25 and 0.12 respectively, indicating higher than the recommended threshold values of 0.15 (moderate) and 0.02 (weak) respectively. COMPA's relative predictive relevance on FIRMP (0.12) was close to the moderate value of 0.15. Moreover, INDUE's relative predictive relevance was 0.02, meeting the minimum threshold value of 0.02. The q^2 values of INDUE on COMPA and FIRME on FIRMP had lower values than the recommended minimum threshold value of 0.02.

5.5.8 Mediation Analysis

Mediation analysis involves decomposing the effects of direct and indirect relationships of a predecessor of a particular dependent variable (Edelman, *et al.*, 2005). The PLS mediation analysis, particularly using the bootstrapping approach, involves estimating the: a) significance of overall direct effect controlling for the mediating variable; b) significance of the indirect effect when the mediating variable is incorporated in the path model; and c) the VAF (Hair, *et al*., 2014). Moreover, the value of the total effect on the endogenous variable should be larger than that of the value of the direct effect when the mediating variable is included (Fairchild & McQuillin, 2010).

Following the suggestions of Preacher and Hayes (2008) and Hair, *et al*. (2014) the partial mediating effect of the competitive advantage on firm performance was computed using the bootstrapping procedure. Hair, *et al*. (2013) state that in estimating a PLS-SEM model, the bootstrapping procedure, which does not assume normal distribution, is appropriate to assess both the direct and indirect effects that result in the total effects. The significance of the direct effect of each of the FIRME and INDUE, controlling for competitive advantage as the mediating variable in the path model, was then estimated. The significance of the indirect effects of both FIRME and INDUE, when COMPA is included as a mediating variable, was also computed. Finally, the VAF of the indirect effect as a measure of the significance of direct and indirect effects of the exogenous constructs and the mediating variable was assessed to predict the variances of the firm performance.

Based on Chin's (2010) directions, the following two steps of the bootstrapping procedure using 1 000 resamples were applied to test for the mediation effects of COMPA on FIRMP using FIRME and INDUE. A 95% percentile bootstrap confidence interval was applied. Moreover, as suggested by Hair, *et al*. (2013; 2014) a two-tailed t-test critical threshold value of 1.65, 1.96 and 2.58 at 10%, 5% and 1% levels of significance were respectively used to assess the direct effects. The outputs of the bootstrap that include significance levels of direct and indirect effects at the 95% confidence interval are shown below in Table 5.19.

Table 5.19: The Significance of the Total Effect on the Mediation Effect

Path	Total Effect (β)	T Statistics	Sig level
FIRME -> FIRMP	0.46	5.33	***
INDUE -> FIRMP	0.10	0.58	NS

Source: PLS algorithm and bootstrapping output.

Note: *** p<1%, NS = Not significant

Key: *FIRME: firm effect; INDUE: industry effect; FIRMP: firm performance*

Table 5.19 depicts that when COMPA as a mediating variable was controlled, the total direct effect of FIRME on FIRMP was significant, meeting the first criterion of mediation analysis as specified by Preacher and Hayes (2008) and Hair, *et al*. (2014). The total effect of INDUE on FIRMP was not statistically significant due the low value of the path coefficient that connected INDUE to COMPA. This relationship could therefore not meet the conditions of mediation. Thus, while FIRME-COMPA-FIRMP qualified, INDUE as a causal variable relating to COMPA did not meet the mediation criteria.

The next mediation procedure was to test the significance of the indirect effects as suggested by Preacher and Hayes (2008) and Hair, *et al*. (2014). The analysis involved computing both the direct and indirect path coefficients of FIRME on FIRMP using the PLS algorithm. The t-value and significance was estimated through bootstrapping procedures as presented in Table 5.20.

Table 5.20: Simple Mediation using both FIRME and INDUE as Independent Variables, COMPA as Mediating and FIRMP as an Outcome Variable

The indirect path	Path Coefficients (β)			t-value			Hypothesis
	A	b	c’	a	b	c'	
FIRME-COMPA_FIRMP	0.63	0.52	0.13	7.75***	4.66***	1.12+	Path a and b are supported, while c’ was not supported
INDUE-COMPA-FIRMP	-0.07	0.52	0.14	0.41+	4.66***	1.16+	Path b is supported, while c’ is not supported

*** P<0.001); + = Not significant

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

The direct path coefficients that connected FIRME to COMPA (a=0.63) and COMPA to FIRMP (b = 0.52) were quite significant with t-values of 7.75 and 4.66 at p<0.001 respectively. The indirect effects of FIRME on FIRMP through COMPA (a*b) was 0.33 using the path coefficient method (Preacher & Hayes, 2008) as indicated in Table 5.14. FIRME had a lower path coefficient on FIRMP with no statistical significance (β = 0.13 t = 1.12) when controlling the mediating variable - COMPA as shown in Table 5.20. Even though the direct path weight of FIRME on FIRMP was weak and not significant, FIRME was an important and relevant construct in predicting FIRMP through the mediation of COMPA. As suggested by Hair, *et al.* (2014) such weak relationship between FIRME on FIRMP should be retained as its effect is relevant for a partial mediation to exist through COMPA. The direct effect of industry on firm performance was positively related, contrary to the stated hypothesis, with no statistical significance (β = 0.14, t = 1.16). INDUE also did not have a significant direct effect on COMPA; hence it failed to meet the first requirement of mediation.

As indicated in Table 5.20, both paths, FIRME-COMPA and COMPA-FIRMP, had significant relationships which fulfilled the second condition of mediation analysis. The third step to test for mediation effects was to calculate the indirect effect (which equals a*b) of FIRME on FIRMP through COMPA. As recommended by Preacher and Hayes (2004; 2008) and Hair, *et al*. (2014), bootstrapping, a non-parametric resampling procedure that does not assume normal distribution of sample data, yields better statistical power than the Sobel (1982) test approach. Besides addressing the problem of the normal distribution of data, bootstrapping provides accurate confidence intervals to test for mediation effects (MacKinnon, Lockwood & William, 2004).

The SPSS macros (Preacher & Hayes, 2004a) and bootstrap were thus appropriate and applied to test mediation effects in the PLS-SEM model. The direct and indirect standardized path coefficient outputs of the independent, mediating and dependent variables, the FIRME-COMPA-FIRMP from the PLS algorithm, were exported to SPSS macros with a bootstrap resample size of 1 000 at the 95% level of confidence. The SPSS macros produce unstandardized regression coefficients to test for mediation as suggested by Baron and Kenny (1986). The lower and upper level bootstrap confidence intervals were computed and the indirect effect of FIRME on FIRM was checked using the SPSS bootstrap macro as shown in Table 5.21.

Table 5.21: SPSS Macro Bootstrap Mediation Analysis Results

Path	**B**				**t- values**			**Indirect effect**	**95% Confidence Interval**	
	A	B	C	C’	a	B	C’	Ab	LLCI	ULCI
FIRME-COMPA-FIRMP	0.68	0.57	0.54	0.15	11.64***	7.18***	1.76**	0.39	0.26	0.54
INDUE-COMPA-FIRMP	-0.15	0.57	-0.09	0.25	-1.57+	7.18***	2.25***	0.16	-0.23	0.02

Notes: *** t-value >1.96, ** t-value >1.65, + not significant.

Key: FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance; LLCI: lower level confidence interval; ULCI: upper level confidence interval

Results from the SPSS macros presented in Table 5.21 above show that the direct effects (C') of FIRME on FIRMP and INDUE on FIRMP when COMPA was controlled, had significant statistical values at t-value >1.65 and t-value >1.96 respectively. As suggested by MacKinnon (2008), the indirect effect of COMPA between FRIME and FIRMP was statistically tested to establish whether zero could fall between the lower and upper limits at the 95% confidence interval. The result indicated that both the lower limit (0.26) and upper limit (0.54) confidence intervals were outside zero, confirming the statistical significance of COMPA's mediating effect. Moreover, its VAF (72%) was between 20% and 80%, indicating a partial mediation (Hair, *et al*., 2014). The value of VAF revealed that 72% of the total FIRMP was predicted by the mediating effect of COMPA. Generally, both results of significance tests for mediation effects using the value of VAF and SPSS macros of Preacher and Hayes (2004) confirmed that COMPA partially mediated the relationship between FIRME and FIRMP.

Furthermore, the industry effects from the SPSS macros mediation analysis shown above revealed that its indirect effect was very weak and not significant as its lower and upper limits were between negative -0.23 and positive 0.02 values at the 95% confidence level. Therefore, industry effects were not significant in explaining firm performance indirectly.

5.5.9 Model Fit

The preliminary assessment of collinearity issues with regard to the inner model quality indicated that there was no problem of multicollinearity since all tolerance levels and the VIF were above 0.20 and below 5 threshold values respectively. The significance of the path coefficients both at the first- and second-order construct levels was assessed using the bootstrapping procedure based on a resample size of 1 000 for 206 observations. The formatively measured first-order construct had path weights ranging from 0.06 (single measure) to 0.50, while the inner path coefficients of the hypothesized constructs had weights ranging from -0.07 to 0.63. The single item measure which had a small value of 0.06 was a TSP. This construct, based on the suggestions of Hair, *et al*. (2014), was retained in the model although it had a rather small value. As it was one of the five dimensions of the five-forces framework that measured INDUE formatively, its removal could affect the content of the construct (Hair, *et al.*, 2014). All the path coefficients, except TSP -> INDUE, INDUE -> FIRMP and INDUE -> COMPA, had t-values higher than 1.65% at the 90% confidence interval. The overall direct effects of FIRME on COMPA (t=7.75, p<0.001), FIRME on FIRMP (t=5.33, p<0.001) and COMPA's effect on FIRMP (t = 4.66, p<0.001) were highly significant. The direct effects of INDUE on FIRMP (t=1.16), FIRME on FIRMP (t=1.12) and INDUE on COMPA (t=0.41) were not significant.

Following the recommendations of Hair, *et al*. (2013; 2014) and Chin (1998; 2010), the overall quality of the structural model was further evaluated using such key indices as coefficient of determination (R^2) with its effect size (f^2), predictive relevance (Q^2) and its effect size (q^2) as summarized and presented below in Table 5.22. The R^2 results that measured the percentage of variance explained which of the two dependent variables had greater values than the moderately suggested threshold value of 0.33 (Chin, 1998; 2010), indicating the predictive capability of the model. The effect sizes of COMPA on FIRMP had a greater value (0.27) than the medium threshold value of 0.15. INDUE had a higher effect value (f^2 =0.03) of the low threshold value of 0.02, while FIRME (f^2=0.02) had just the minimum threshold level on FIRMP. The change in R^2 value (f^2) of COMPA had quite a substantive impact on FIRMP, while the other exogenous variables had either close to medium or small impacts on FIRMP. The R^2 values indicated that FIRMP is strongly associated with COMPA, showing that COMPA's path coefficients had adequate statistical power to predict and explain FIRMP.

Table 5.22: Summaries of Major Model Fit Evaluation Criteria

			Endogenous Variables					
			COMPA			FIRMP		
Constructs	R^2	Q^2	**Path Coefficient**	f^2	q^2	β	f^2	q^2
FIRME			0.63	0.65	0.25	0.13	0.02	0.01
INDUE			-0.07	0.01	-0.01	0.14	0.03	0.02
COMPA	0.40	0.20				0.52	0.27	0.12
FIRMP	0.39	0.23						

Key: *FIRME: firm effect; INDUE: industry effect; COMPA: competitive advantage; FIRMP: firm performance*

The results of the overall Q^2 values of both endogenous variables were above the threshold level of zero as presented in Table 5.22 above. Moreover, the relative measures of predictive relevance (q^2) values of FIRME on COMPA and COMPA on FIRMP were much higher than the threshold values of 0.15 and 0.02 defined as medium and small values (Hair, *et al.*, 2014). The q^2 values of INDUE on COMPA and FIRME on FIRMP were below the minimum threshold level of 0.02 suggesting their poor predictive relevance. The relative predictive relevance of INDUE on FIRMP achieved the minimum relative predictive relevance value of 0.02. These results revealed that industry effect had more predictive relevance than firm effect on firm performance.

Finally, the mediation effect of COMPA on the relationship of FIRME and FIRMP was evaluated using VAF and the bootstrap confidence interval of 95%. The result supports the partial mediation of COMPA explaining about 72% (VAF value) of FIRMP and outside zero lower and upper confidence interval values of 0.26-0.54 respectively. This result supported the RBV that competitive advantage is the result of firm resources and capabilities and explains the performance of firms (Barney, 1991; Newbert, 2008). COMPA did not have a mediation effect on the relationship between INDUE and FIRMP. It therefore did not support Porter's (1991) five-forces industry view, which claims that industry effect drives the competitive advantage of firms. Generally, the assessments of the structural model based on the above criteria revealed that the model had satisfactory statistical power and relevance to predict and explain the hypothetical relationships of the structural model.

5.6 CHAPTER SUMMARY

This chapter presented the data analysis and results of the study. The descriptive statistics of the sample as well as the response rate were discussed. The data collected were checked for missing values, outliers and for normality and was found to be robust. More importantly, the measurement or outer model and the structural model or the inner model results were analysed and presented. The measurement model was checked and evaluated using item and composite reliabilities, Cronbach's alpha measures and validity measures. All values were found to be within acceptable limits. The strengths of the structural path coefficients, direct and total effects of firm and industry on competitive advantage and firm performance and mediation effect were assessed. Finally, the hypothesized model quality was measured using R^2, the relative predictive accuracy effect size (f^2), the predictive relevance (Q^2) and the relative predictive effect (q^2). The size of industry effects and firm effects on firm performance were found to be robust, which indicated that the predictive and explanatory quality of the research model was sound. The next chapter presents the discussions, conclusions and recommendations of the research.

CHAPTER 6: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter discusses the results presented in Chapter 5 and provides conclusions and recommendations based on the findings of this study. The first part covers a discussion on the total firm and industry effects and firm performance. The predictive effects of firm resources and capabilities as well as the impact of the five forces of industry on firm performance are discussed. The answers to the research questions and the hypotheses test results are also presented. This section examines the direct relationships and indirect or mediation effects of firm and industry on firm performance as hypothesized and responds to the research questions. The conclusions, findings, limitations, contributions and recommendations of the study follow, and the chapter is concluded with an agenda for further research.

6.2 DISCUSSION OF THE RESULTS

6.2.1 Firm and Industry Effects on Firm Performance

6.2.1.1 Firm Effects

Firm effects were measured using tangible and intangible assets and dynamic capabilities. Firm resources and capabilities that are valuable, rare, inimitable and effectively organized are sources of competitive advantage that could lead to improved performance (Barney & Clark, 2007; Barney & Hesterley, 2010), even though firms could also generate higher performance without having competitive advantages (Porter, 1991; Ma, 2000b). In this study, the measurement of firm effect involving its first-order constructs showed that intangible assets ($\beta = 0.91$, $t = 41.17$) and dynamic capabilities ($\beta = 0.90$, $t = 47.88$) had substantial statistical significance, while tangible assets had less ($\beta = 0.48$, $t = 6.90$), but acceptable significance. The total firm effect on firm performance was also very strong ($\beta=0.46$, $t=5.33$, $p<0.001$). A further breakdown confirmed that the relative size of the impact of firm effects on competitive advantage was substantial (65%), compared to its relative low effect level (2%) on firm performance. This low level of direct relative predictive effect of size on firm performance showed that firm resources and capabilities have less power to influence firm performance variation, unless they are able to create competitive advantage.

The results of this study demonstrated that tangible and intangible assets and dynamic capabilities of financial service firms could significantly and indirectly explain performance variations across firms in the financial services industry. This is true even in the absence of managerial efficiency, product variety, service quality and innovation and technology usage (Access Capital, 2010; EEA, 2011; Waktola, 2015; AfDB, 2016). The indirect effects of intangible assets and dynamic capabilities in particular were quite strong, indicating their importance in causing performance variations among firms. These findings are consistent with many empirical studies and with the fundamental propositions of the RBV. The RBV holds that a firm's tangible and intangible assets and capabilities that are valuable, rare, difficult to imitate, and properly organized could predict competitive advantage and firm performance (Teece, *et al*., 1997; Zott, 2003; Ray, *et al.*, 2004; Caloghirou, *et al*., 2004; Galbreath & Galvin, 2008; Barney & Hesterly, 2010; Wu, 2010).

6.2.1.2 Industry Effects

The financial services industry in Ethiopia is concentrated, underdeveloped and uncompetitive compared to those in most African countries (EEA, 2011; Kapur & Gualu, 2012; Zemzem & Gashaw, 2014; Bezabeh & Desta, 2014; Waktola, 2015; AfDB, 2016). For example, the state-owned CBE had a deposit level of 68% and a profit share of 65% in 2014/15. Similarly, the state-owned EIC had a market share of 40%, indicating government dominance of the sector (Bezabeh & Desta, 2014; NBE, 2014/15). Further evidence revealed that the revenue concentration ratio of eight commercial banks (C8) was 89%, while four of them (C4) had 75%. Amongst the insurance companies the concentration ratio for eight firms (C8) was 78%, while four of them (C4) had 57% in 2014/15 (NBE, 2014/15; EEA, 2011). The financial services industry in Ethiopia is thus concentrated and underdeveloped compared to those of neighbouring countries (EEA, 2011; Kapur & Gualu, 2012; Zemzem & Gashaw, 2014; Bezabeh & Desta, 2014; AfDB, 2016).

Firms may erect their respective entry barriers to protect their rent-generating potential in an industry (Peteraf & Bergen, 2003; Porter, 2008). Besides such protection that could stem from firm strategy, in the case of Ethiopia it has been the government that has set entry barriers to protect the financial services industry from foreign financial service competitors. Financial service firms protected from foreign competitors should take the opportunity to develop and invest in their

internal resources and capabilities to enhance their competitiveness. In order to develop their internal resources and capabilities, firms should invest in and continuously upgrade these resources and manage them efficiently. In Ethiopia the government determines the deposit interest rates of banks (Bezabeh & Desta, 2014), which could affect their revenues. This in turn affects their re-investment of profits to develop their resources and capabilities. Although the government does not set premium rates for insurance companies, it applies similar regulatory requirements on aspects such as branch expansion, reporting requirements, appointment of top executives and management positions. The practice of the government favours public banks and all government and related businesses to do business with stated-owned firms (EEA, 2011; NBE, 2014/15). At policy level for instance, all private commercial banks, excluding the state-owned banks, have been required to buy a 27% worth of bonds for every loan they disburse with effect from July 2010 with the objective of earning a 3% interest while fixing the deposit rate at 5% (Bezabeh & Desta, 2014). Such a practice would affect the competitiveness of private financial service firms compared to the state-owned financial firms.

Based on the works of O'Cass and Ngo (2007) and O'Cass and Weerawardena (2010), unlike firm effects, industry effects were measured using Type II (reflective-formative) modelling, based on the five-forces (lower-order) constructs that cause the industry effects which were in turn measured reflectively. The five forces used to predict industry effect included entry barriers ($\beta = 0.45$, $t=2.47$, $p < 0.01$), bargaining power of customers ($\beta = 0.27$, $t=3.25$, $p < 0.001$), bargaining power of suppliers ($\beta = 0.\ 0.30$, $t=1.78$, $p < 0.05$), rivalry among existing firms, ($\beta = 0.\ 0.46$, $t=2.89$, $p < 0.001$), and threat of substitute products, which was not significant ($\beta = 0.\ 06$) since it was measured with a single item. This measurement construct was not deleted as its removal would affect the whole meaning of the five forces and reduce it to a four force of industry effect (O'Cass & Weerawardena, 2010; Hair, *et al*., 2014). These five first-order constructs thus explained over (R^2) 95% of industry effect, indicating the substantive power of the five forces in the prediction of industry effect. It was found that the dimension of threat of substitute products was not a significant factor in predicting industry effects, although the remaining four variables were highly relevant in explaining industry effects. These results show that banks and insurance firms should focus on these four dimensions of industry effects.

The total industry effect on firm performance was not significant due to the weak association between industry effects and competitive advantage. As indicated earlier, the R^2 values of competitive advantage and firm performance were 40% and 39% due to the combined exogenous effects of both firm and industry effects and the industry predictive effect sizes relating to competitive advantage and firm performance which were 0.01 and 0.03 respectively. Even though the relative industry effect size pertaining to competitive advantage was extremely low, its impact on firm performance was 0.03, which was higher than the firm effect size of 0.02. These findings show that the size of the relative industry effects on firm performance had a larger predictive power than the direct firm effect size. This implies that financial service firms could benefit from the opportunities available in the industry. The result supported Porter's five-forces framework and many other empirical studies confirming the higher impacts of industry structure on firm performance than internal firm-specific factors (Schmalensee, 1985; Roquebert, *et al.*, 1996; Powell, 1996; McGahan & Porter 1997; Mauri & Michaels, 1998; McGahan & Porter, 2003; Chen, 2010; Karabag & Berggren, 2014).

6.2.1.3 Firm Performance

Firm performance was an endogenous construct measured reflectively using financial and marketing variables. Financial performance was further measured by three items namely ROA, profit margin and overall profitability. The measurement items of marketing included the rate of new customers' acquisitions, customer satisfaction and market share. The bootstrap statistical significance report of both the financial and marketing performance metrics were quite substantial (t-value >1.96; $p < 0.001$). Although the strengths of the standardized path coefficients of both financial ($\beta = 0.93$) and marketing ($\beta = 0.84$) performance metrics were high, financial performance measures had a higher weight than the marketing performance metric. Further analysis indicated that firm performance predicted 87% and 70% of the financial and marketing performance variations respectively. This result demonstrated that banks and insurance companies in Ethiopia placed more emphasis on financial measures than market oriented measures, suggesting that banks and insurance companies are less market-oriented and prefer to evaluate their performance using lag indicators.

The coefficient of determination assessed the predictive power of the endogenous constructs in the structural model. The inner model of the study was examined based on Chin's (1998) R^2 cut-offs of 0.67, 0.33 and 0.19 to determine the predictive power of endogenous latent constructs as substantial, moderate and weak respectively. The results of this study revealed that both firm and industry effects jointly explained 40% and 39% of the variance in competitive advantage and performance variations of financial service firms respectively.

6.2.2 Research Questions and Hypotheses Testing

In this section, the results of the direct and mediated relationships are discussed based on the research questions and hypotheses formulated. There are five direct and two indirectly formulated hypotheses to test the relationships between exogenous and endogenous constructs. Bootstrapping procedures were applied to test mediations as outlined by Chin (1998; 2010) and Hair, *et al*. (2014) with 1 000 resamples.

6.2.2.1 Testing for the Direct Relationships

Three questions of the study were answered, and five hypotheses were used to test the direct relationships between each of the exogenous and the endogenous constructs in order to answer the three research questions as presented below.

Research question no. 1: To what extent do industry effects predict competitive advantage and performance of financial service firms in Ethiopia?

To analyse and respond to this question, two hypotheses were tested.

Hypothesis no. 1 (H_{11}): Industry effects influence the performance of financial service firms in Ethiopia.

The Ethiopian financial services industry, even though it has been growing since the liberalization in 1994, is still underdeveloped compared to the same industry in many African countries. For example, the African average banking deposit level to GDP was 22% in 2011 (Mamvura, 2015), while in Ethiopia it was about 17% in 2010/11 (Geda, 2015). In 2012 the African average insurance penetration rate was about 5.6% (Swiss Re, NKC Research, as cited by KPMG, 2012), while the

Ethiopian insurance penetration rate was less than 1% (NBE, 2012/13). In the same period Ethiopia's insurance penetration rate compared to neighbouring Kenya's insurance penetration rate of 3.2% was quite low (KPMG, 2012). Such a low rate of penetration into the financial services sector could therefore be attributed to the low level of the economy, firms' limited resources and capabilities and excessive regulations in the sector. The financial services are still dominated by the state-owned financial enterprises, irrespective of the increasing number of private banks and insurance companies (EEA, 2011; Zemzem & Gashaw, 2014). The state-run CBE had 68% of the deposits mobilized and 65% of the net profit in 2014 while the state-owned EIC had a dominant market share of 44% (NBE, 2014/15). In support of this argument, Bezabeh and Desta (2014) clearly indicate that the government dictates the credit allocations of all banks, including privately owned banks. It also sets and controls the interest rates, besides levying a 27% forced bond purchase on private commercial banks for every loan advanced. Capital requirements and other compliance issues have been increasing from time to time, making entry into the business more difficult than ever before. In addition to strict regulations by the government, the Ethiopian financial services sector is not open to investment by foreign nationals, including those of Ethiopian origin. Despite its low level of development under increasingly tighter regulatory requirements, empirical data indicated that both the banking and insurance firms, driven by a high demand for such financial services, have been performing well (EEA, 2011; NBE, 2014/15).

Based on the characteristics of the financial services industry discussed so far, question number one stated above was addressed using a hypothesis test. The direct standardized path coefficient between INDUE and FIRMP was not significant ($\beta = 0.14$, $t=1.16$). Thus, this hypothesis (H11) was not supported. The rejection of this hypothesis implies that industry effects do not have a significant impact on the performance of financial service firms. This is consistent with the prevailing situation of the financial services industry in Ethiopia characterized by low levels of competitiveness. Given the dominant role of state-owned financial services, the high level of concentration and limited effects of market forces, this finding confirms the prevailing situation in the industry which is operating in a stable environment. This finding supports a large body of empirical evidence with regard to the financial services industry in Ethiopia operating under a stable and stringent regulatory framework, which has affected the competitiveness of the sector (EEA, 2011; Kapur & Gualu, 2012; Bezabeh & Desta, 2014). An empirical study by Athanasoglou,

Brissimis and Delis (2008) indicates that industry structure had no impact on the profitability of banks in Greece. The strength of industry effect in emerging economies increases when firms operate in a dynamic environment with high levels of uncertainty and risk (Kearney, 2012). A similar study by Weerawardena, *et al*. (2006) revealed that in a competitive or dynamic industry, industry structure conceived and represented by the five forces, affects firm performance as firms operating in such an environment tend to learn from the customers, competitors and other external forces. Therefore, it can be tentatively concluded that industry effects do not significantly explain the performance of financial service firms in the context of a stable and regulated developing economy in Ethiopia.

Hypothesis no. 2 (H_{21}): Industry effects influence the competitive advantage of financial service firms in Ethiopia.

According to Porter (1991), the industry effects viewed in terms of the five forces affect and shape a firm's competitive advantage. A firm's competitive advantage stems from the bargaining of power of suppliers, bargaining power of customers, and bargaining power of competitors and the availability of substitute products (Coff, 1999; 2003; Kim & Oh, 2004). These contending forces could share a firm's benefit before realizing it in the form of profit or other firm specific rewards. Depending on the intensity of industry competition, firms may have different levels of cost or differentiation-based advantages over their competitors (Porter, 1980b; 1985). Empirical studies indicate that competitive intensity, measured using Porter's five-forces framework, affected a firm's performance, strategy and its adaptation (O'Cass & Julian, 2003; Weerawardena, *et al.*, 2006; O'Cass & Ngo, 2007; Galbreath & Galvin, 2008). The primary aim of a firm that pursues an industry-based perspective is to create and deliver added value to its customers by positioning its products and services competitively relative to its competitors' offerings (Delvin, 2000; Hooley & Greenley, 2005).

In view of the above research question number one, the direct INDUE on the COMPA of financial services using a path coefficient, revealed the same negative algebraic sign as initially assumed. However, the strength of the relationship with competitive advantage was very weak ($\beta = -0.067$) with no statistical significance. Hypothesis 2 (H_{21}) was tested to answer the first research question

and was rejected as its t-value (0.412) and p-value ($p > 0.05$) were not within the recommended threshold levels. This outcome is not consistent with Porter's (1991) claim that a firm's competitive advantage resides in its industry structure. As discussed above, the Ethiopian financial industry, characterized by repressive regulations, lacks competitiveness and market innovation. In such an industry where a low level of competition exists, gaining a better market share rather than efficiency-based advantage results in superior financial performance (Cool, Dierickx & Jemison, 1989). Moreover, in support of this finding, Powell (1996) argues that in the case of the service industries, industry factors create limited competitive advantages compared to firm resources and capabilities.

The financial services industry in the country, besides being affected by the dominating role of the government both as regulator and operator in the business, has a low level of penetration and less competitiveness even by African standards (EEA, 2011; Waktola, 2015). Thus, the industry effects exert little impact on the competitive advantage of firms in the industry. As the industry is not dynamic, the joint intensity of the five forces has not created adequate pressure on the financial firms to improve their efficiency and a level of innovation to gain and sustain a competitive advantage. As the entry barriers are lowered, coupled with increasing competition, firms generally build their unique internal resources and capabilities and create cooperative partnerships with relevant industry forces in order to gain a competitive advantage (Ritala & Ellonen, 2010; EEA, 2011). The findings of this study therefore confirm that the Ethiopian financial services industry, which operates in a regulated environment where the five forces exert limited bargaining powers, coupled with high entry barriers and protection, is not influencing the competitive advantage and performance of firms in the financial services sector.

Research question no. 2: How do firm effects explain the competitive advantage and performance of financial service firms in Ethiopia?

Hypothesis no. 3 (H_{31}): There is a positive relationship between firm effects and the performance of financial service firms in Ethiopia.

Since the introduction of the RBV in 1984 by Wernerfelt (1984) and its growth in the 1990s as a result of the contributions of Barney (1986a; 1991; 1995), Grant (1991), Peteraf (1993) and others, internal firm resources and capabilities have received increasing attention as predictors of firm performance (Newbert, 2007). The RBV explains firm performance using firm resources as valuable, rare, inimitable and properly organized (Barney, 1995; Barney & Hesterly, 2010). These resources and capabilities mainly include tangible and intangible assets and dynamic capabilities (Teece, *et al*., 1997; Galbreath & Galvin, 2008). Many empirical studies employed the RBV to investigate the relationship between firm effects and performance (Galbreath, 2005; Galbreath & Galvin, 2008; Tang & Liou, 2010; Liu, *et al*., 2011; Houthoofd & Hendrickx, 2012). The impact of intangible assets and capabilities have been high compared to those of tangible assets, particularly in financial services firms such as banks and insurance service firms (Clulow, *et al*., 2003; Ray, *et al*., 2004; Galbreath & Galvin, 2008; Liu, *et al*., 2011).

In this study, the direct relationship between firm effects, measured using its lower-level constructs namely tangible and intangible assets and dynamic capabilities as explained earlier, as well as firm performance, were investigated. The path coefficients showed statistically highly significant direct firm effect relationships with intangible assets ($\beta = 0.91$, $t = 41.17$) and dynamic capabilities ($\beta = 0.90$, $t = 47.88$), while tangible assets had a lower path coefficient ($\beta = 0.48$, $t = 6.90$), but an acceptable level of significance. The direct path coefficient of firm effect (second-order construct) on the performance of financial service firms was small ($\beta = 0.13$, $t = 1.12$) and insignificant. Thus, hypothesis number 3 (H_{31}) was not supported. This shows that financial service firms cannot directly enhance their performance unless their respective resources and capabilities create competitive advantages as suggested by Ma (2000b), Carpenter and Sanders (2009) and Grant (2010). The finding of this study thus confirms that firm resources and capabilities are not significantly important to directly generate a better performance (Porter, 1991; 1998), which is consistent with the empirical claims of Schmalensee (1985). Moreover, Lee and Miller (1996) confirmed that firms operating in a protected industry could enhance their performances, even without having strategies. This finding did not support the studies that state that firm-specific factors are critical determinants of performance in the financial services industry as claimed by Clulow, *et al*. (2003), Ray, *et al*. (2004), Athanasoglou, *et al*. (2008) and Galbreath and Galvin (2008). This study therefore revealed that firm resources and capabilities that are valuable, rare

and difficult to imitate would not necessarily result in improved firm performance, challenging the tenets of the RBV.

Hypothesis no. 4 (H_{41}): There is positive relationship between firm effects and the competitive advantage of financial service firms in Ethiopia.

According to the RBV, a firm that has valuable and rare resources that are difficult to imitate, can gain a competitive advantage which in turn results in superior performance (Barney & Hesterly, 2010; Carpenter & Sanders, 2009; Bamiatzi, *et al*., 2016), provided they are exploited through appropriate organizational arrangements. In this study, firm effect was measured reflectively using three dimensions of resources: tangible resources, intangible resources and dynamic capabilities. All the outer measurement items that in turn measured the three first-order constructs had outer loadings above 0.45 for a newly developed scale, as suggested by Hair, *et al*. (2011). The three first-order constructs had path coefficients above 0.45 as recommended by Hair, *et al*. (2011): TANG (β = 0.48), INTAG (β =0.91) and DC (β=0.90). The outputs of all standardized path coefficient's t-statistics were above >1.96 with $p<0.05$ in a two-tailed measurement. The inner direct effect of firm performance on competitive advantage was thus highly significant (β = 0.63, t = 7.75), which supported the hypothesis postulated under H_{41}.

The results revealed that both intangible resources and dynamic capabilities were the most important dimensions of financial service firms in Ethiopia, which influenced their competitive advantage, while tangible resources had the lowest contribution. The substantial path weight of intangible resources measured in terms of reputation, image, organizational structure, policies and organizational culture revealed their critical importance in determining the competitive advantages of banks and insurance companies. Similarly, dynamic capabilities, which included managerial and organizational processes such as coordination and integration, learning and reconfiguration of both tangible and intangible assets, were also equally critical resources in explaining and shaping competitive advantage. Tangible resources that included financial and physical assets, cash reserves, cash flows, equipment and the number of branches were not as important as the other two resources in influencing the competitive advantage of banks and insurance companies in Ethiopia. This finding revealed that firm resources and capabilities could lead to competitive

advantage although its sustainability depends on the inimitability of these resources and capabilities (Mahoney & Pandian, 1992), confirming the tenets of the RBV. The results obtained are also consistent with those reported in previous empirical studies such as Foss and Knudsen (2003), Powell (2003), Newbert (2008), Wu (2010), Tuan and Yoshi (2010), Tang and Liou (2010) and Gaya, *et al*. (2013). In line with the propositions of the RBV, this finding confirms that firm resources and capabilities are sources of competitive advantage (Barney, 1991; 1995; Barney & Hesterley, 2010).

Research question no. 3: How does competitive advantage contribute to the performance of financial service firms in Ethiopia?

Hypothesis no. 5 (H_{51}): Competitive advantage has a positive influence on the performance of financial service firms in Ethiopia.

Competitive advantage, viewed from both Porter's perspective and the RBV, is expressed in terms of differentiation and cost-based advantages leading to firm performance (Juga, 1999; Ma, 2000b; Peteraf & Barney, 2003; Kim & Oh, 2004; O'Shannassy, 2008; Kim, *et al*., 2008; Daveni, *et al*., 2010; Gjerde, *et al*., 2010; Sigalas & Economou, 2013). Since the liberalization of the financial sector in 1994, the Ethiopian financial service firms have been performing well, although the industry has been highly concentrated and seems to be in a monopolistic competition situation (Zemzem & Gashaw, 2014).

In an attempt to investigate research question no. 3 above, a hypothesis was tested. The result showed that competitive advantage was directly and positively related to firm performance. The outputs of the statistical tests revealed ($\beta = 0.52$, $t = 4.67$, $p<0.001$) a highly significant relationship. Competitive advantage was also significantly related to both cost ($\beta = 0.75$, $t=15.15$, $p < 0.001$) and differentiation ($\beta = 0.93$, $t=71.55$, $p < 0.001$) advantages. The result further indicated that the superior differentiation of banks and insurance services was important to create competitive advantage and superior performance, measured financially as well as by using marketing metrics. This implies that financial service firms could benefit more through differentiation than reducing costs that do not add value for customers. This result disagrees with

the findings reported in the literature that cost structure has no effect on competitive advantage unless it is transferred onto customers by way of price reductions (Devlin, 2000; Langerak, 2003).

Even though the Ethiopian financial industry is in its infancy with low levels of competition and despite the foreign entry barrier and rivalry restraint by the government, firms have exploited the opportunities mainly through their intangible resources and dynamic capabilities to gain competitive advantage and achieve better performance. Prior empirical studies in the contexts of developed (Ray, *et al*., 2004; Athanasoglou, *et al*., 2008; Newbert, 2008) and developing economies (Wu, 2010; Tang & Liou, 2010; Tuan & Yoshi, 2010; Gaya, *et al*., 2013; Ahmadi, *et al*., 2014; Ibrahim, *et al*., 2016) using the RBV, concur with the outcomes of this study that competitive advantage directly and positively affects firm performance. More importantly, Ramaswamy, Thomas and Litschert (1994), who investigated the organizational performance of the USA airline industry operating in a regulated environment, indicated that firms that had strategic resources and implemented efficiency based strategies performed better than their rivals. Even though competitive advantage is one among many factors that affect firm performance (Ma, 1999; 2000a), a firm that has a competitive advantage can achieve better performance than firms that do not (Barney & Clark, 2007; Makadok, 2011). Competitive advantage was thus a significant predictor and an antecedent to firm performance even in a regulated industry (Ramaswamy, *et al*., 1994) and is consistent with the RBV (Powell, 2001; Foss & Knudsen 2003; O'Shannassy, 2008; Makadok & Ross, 2011; Sigalas & Economou, 2013). The findings of this study contribute to the theoretical relevance of the RBV in the context of a regulated industry in a developing economy.

Table 6.1: Research Questions and Hypotheses Results of Direct Relationships

Research Questions	Hypotheses	β	t-value	Significance	Status
1. To what extent do industry effects predict competitive advantage and performance of financial service firms in Ethiopia?	H_{11}: Industry effects influence the performance of financial service firms in Ethiopia	0.14	1.16	NS	Not supported
	H_{21}: Industry effects influence the competitive advantage of financial service firms in Ethiopia	-0.07	0.41	NS	Not supported
2. How do firm effects explain the competitive advantage and performance of financial service firms in Ethiopia?	H_{31}: There is a positive relationship between firm effects and the performance of financial service firms in Ethiopia	0.13	1.12	NS	Not Supported
	H_{41}: There is a positive relationship between firm effects and competitive advantage of financial service firms in Ethiopia	0.63	7.75	***	Supported
3. How does competitive advantage contribute to the performance of financial service firms in Ethiopia?	H_{51}: Competitive advantage has a positive influence on the performance of financial service firms in Ethiopia	0.52	4.65	***	Supported

Note: *** $p<0.01$, NS = Not significant

In conclusion, the direct relationships of industry effects on competitive advantage and firm performance, firm effects on competitive advantage as well as on firm performance and the direct effect of competitive advantage on firm performance were investigated. Three research questions directed by five hypotheses were reported and discussed. Hypotheses H_{11} to H_{31} were not supported. Generally, the outputs of the PLS bootstrap revealed that, of the five hypotheses tested to predict the direct relationships of industry effects on competitive advantage and firm performance, and firm effects on both competitive advantage and firm performance, and the direct relationship between competitive advantage on firm performance, two hypotheses (H_{41} and H_{51}) were accepted, while three of them were not supported.

6.2.2.2 The Mediation Effect of Competitive Advantage on Firm Performance

This section covers the discussions of the last research questions, no. 4 and 5, and the results of the sixth and seventh hypotheses as presented below.

Research question no. 4: To what extent does competitive advantage mediate the relationship between industry effects and the performance of financial service firms in Ethiopia?

Hypothesis no. 6 (H_{61}): Competitive advantage mediates the relationship between industry effects and the performance of financial service firms in Ethiopia.

The Ethiopian financial services industry generally lacks competitiveness mainly due to the role of the government as both business operator and regulator of the industry. In a competitive landscape, the collective strengths of the forces exert pressure and squeeze firms' competitive advantage through their bargaining power to maximize their respective benefits (Porter, 1985). If firms gain industry-based advantage, they will have market power that can lead to the generation monopoly rents (Spanos & Lioukas, 2001; Enders, *et al*., 2009). Moreover, as a result of increasing pressures, firms would be obliged to strengthen their resources and capabilities to better position themselves favourably, thus leading to rent appropriation (Coff, 1999; Kim & Oh, 2004).

As indicated earlier in hypothesis H_{11} under research question no.1, the direct effects of industry on competitive advantage was not significant ($t=0.42$, $p > 0.05$) and failed to meet the basic assumption of mediation. The bootstrap SPSS macros result for the direct effect of industry on firm performance was significant ($\beta = 0.14$, $t = 2.25$, $p<0.05$) at the 95% level of confidence. The result was not supported as INDUE did not have a significant direct effect on COMPA and it therefore could not meet the first requirements of mediation. The indirect effect was not significant either. Competitive advantage therefore did not mediate the relationship between industry effect and firm performance. Hypothesis H_{61} was thus not supported as can be seen in Table 6.2.

Table 6.2: Research Questions and Hypotheses Results of Mediation Analysis

Research Questions	Hypotheses	Paths	t- values			Indir. Eff.	95% Confi. Interval		Status
			a	b	C'	ab	LLCI	ULCI	
4. To what extent does competitive advantage mediate the relationship between industry effects and the performance of financial service firms in Ethiopia?	H_{61}: Competitive advantage mediates the relationship between industry effects and the performance of financial service firms in Ethiopia	INDUE -> COMPA -> FIRMP	-1.57+	7.18***	2.25***	0.16	-0.23	0.02	Rejec.
5. To what extent does competitive advantage mediate the relationships between firm effects and the performance of financial service firms in Ethiopia?	H_{71}: Competitive advantage mediates the relationship between firm effects and the performance of financial service firms in Ethiopia	FIRME -> COMPA -> FIRMP	11.64***	7.18***	1.76*	0.39	0.26	0.54	Supp.

*** t-value >1.96, * t-value >1.65, + = not significant

Key: LLCI: lower level confidence interval; ULCI: upper level confidence interval

This result revealed that industry forces that have a low level of collective intensity under a closed and highly regulated environment cannot create a competitive advantage. Since banks and insurance companies operate in a protected environment and are directed by the government, the industry effect has created a common pressure factor applicable to all firms resulting in little contribution to their competitive advantage. The five forces that served to measure industry effects were expected to significantly affect the performance of banks and insurance companies. However, their collective impacts were not significant. Because of the lack of market competition coupled with strict regulations, the industry has an insignificant effect on firms to position themselves in the market and against their competitors to gain competitive advantage. Empirical evidence supports the finding that firms in a dynamic and competitive industry tend to gain competitive

advantage and enhance their performance as they would be obliged to learn and fit into the changing nature of industry forces (Weerawardena, *et al*., 2006; Kearney, 2012).

Research question no. 5: To what extent does competitive advantage mediate the relationship between firm effects and the performance of financial service firms in Ethiopia?

Hypothesis no. H_{71}: Competitive advantage mediates the relationship between firm effects and the performance of financial service firms in Ethiopia.

In answering research question no. 5, using hypothesis H_{71} as shown above, the bootstrap macros analyses revealed the following results. The total effect of firms on competitive advantage was highly significant (β=0.46, t=5.33, p<0.001). The direct relationship between firm effects and competitive advantage was also significant (β=0.63, t=7.48, p<0.001). The direct effect of firms on performance was significant when competitive advantage was included (β=0.13, t=1.76, p<0.1). The indirect effect of firm effects was also significant (β=0.39) at the 95% level of confidence interval. The statistical result of the mediation effect of competitive advantage between firm effects and performance of financial service firms, based on the SPSS bootstrap macros, confirmed that the lower and upper level confidence intervals of competitive advantage were 0.26 and 0.54 respectively indicating the algebraic number zero was outside the range of values. The VAF also indicated a 72% role which confirmed that competitive advantage partially mediated the relationship between firm effects and performance of financial service firms as this reported percentage was between 20% and 80% and therefore acceptable (Hair, *et al.*, 2014). Hypothesis $H_{71,}$ which stated that firm effect influences firm performance through the mediating effect of competitive advantage, was therefore partially supported as shown in Table 6.2 above.

Following the relational conceptual clarity between competitive advantage and performance achieved over the past two decades, the number of empirical studies investigating the mediating effect of competitive advantage between firm effect and firm performance has been increasing (Edelman, *et al*., 2005; Newbert, 2008; Lopez-Gamero, *et al.*, 2009; Tang & Liou, 2010; Kamukama, *et al.*, 2011). Firm resources and capabilities that are valuable, rare and inimitable result in gaining a competitive advantage (Barney & Hesterly, 2010). Banks and insurance companies are required by the regulatory body (NBE) to fulfil such requirements as fit and proper

criteria for selecting CEOs and deputies, obtain prior approval of branch openings, planning, reporting and other compliance requirements. Such strict requirements and controlling mechanisms might have contributed to developing and exploiting their resources and capabilities in order to enhance their competitive advantage. In support of this argument, Wu's (2010) empirical study in Taiwan confirms that firms operating in less volatile environments can gain competitive advantage. Similar findings revealed the importance of firms' resources and capabilities in predicting competitive advantage directly and firm performance indirectly (Devlin, Ennew & Mirza, 1995; Ray, *et al.*, 2004; Newbert, 2008; Tuan & Yoshi, 2010; Kamukama, *et al.*, 2011). The findings further show that the demand for dynamic capabilities seems to be increasing, suggesting that routine or normal firm capabilities cannot be effective. Firms' needs for acquiring dynamic capabilities increase as the degree of competition among local financial firms intensifies in order to transform other resources to fit external changes (Wu, 2010; Wilden, *et al.*, 2013). This finding was also consistent, although in a different industry, with the results of the recent findings of Ibrahim, *et al*. (2016) who found competitive advantage partially mediated entrepreneurial orientation and firm performance in 283 SMEs in Nigeria.

In a manner consistent with the RBV, banks and insurance companies have increased their performance through the partial mediation effect of competitive advantage. The financial services industry operates in a highly regulated and stable environment, protected from foreign competitors, with limited competitiveness. Further analysis implies that these firms, operating under such tight supervision and direction by the government, have been able to gain higher benefits through differentiation and cost advantages from implementing similar strategies using homogenous resources as dictated by the regulator. Contrary to the RBVs tenets of resource heterogeneity, financial service firms operating under a regulated environment with entry barriers could perform better through gaining competitive advantage. This finding was in line with the assertions of Foss and Knudsen (2003) who argued that heterogeneity is not a necessary condition to gain competitive advantage and superior firm performance. Given improved performance is the result of many external factors, competitive advantage that stems from firm specific resources is an antecedent to firm performance and explains the variations among firms. Realizing the value generated from superior differentiation and cost advantages depends on the bargaining situation of firms with their internal and external stakeholders.

6.3 CONCLUSIONS

6.3.1 Introduction

Based on the discussion in section 6.2 above, the research questions and objectives were addressed using seven hypotheses to arrive at the concluding summaries of the key findings and contributions of the study to the existing body of knowledge and practice in the financial services industry as presented below.

6.3.2 Findings

Even though it began a century ago, the Ethiopian financial services industry has been hampered by political ideology and economic systems that the country followed in the past resulting in its stunted growth. Financial services such as banks and insurance companies that flourished during the 1960s and early 1970s were nationalized by the socialist government in 1975, which led to the establishment of the state-owned CBE and EIC. Following the downfall of the socialist regime in 1991 and the subsequent reintroduction of a free market economy, the Ethiopian financial services industry was liberalized for domestic investment in 1994. Since then the number of privately owned commercial banks and insurance companies has been increasing. The total number of private banks and insurance companies in 2014/15 was 32 (each had an equal number of 16). Even through the financial performance and market shares of privately owned banks and insurance companies have been increasing, the government has been the dominant player in the market in addition to applying stringent regulatory requirements. As an infant industry in an emerging economy, it is protected, and foreigners are not allowed to invest in financial services.

This study investigated the predictive effects of firm and industry on the performance of financial service firms through the mediating effect of competitive advantage in a highly regulated and developing financial industry in Ethiopia. The investigation was based on the perceptions of the top management of the banks and insurance firms in the country. The study was set to specifically address the following research objectives:

1. the extent to which firm effects through internal firm resources (such as tangible assets, intangible assets and dynamic capabilities) affect competitive advantage and the performance of financial services in Ethiopia;

2. how the industry effects through the industry five forces affect competitive advantage and the performance of financial services in Ethiopia.
3. the mediation effect of competitive advantage on the relationship between industry effects and the performance of financial services in Ethiopia.
4. the mediation effect of competitive advantage on the relationship between firm effects and the performance of financial services in Ethiopia.

The findings of the study are summarized below.

The findings of this investigation revealed that the total firm effects on firm performance was significantly positively related (β=0.46, t=5.33, p<0.001), while the total industry effect was not significant to predict firm performance (β = 0.10, p > 0.05). The direct relationship between firm effects on firm performance was also not strong and significant. However, the indirect relationship between firm effect and firm performance was strong (β = 0.33) and significant, having lower limit and upper limit values between 0.26 and 0.54 respectively at the 95% confidence interval. Further, the VAF test outcome was 72%, confirming a partial mediation of competitive advantage between firm effect and firm performance. Moreover, the direct effect of industry on firm performance was positively related, but statistically non-significant. Its indirect effect on firm performance was also very weak and not significant as its lower and upper limits were within zero value, falling between negative -0.23 and positive 0.023 values at the 95% confidence level. The hypothesis result of a positive relationship between competitive advantage and firm performance was strong and highly significant (β = 0.52, t = 4.67, p<0.001). This finding further indicated that competitive advantage through differentiation had a higher impact than cost advantage.

The combined predictive powers (R^2 values) of both firm effects and industry effects on competitive advantage and firm performance were 40% and 39% respectively, indicating more than moderately acceptable values. These results indicated that both industry effects and firm effects could explain 40% and 39% of performance variations among financial service firms respectively. Further effect sizes of a firm on competitive advantage was 65.4%, confirming the theoretical propositions of the RBV that internal firm resources and capabilities are sources of competitive advantage. The industry effect on competitive advantage had an insignificant effect

size of about 1%. Nevertheless, the relative direct effect sizes of firm effects and industry effects predicted 2% and 3% of firm performance respectively.

The Q^2 values of the latent variables of competitive advantage (0.20) and firm performance (0.23) were significantly acceptable, indicating the predictive relevance of the research model. The relative effect size of the predictive relevance (q^2) of firm effects on competitive advantage, when industry effects dropped, was 0.25 while industry effects on competitive advantage without firm effects was a low -0.01. The relative effect sizes of the predictive relevance of firm effects on firm performance, deleting industry effects was 0.008, while industry effects without firm effects had a relative predictive effect size of 0.02 on firm performance. Competitive advantage had the largest relative effect size of 0.12 on firm performance. In summary, the influences of firm effects on competitive advantage ($q^2 = 0.25$), and competitive advantage on firm performance ($q^2 = 0.12$) had relative predictive effect sizes. These could be considered as above average and close to average values respectively, as measured by the relative measure of predictive relevance (q^2) values of 0.02, 0.15 and 0.35 defined as small, medium and large (Hair, *et al.*, 2014; Chin, 2010). Firm effects on competitive advantage were quite high as opposed to its small effect size on firm performance. The effect size of industry on competitive advantage when firm effect was dropped was not significant. However, the industry effects size on firm performance was above the minimum effect size threshold value. The largest effect size was estimated by competitive advantage in predicting firm performance. This result showed that competitive advantage had the largest effect size while industry effect has a slightly larger direct positive impact than the direct firm effects size on performance variations among financial service firms in Ethiopia.

The findings of this study are the following:

1. Firm effects represented by firm resources and capabilities failed to directly predict the performance of financial service firms. This low direct relative predictive effect size on firm performance reveals that firm resources and capabilities have a limited power to explain firm performance, unless these firm's resources and capabilities could create competitive advantage. Both firm effects and industry effects predicted 40% and 39% of competitive advantage and performance variations respectively. The direct firm effect size on competitive advantage, in the absence of industry effects, was 65.4%. This indicates a substantial predictive power of firm effects, while the direct industry effects size explained

about 1% of competitive advantage. Moreover, the direct firm effect size predicted about 2%, while industry's direct effect size explained 3% of performance variations among firms in the financial industry. Firm effects were not significant direct predictors of firm performance, confirming the view that firm resources and capabilities do not necessarily result in improved firm performance.

2. The total firm effect on the performance of financial service firms (banks and insurance companies) was quite substantial. This total firm effect was mainly driven indirectly through the partial mediation of competitive advantage. The mediation effect of competitive advantage between firm effects and the performance of financial services firms indicated that competitive advantage partially influences the performance of financial service firms. Firm effects, particularly through intangible resources and dynamic capabilities, were instrumental in creating competitive advantage and thus improved performance more than tangible resources in those banks and insurance companies. Firm effects, mainly using intangible resources and dynamic capabilities, were significant indirect predictors of firm performance through the partial mediation effect of competitive advantage which confirmed the RBV.
3. The total industry effects on firm performance were not significant because of low effects on competitive advantage. The direct result of industry effects on firm performance was also weak and non-significant. The financial services industry operating in a highly regulated and protected market situation made little contribution to the performance variations of financial service firms. This finding is consistent with the study of Athanasoglou, *et al*. (2008), who found that industry structure had no effect on bank performance in Greece and with the empirical study of Karniouchina, *et al*. (2013), where industry effect had little impact at an early stage, while it became more important to explain firm performance at the later stages of an industry's life cycle.
4. The mediation effect of competitive advantage between industry effect and firm performance was not also significant. As industry's five forces are contextual, the low level of competition and excessive regulatory environment of the Ethiopian financial services industry could not trigger and encourage firms to learn, improve and then gain competitive advantage. Such lack of market dynamism is mainly attributed to the weaknesses of the five forces and the regulation to shape and influence the competitive landscape of the financial services industry

(Porter, 1998; Coff, 1999; 2003; Devlin, 2000; O'Shannassy, 2008; Grant, 2010). This finding contradicts Porter's (1991) view that industry structure is the true source of competitive advantage and firm performance creating a favourable position in an industry. This finding also disagrees with the empirical studies of O'Cass and Julian (2003); O'Cass and Ngo (2007) and Gjerde, *et al*. (2010). The study outcome is also in agreement with the findings of Makhija (2003) with respect to the privatization process of the Czech Republic in 1992, showing that industry forces did not create competitive advantage.

5. Competitive advantage has positively affected firm performance through differentiation and cost advantages. Differentiation was more strongly related to competitive advantage than cost advantage. This result seems contradictory to the actual conditions of both banks and insurance companies that enjoy limited innovations, varieties of products and/or service differentiation. Driven by the strong firm effects, the direct effect size of competitive advantage on firm performance was 27%, demonstrating above average predictive power on the performance of banks and insurance companies. Even though there are many routes that could lead to higher firm performance, the findings of this study confirmed that competitive advantage predicted a significant level of firm performance in an emerging economy in a regulated industry. Competitive advantage was thus a significant predictor and an antecedent to firm performance, even in a regulated industry.

Despite the untapped market demand in the financial services industry in Ethiopia, firms have had little product differentiation and innovation, follow similar pricing structures (similar interest rates for banks and premium rates for insurance companies) and operate inefficiently. Moreover, they also lack competent employees that could enhance their competitiveness. In 2009 for example, the majority (60%) of the banks did not have written strategic documents (NBE, 2009), which highlighted a lack of strategic leadership capabilities among many of those firms. Because of these challenges in the industry, the NBE (the regulatory body) demands that each bank and insurance company allocates 2% of annual revenues to a training and development budget, planning and reporting performance periodically, fulfilling the 'qualification competency' requirements of executives, appointment, approval and dismissal of chief executives and deputies, setting board remunerations, determining deposit interest rates (specific to banks), setting branch expansion and growth targets, fixing a 5% maximum shareholding limit for a private owner directly or indirectly,

while there is no similar limit for the government (Bezabeh & Desta, 2014). As a result of the branch expansion policy of the government (NBE, 2014/15), for instance one of the private banks that used to operate with a one branch business model supported by information technology for many years, had to change its strategy and become a branch-based banking service provider. The government seems to play the role of resource allocation besides regulating the industry (EEA, 2011). Such requirements and stringent regulatory frameworks might have contributed towards creating and building similar kinds of resources and capabilities, and homogenous industry perceptions of managers in banks and insurance companies in Ethiopia (Kim & Lim, 1988). In such a situation, firms could have common strategic responses and gain similar performance results through imitation (Mauri & Michaels, 1998).

In addition to these uniformly applied regulatory policies, given the low level of development of the country, the local factor markets may not have quality suppliers of resources and capabilities particularly in terms of manpower, technology and management, which cause difficulties in the attempt to create resource-based heterogeneity among firms. Contrary to the condition of RBV's resource heterogeneity that calls for barriers to imitation among firms (Barney, 1991; Rumelt, 1991), banks and insurance companies that operate in a highly regulated environment, protected from foreign competitors, could gain competitive advantage and improved performance using homogenous resources. Therefore, this analysis and findings tentatively lead to the conclusion that resource heterogeneity may not be a necessary condition to create competitive advantage that leads to improved firm performance as argued by Foss and Knudsen (2003).

6.3.3 Limitations of the Study

This research investigated the predictive effects of both industry and firm factors on the performance of banks and insurance companies operating in the same financial services industry. This was the first study of its kind in Ethiopia. Despite this, it was not a complete study on the whole financial services industry as it excluded such institutions as micro-financiers, money transfers, insurance brokers and agents. This study should have also compared and contrasted the predictive power of both industry and firm effects on the competitive advantage and performances of banks and insurance companies separately to determine any significant variations between them.

Another limitation of this study stemmed from the subjective measures of firm performance. Even though subjective measures are as valid as objective measures, performance measured using top management perceptions might include some biases. Moreover, the competitive advantage and performance of banks and insurance companies could be influenced by many factors other than firm and industry effects. The findings of this research should therefore be viewed whilst taking those limitations into account. Nevertheless, everything possible was done to minimize any potential adverse effect of these limitations on the results and ensure that they were valid and reliable.

6.3.4 Contributions of the Study

The Ethiopian financial services industry in general and the banking and insurance services in particular are characterized by low levels of competition, inefficient management, lack of product diversification and innovativeness, a limited penetration rate, dominance by state ownership and a tight regulatory environment. The industry is accessible only to domestic investors with a maximum 5% private shareholding limit, except for the government. Both banks and insurance companies have been growing profitably since their establishment following the liberalization of the sector for private domestic investors in 1994. This study on financial service firms (banks and insurance companies) operating in a regulated industry in Ethiopia has made significant contributions to the existing body of knowledge and practice in many ways.

In the first instance, this study investigated the impacts of firm and industry effects on firm performance through the mediating effect of competitive advantage. Prior research particularly addressing the mediating effect of competitive advantage in the context of regulated industries in developing countries had been limited and to the knowledge of this researcher, there was no relevant study on this subject in Ethiopia. Even though the findings supported the fundamental propositions of the RBV of strategy, it also revealed that financial service firms operating in a protected and highly regulated industry, with inefficient management, limited adoption of strategy and low levels of competition could still gain competitive advantage that further leads to improved performance. The findings contained in this research are therefore an original theoretical contribution to the existing debate on resource-based strategy, which assumes firm heterogeneity in the context of a competitive environment. Given the characteristics of the Ethiopian financial service firms, it is hardly possible to argue that firms' competitive advantage and superior performance have been the result of heterogeneous resources and capabilities. Rather, these achievements could be attributed to homogenous organizational capabilities and resources that seem to have had little imitation and mobility barriers. Moreover, the result that direct firm effect did not have a significant impact on firm performance was also consistent with the RBV which holds that firm resources and capabilities may not necessary explain improved firm performance.

The second original contribution of this study is that industry effect had no impact on competitive advantage and its direct and total effects on firm performance were not significant. These findings challenge the claims made by the proponents of the IO and the industry structure approach who argue that industry structure explained in terms of the five forces is the driver of competitive advantage and a predictor of firm performance. Since the financial services industry in Ethiopia has been stable but closed to foreign firms, the impact of the industry forces at this early stage of the industry to create market dynamism and encourage firms to improve their levels of efficiencies and innovativeness, has been insignificant.

The third theoretical contribution of this research includes the conceptual clarity between the relative measures of competitive advantage and the performance of firms. In this study, competitive advantage has been found to partially mediate firm performance and predict a significant part of firm performance variations. This empirical picture is consistent with the views of other scholars that competitive advantage is not the same as firm performance and rather that competitive advantage is different to and an antecedent to firm performance (Ma, 2000a; 2000b; Newbert, 2008; 2014; O'Shannassy, 2008; Makadok & Ross, 2011; Sigalas & Economou, 2013). Moreover, testing the relative measures of competitive advantage and firm performance as originally conceptualized by the RBV scholars could also bridge the gap between theory and practice (Newbert, 2007; 2014).

The fourth theoretical contribution of this study relates to the integration of the industry-based perspective stemming from the economics discipline and internal firm resources and capabilities using the RBV of management scholarship that advances the field of strategic management and explains firm performance variations advocated by many scholars (Mauri & Michaels, 1998; Spanos & Lioukas, 2001; Spulber, 2003; Kim & Oh, 2004; Sheehan & Foss, 2007; Raduan, *et al*., 2009; Hussler, *et al*., 2012).

The practical contribution of this study is the possibility of it being of some help to managers and professionals in the financial services industry to encourage them to consider the importance of internal firm resources and capabilities as drivers of competitive advantage and firm performance,

even if they are operating in a regulated environment. The existing competitive advantage and superior performance of firms in an emerging industry may not be sustainable. Managers and professionals should therefore monitor changes in the financial services industry. By the time the industry changes dynamically, firms that have unique resources and capabilities that can hardly be imitated would create and ensure sustainable competitive advantage and superior performance. Both banks and insurance companies should invest in and develop their strategic resources with particular emphasis on intangible assets and dynamic capabilities that could create and ensure the sustainability of their competitive advantage and superior performance.

6.4 RECOMMENDATIONS

The study demonstrated that firm and industry effects directly and positively affect the performance variations of banks and insurance companies. The combined predictive power of the two exogenous variables on competitive advantage and the performance of banks and insurance companies are substantial. The industry direct effects on firm performance have almost twice the predictive power of firm effects. Firm effects, however, is a significant predictor of firm performance indirectly through the partial mediating effect of competitive advantage. Financial service firms in Ethiopia, protected from foreign competitors and operating in a stringent regulatory system, have been performing profitably. Virtually every bank and insurance company was profitable in a year or two after establishment. Such encouraging performance might not be unexpected in an economy that shifted from a socialist orientation to a market-led economy. It is believed that such protection may not last long given the pressure of globalization and Ethiopia's request to join the World Trade Organization. As the context evolves, and particularly when the government lifts its entry barrier on foreign banks and insurance companies, local financial institutions will face difficulties to compete against foreign banks and insurance firms that are equipped with superior resources and capabilities. Even at present, in the absence of foreign financial firms, there are some indications that competition among existing firms is increasing due to their internal demand for growth and the regulator's pressure to expand their market across the country. As the forces in the industry change and are better informed, it is expected that these contending forces will develop more bargaining power to exert increasing pressure on banks and insurance companies for better benefits and appropriations. The following is therefore recommended:

- Banks and insurance firms, while enjoying the government's protection against foreign entry at the moment, should analyse their internal resources and capabilities as well as expected changes in the external environment and craft a resource-based strategy that will enable them to enhance their dynamic capabilities reconfiguring and transforming other resources to fit the environment.
- In order to sustain their competitive advantages, financial service firms should invest in acquiring, building and organizing resources and dynamic capabilities that are valuable, rare and difficult to be imitated by competitors. Emphasis has to be more on investing and building intangible assets such as branding and image building, particularly at organizational

levels rather than product levels (firms have similar offers which create little differentiation), customer service reputation, manpower development and training, restructuring and creating alignments, increasing use of technologies, systems and policies; enhancing their capabilities such as managerial skills, learning, reconfigurations and transforming organizational processes which create more durable and superior competitive advantage.

- Since competitive advantage in the service industries like banks and insurance companies may be easily copied and eroded, the continuous renewal and improvement, innovation and reconfiguration of activities and processes become critical. Financial service firms that have been offering similar types of products with few price differences should be able to innovate and diversify their products and service levels.
- As their products are homogenous, firms should segment their markets properly and create differentiation advantages, while controlling their costs for customers that prefer quality services, using services and marketing continuously.
- The NBE, as the regulatory body, has to support the managerial and professional competencies of financial service firms in addition to its regulatory role. Its roles should focus more on creating and fostering a competitive environment where firms can develop their resources and capabilities, enhance their efficiencies and competitiveness. To this end, the NBE has to develop its internal resources and capabilities as its staff competencies and supervisory capabilities have not been satisfactory (Bezabeh & Desta, 2014).
- The existing practice of the NBE's involvement in setting interest rates and loan allocations to the commercial banks should be left to market forces. The market forces and banks' strategies should determine the interest and loan disbursements. Government's favouritism towards public financial service firms should be terminated and the market should be open to every firm in the industry to compete freely and fairly.
- The government should also open the market to foreign entrants as their presence could contribute significantly to bring in new skills and managerial know-how, new technologies and innovative varieties of products which would promote competitiveness and growth in the financial services industry. Before opening the market to foreign firms, the regulatory body has to strengthen its organizational capabilities and resources in order to provide proper direction and support to both existing and new firms.

Further research directions

Future studies on banks and insurance companies should investigate the impact of firm and industry effects on performance using mixed method designs that include both quantitative and qualitative data analyses. Such types of studies enhance the quality of the research through triangulation. As this study employed a cross-sectional survey design, it would also be appropriate to use longitudinal designs in future studies. Since this research was done on the combined effects of firm and industry on firm performance with the mediating effect of competitive advantage, a separate study on the effect of firm on firm performance and industry effects on firm performance may be made with the mediation of competitive advantage on the banks and insurance companies. A similar study may be carried out on the same topic using co-variance-based SEM in order to examine and compare the methodological effects.

More importantly, apart from the industry and firm effects, government effect on the performance of the financial service industry shall be also studied. In a country where the importance of the government as player as well as regulator of business is dominant, addressing government as a third variable should be a potentially rich research area. Similar studies may also be embarked on in other less regulated industries in Ethiopia in order to compare and evaluate the effects of both industry and firms on performance. Such types of research could provide alternative views of the highly regulated financial service industry.

Finally, researchers and academics are encouraged to further investigate the effects of homogenous firm resources and capabilities in explaining firm performance variations, particularly in a regulated environment.

List of References

Aaker, D.A. 1989. 'Managing assets and skills: The key to a sustainable competitive advantage'. *California Management Review,* 31(2): 91-106.

Access Capital. 2010. *Banking sector review*. Addis Ababa: Access Capital.

Access Capital. 2011/12. *Ethiopia: Macroeconomic handbook*. Addis Ababa: Access Capital.

Adner, R. and Zemsky, P. 2006. 'A demand-based perspective on sustainable competitive advantage'. *Strategic Management Journal*, 27: 215-239.

African Development Bank. 2016. *Ethiopia 2016.* [online]. Available from: <http://www.africaneconomicoutlook.org> [Accessed 12 January 2016].

Ahmadi, H., O'Cass, A. and Miles, M.P. 2014. 'Product resource-capability complementarity, integration mechanisms and first product advantage'. *Journal of Business Research*, 67: 704-709.

Allen, R.S. and Helms, M.M. 2006. 'Linking strategic practices and organizational performance to Porter's generic strategies'. *Business Process Management Journal*, 12(4): 433-454.

Altuntas, G., Semercioz, F., Mert, A. and Pehlivan, C. 2014. *Industry forces, competitive and functional strategies and organizational performance: Evidence from restaurants in Istanbul, Turkey* [online]. *10th International Strategic Management Conference. Procedia - Social and Behavioral Sciences, 150 (2014) 300-309*. Available from: www.sciencedirect.com. [Accessed 25 February 2016].

Ambrosini, V. and Bowman, C. 2009. 'What are dynamic capabilities and are they a useful construct in strategic management'. *International Journal of Management Reviews*, 11(1): 29-49.

Amit, R. and Shoemaker, P.J. 1993. 'Strategic assets and organizational rent'. *Strategic Management Journal*, 14: 33-36.

Andersen, O. and Kheam, L.S. 1998. 'Resource-based theory and international growth strategies: An exploratory study'. *International Business Review*, 7: 163-184.

Andonova, V. and Ruíz-Pava, G. 2016. 'The role of industry factors and intangible assets in company performance in Colombia'. *Journal of Business Research,* 69: 4377-4384.

Arend, R.J. 2004. 'The definition of strategic liabilities, and their impact of firm performance', *Journal of Management Studies*, 41(6): 1003-1027.

Arend, R.J. 2009. 'Industry effects and firm effects: No effect is an island'. *Journal of Business Research,* 62: 651-659.

Arrighetti, A., Fabio Landini, F. and Lasagni, A. 2014. 'Intangible assets and firm heterogeneity: Evidence from Italy'. *Research Policy,* 43: 202-213.

Athanasoglou, P., Brissimis, N. and Delis, D. 2008. 'Bank-specific, industry-specific and macroeconomic determinants of bank profitability'. *International Financial Markets, Institution and Money,* 18: 121-136.

Attia, S.T. and Hooley, G. 2007. 'The role of resources in achieving target competitive positions'. *Journal of Strategic Marketing,* 15(2-3): 91-119.

Augier, M. and Teece, D.J. 2009. 'Dynamic capabilities and multinational enterprise: Penrosean insights and omissions'. *Management International Review,* 47: 175-192.

Bain, J.B. 1951. 'Relation of profit rate to industry concentration: American manufacturing, 1936-1940'. *Quarterly Journal of Economics,* 65(3): 293-324.

Bain, J.S. 1956. *Barriers to new competition*. Cambridge: Harvard University Press.

Bain, J.S. 1959. *Industrial organization*. New York: John Wiley & Sons.

Bamiatzi, V., Bozos, K., Cavusgil, T. and Hult, T. 2016. 'Revisiting the firm, industry, and country effects on profitability under recessionary and expansion periods: A multi-level analysis'. *Strategic Management Journal,* 37: 1448-1471.

Barney, J. 1986a. 'Strategic factor markets: Expectations, luck, and business strategy'. *Management Science,* 42: 1231-1241.

Barney, J. 1986c. 'Types of competition and the theory of strategy: Toward an integrative framework'. *Academy of Management Review,* 11: 791-800.

Barney, J. 1991. 'Firm resources and sustainable competitive advantage'. *Journal of Management,* 17: 99-120.

Barney J. 1995. 'Looking inside for competitive advantage'. *Academy of Management Executive,* 9(4): 49-61.

Barney, J. 2001a. 'Is the resource-based "view" a use perspective for strategic management research? Yes'. *Academy of Management Review,* 26(1): 41-56.

Barney, J. 2001b. 'The resource-based theories of competitive advantage: A ten year retrospective on the resource-based view'. *Journal of Management,* 27: 643-650.

Barney, J. and Arikan, A. 2001. 'The resource-based view: Origins and implications.' In: Hitt, M.A., Freeman, R.E. and Harrison, J.S. eds. *Handbook of Strategic Management*. Oxford: Blackwell. 124-188.

Barney, J.B. 2002. 'Strategic management: From informed conversation to academic discipline'. *Academy of Management Executive,* 16(2): 53-57.

Barney, J.B. and Clark, D. 2007. *Resource-based theory: Creating and sustaining competitive advantage*. New York: Oxford University Press.

Barney, J.B. and Hesterly, W. 2010. *Strategic management and competitive advantages: Concepts and cases*. 3rd ed. New Jersey: Pearson Education Inc.

Barney, J.B., Ketchen, D.J. and Wright, M. 2011. 'The future of resource-based theory: Revitalization or decline'? Special issue: Twenty years of resource-based theory. *Journal of Management,* 37(5): 1299-1315.

Barney, J.B. and Wright, P.M. 1998. 'On becoming a strategic partner: The role of human resources in gaining competitive advantage'. *Human Resource Management,* 37(1): 31-46.

Baron, R. and Kenny, D.A. 1986. 'The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations'. *Journal of Personality and Social Psychology,* 51(6): 1173-1182.

Barreto, I. 2010. 'Dynamic capabilities: A review of past research and an agenda for the future'. *Journal of Management,* 36: 256-280.

Becker, J., Klein, K. and Wetzels, M. 2012. 'Hierarchical latent variable models in PLS-SEM: Guidelines for using reflective-formative type models'. *Long Range Planning,* 45: 359-394.

Best, R.J. 2009. *Market-based management: Strategies for growing customer value and profitability*'. 5th ed. New Jersey: Pearson Prentice Hall.

Bezabeh, A. and Desta, A. 2014. 'Banking sector reform in Ethiopia'. *International Journal of Business and Commerce,* 3(8): 25-38.

Bharadwaj, G., Varadarajan, P. and Fahy J. 1993. 'Sustainable competitive advantage in services industries: A conceptual model and research propositions'. *The Journal of Marketing,* 57(4): 83-99.

Bhattacherjee, A. 2012. *Social Science Research: Principles, Methods, and Practices* [online]. USF Open Access Textbooks Collection. Book 3. Available from: <http://scholarcommons.usf.edu/oa_textbooks/3 > [Accessed 4 December 2016].

Bingham, C. and Eisenhardt, K. 2008. 'Position, leverage and opportunity: A typology of strategic logics linking resources with competitive advantage'. *Managerial and Decision Economics*, 29: 241-256.

Boshoff, C. and du Plessis, F. 2009. *Services marketing: A contemporary approach*. Cape Town: Juta and Company Ltd.

Bou, J.C. and Satorra, A. 2007. 'The persistence of abnormal returns at industry and firm levels: Evidence from Spain'. *Strategic Management Journal*, 28(7): 707-722.

Bowman, C. and Ambrosini, V. 2000. 'Value creation versus value capture: Towards a coherent definition of value in strategy'. *British Journal of Management*, 1(11): 1-15.

Bowman, C. and Ambrosini, V. 2007. 'Firm value creation and levels of strategy'. *Management Decision*, 45(3): 360-371.

Bowman, E. and Helfat, C. 2001. 'Does corporate strategy matter?' *Strategic Management Journal*, 22: 1-23.

Brandenburger, A. M. and Stuart, H. W. 1996. 'Value-based Business Strategy'. *Journal of Economics and Management Strategy*, 5: 5–24.

Bridoux, F. 2004. *A resource-based approach to performance and competitions: An overview of the connections between resources and competition. A research paper presented at the 2004 SMS Conference, Puerto Rico*, USA [online]. Available from: https://www.uclouvain.be/cps/ucl/doc/iag/. /WP_110_Bridoux.pdf. [Accessed 11 February 2012].

Byrne, B.M. 2010. *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. 2nd ed. New York: Taylor & Francis Group.

Caloghirou, Y., Protogerou, A., Spanos, Y. and Paragiannakis, L. 2004. 'Industry-versus firm specific effects on performance: Contrasting SMEs and large-sized firms'. *European Management Journal*, 22(2): 231-243.

Camelo-Ordaz, C., Martı´n-Alca´zar, F. and Valle-Cabrera, R. 2003. 'Intangible resources and strategic orientation of companies: An analysis in the Spanish context'. *Journal of Business Research*, 56: 95-103.

Cano, C.R., Carrillat, F.A. and Jaramillo, F. 2004. 'A meta-analysis of the relationship between market orientation and business performance: Evidence from five continents'. *International Journal of Research in Marketing,* 21: 179-200.

Carmeli, A. and Tishler, A. 2004. 'Resources, capabilities, and the performance of industrial firms: A multivariate analysis'. *Managerial and Decision Economics,* 25: 299-315.

Carpenter, M.A. and Sanders, W.G. 2009. *Strategic management: A dynamic perspective; concepts and cases*. 2nd ed. New Jersey: Pearson Prentice Hall.

Chang, S. and Singh, H. 2000. 'Corporate and industry effects on business unit competitive position'. *Strategic Management Journal,* 21: 739-752.

Chareonsuk, C. and Chansa-ngavej, C. 2008. 'Intangible asset management framework for long-term financial performance'. *Industrial Management and Data Systems,* 108(6): 812-828.

Chatain, O. 2010. 'Value creation, competition, and performance in buyer-supplier relationships'. *Strategic Management Journal,* 32: 76-102.

Chen, Y. 2010. 'The continuing debate on firm performance: A multilevel approach to the IT sectors of Taiwan and South Korea'. *Journal of Business Research,* 63: 471-478.

Chin, W.W. 1998. 'The partial least squares approach to structural equation modeling'. In: Marcoulides, G.A. ed. *Modern methods for business research*. New Jersey: Lawrence Erlbaum Associates Inc. 295-336.

Chin, W.W. 2010. 'How to write up and report PLS analyses'. In: Vinzi, V.E., Chin, W.W., Henseler, J. and Wang, H. eds. *Handbook of partial least squares*: *Concepts, methods and applications*. Berlin: Springer-Verlag. 655-690.

Chin, W.W. and Newsted, P.R. 1999. 'Structural equation modeling analysis with small samples using partial least squares'. In: Hoyle, R. ed. *Statistical strategies for small sample research*. Thousand Oaks, CA: Sage Publications. 307-341.

Claver, E., Molina, J. and Tari, J. 2002. 'Firm and industry effects on profitability: A Spanish empirical analysis'. *European Management Journal,* 20(3): 321-328.

Clelland, I.J., Douglas, T.J. and Henderson, D.A. 2006. 'Testing resource-based and industry factors in a multi-level model of competitive advantage creation'. *Academy of Strategic Management Journal,* 5: 1-24.

Clulow, V., Barry, C. and Gerstman, J. 2007. 'The resource-based view and sustainable competitive advantage: The customer-based view of the firm'. *Journal of European Industrial Training*, 31(1): 19-35.

Clulow, V., Gerstman, J. and Barry, C. 2003. 'The resource-based view and sustainable competitive advantage: The case of a financial services firm'. *Journal of European Industrial Training*, 27(5): 220-32.

Cockburn, I., Henderson, R. and Stern, S. 2000. 'Untangling the origins of competitive advantage'. *Strategic Management Journal*, 21(10-11): 1123-1145.

Coff, R.W. 1999. 'When competitive advantage doesn't lead to performance: The resource-based view and stakeholder bargaining power'. *Organization Science*, 10(2): 119-133.

Coff, R.W. 2003. 'The emergent knowledge-based theory of competitive advantage: An evolutionary approach to integrating economics and management'. *Managerial and Decision Economics*, 24: 245-251.

Cohen, J. 1992. 'A power primer'. *Psychological Bulletin*, 112: 155-159.

Coltman T., Devinney T., Midgley F. and Venaik, S. 2008. 'Formative versus reflective measurement models: Two applications of formative measurement'. *Journal of Business Research*, 61: 1250-1262.

Combs, J. and Ketchen, D. 1999. 'Explaining inter-firm cooperation and performance: Toward a reconciliation of predictions from the resource-based view and organizational economics'. *Strategic Management Journal*, 20: 867-888.

Commercial Bank of Ethiopia (2009/10). *Annual Report*. Addis Ababa, Ethiopia: Commercial Bank of Ethiopia.

Conant, J., Mokwa, M. and Varadarajan, P. 1990. 'Strategic types, distinctive marketing competencies and organizational performance: A multiple measures-based study'. *Strategic Management Journal*, 11 (5): 365-383.

Conner, K.R. 1991. 'A historical comparison of resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm?' *Journal of Management*, 17(1): 121-154.

Cool, K., Dierickx, L. and Jemison, D. 1989. 'Business strategy, market structure and risk-return relationships: A structural approach'. *Strategic Management Journal*, 10: 507-522.

Costa, L.A., Cool, K. and Dierickx, I. 2013. 'The competitive implications of the deployment of unique resources'. *Strategic Management Journal*, 34: 445-463.

Creswell, J.W. 2009. *Research design: Qualitative, quantitative, and mixed methods approaches*. 3rd ed. Los Angeles: Sage Publications.

Creswell, J.W. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches*. 4th ed. Los Angeles: Sage Publications.

Creswell, J.W. and Clark, V.L.P. 2011. *Designing and conducting mixed methods research*. 2nd ed. London: Sage Publications.

Crook, R.T., Ketchen, D.J., Combs, J.G. and Todd, S.Y. 2008. 'Strategic resources and performance: A meta-analysis'. *Strategic Management Journal*, 29: 1141-1154.

Crossan, M.M., Lane, H.W. and White, R.E. 1999. 'An organizational learning framework: from intuition to institution'. *Academy of Management Review*, 24(3): 337-360.

Daveni, R.A., Dagnino, G. and Smith, K. 2010. The age of temporary advantage. *Strategic Management Journal*, 31(13): 1371-1385.

David, F.R. 2011. *Strategic management: Concepts and cases*. 13th ed. New Jersey: Prentice Hall.

Day, S.G. 1994. 'The capabilities of market-driven organizations'. *Journal of Marketing*, 58: 37-52.

Day, S.G. and Wensley, R. 1988. 'Assessing advantage: A framework for diagnosing competitive superiority'. *Journal of Marketing*, 52: 1-20.

Dess, G., Ireland, R.D. and Hitt, M.A. 1990. 'Industry effects and strategic management research. *Journal of Management*, 16: 7-27.

Dess, G.G., and Beard, D.W. 1984. 'Dimensions of organizational task environments'. *Administrative Science Quarterly*, 29: 52-73.

Devlin, J.F. 2000. 'Adding value to retail financial services'. *International Journal of Bank Marketing'*, 18(5): 222-232.

Devlin, J.F., Ennew, C.T. and Mirza, M. 1995. 'Organizational positioning in retail financial Services'. *Journal of Marketing Management*, 1(1-3): 119-132.

Diamantopoulos, A. 2006. 'The error term in formative measurement models: Interpretation and modeling implications'. *Journal of Modelling in Management*, 1(1): 7-17.

Diamantopoulos, A. and Winklhofer, H.M. 2001 'Index construction with formative indicators: An alternative to scale development'. *Journal of Marketing Research*, 38: 269-277.

Douglas, T. and Ryman, J. 2003. 'Understanding competitive advantage in the general hospitality industry, evaluating strategic competencies'. *Strategic Management Journal*, 24: 333-347.

Drnevich, P. and Shanley, M. 2005. 'Multi-level Issues for Strategic Management Research: Implications for Creating Value and Competitive Advantage'. Research in Multi-Level Issues, 4: 117–161.

Duhamel, F., Reboud, S. and Santi, M. 2014. 'Capturing value from innovations: The importance of rent configurations'. *Management Decision*, 52(1): 122-143.

Dulcic, Z., Gnjidic, V. and Afrirevic, N. 2012. 'From five competitive forces to five collaborative forces: Revised view on industry structure-firm interrelationship'. *Procedia - Social and Behavioral Sciences*, 58: 1077-1084.

Duncan, W. J., Gintei M.P and Swayne L. 1998. 'Competitive advantage and internal organizational assessment', *Academy of Management Executive*, 12(3):6-17.

Dyer, J.H. and Singh, H. 1998. 'The relational view: Cooperative strategy and sources of inter-organizational competitive advantage'. *The Academy of Management Review*, 23(4): 660-79.

Easterby-Smith, M., Lyles, M.A. and Peteraf, M.A. 2009. 'Dynamic capabilities: Current debates and future directions', *British Journal of Management*, 20: S1-S8.

Edelman, L.F., Brush, C.G. and Manolova, T. 2005. 'Co-alignment in the resource-performance relationship: Strategy as mediator'. *Journal of Business Venturing*, 20: 359-383.

Ehlers, T. and Lazenby, K. 2010. *Strategic management: South African concepts and cases*. 2nd ed. Pretoria: Van Schaik.

Eisenhardt, K.M. and Martin, J.A. 2000. 'Dynamic capabilities: What are they'? *Strategic Management Journal*, 21: 1105-1121.

Enders, A., Konig, A., Hungenberg, H. and Engelbertz, T. 2009. 'Towards an integrated perspective of strategy: The value-process framework'. *Journal of Strategy and Management*, 2(1): 76-96.

Ennew, C.T. and Waite, N. 2007. *Financial services marketing: An international guide to principles and practice*. Oxford: Elsevier Ltd.

Eriksen, B. and Knudsen, T. 2003. 'Industry and firm level interaction implications for profitability'. *Journal of Business Research*, 56: 191-199.

Ethiopia. The Federal Democratic Republic of Ethiopia, House of Peoples Representative. 1994. *The Licensing and Supervision of Banking Business Proclamation Number 84/1994*, Addis Ababa: Federal Negarit Gazeta.

Ethiopia. The Federal Democratic Republic of Ethiopia, House of Peoples Representative. 1994. *The licensing and supervision of banking business Proclamation Number 86/1994,* Addis Ababa: Federal Negarit Gazeta.

Ethiopia. The Federal Democratic Republic of Ethiopia, House of Peoples Representative. 2008. *Banking Business Proclamation Number 592/2008*. Addis Ababa: Federal Negarit Gazeta.

Ethiopia. The Federal Democratic Republic of Ethiopia, House of Peoples Representative. 2012. *Insurance Business Proclamation Number 746/2012*. Addis Ababa: Federal Negarit Gazeta.

Ethiopia. The Provisional Military Government Administration Council. 1975. *Government ownership and control of the means of production Proclamation Number 26/1975*, Negarit Gazeta, 11 March 1975. Addis Ababa.

Ethiopia. The Provisional Military Government Administration Council. 1975. *Ethiopian Insurance Corporation Establishment Proclamation Number 68/1975*. Negarit Gazeta. 12 December 1975. Addis Ababa.

Ethiopian Economics Association. 2011. *Report on the Ethiopian economy: Financial sector developments in Ethiopia: Performance, challenges and policy issues*. Addis Ababa: Ethiopian Economics Association.

Fahy, J. 2000. 'The resource-based view of the firm: Some stumbling-blocks on the road to understanding sustainable competitive advantage'. *Journal of European Industrial Training*, 24: 94-104.

Fahy, J. and Smithee, A. 1999. 'Strategic marketing and the resource-based view of the firm'. [online]. *Academy of Marketing Science Review*, 10. Available from: http://www.amsreview.org/articles/fahy10-1999.pdf. [Accessed 23 August 2013].

Fairchild, A.J. and McQuillin, S.D. 2010. 'Evaluating mediation and moderation effects in school psychology: A presentation of methods and review of current practice'. *Journal of School Psychology*, 48: 53-84.

Farjoun, M. 2002. 'Towards an organic perspective on strategy'. *Strategic Management Journal*, 23: 561-594.

Ferna´ndez, E., Montes, M. and Va´zquez, J. 2000. 'Typology and strategic analysis of intangible resources: A resource-based approach'. *Technovation*, 20: 81-92.

Field, A. 2009. *Discovering statistics using SPSS*. 3rd ed. London: Sage Publications.

Flint, G.D. 2000. 'What is the meaning of competitive advantage'? *Advances in Competitiveness Research,* 8(1): 121-129.

Foon, L.S. and Nair, P.B. 2010. 'Revisiting the concept of sustainable competitive advantage: Perceptions of managers in Malaysian MNCs'. *International Journal of Business and Accountancy,* 1(1): 63-78.

Foss, N.J. 1996. 'Research in strategy, economics, and Michael Porter'. *Journal of Management Studies,* 33: 1-24.

Foss, N.J. 1998. The resource-based perspective: An assessment and diagnosis of problems, *Scandinavian Journal of Management*, 14(3): 133-149.

Foss, N.J. and Knudsen, T. 2003. 'A resource-based tangle: Towards a sustainable explanation of competitive advantage'. *Managerial and Decision Economics*, (24): 291-307.

Furrer, O., Sudharshan, D., Thomas, H. and Alexandre, M.T. 2008. 'Resource configurations, generic strategies, and firm performance'. *Journal of Strategy and Management*, 1(1): 15-40.

Galbreath, J. 2005. 'Which resources matter the most to firm success? An exploratory study of resources-based theory'. *Technovation*, 25(9): 979-987.

Galbreath, J. and Galvin, P.2008. 'Firm factors, industry structure and performance variation: New empirical evidence to a classic debate'. *Journal of Business Research*, 61: 109-117.

Galunic, D.C. and Eisenhardt, K.M. 2001. 'Architectural innovation and modular corporate forms'. *Academy of Management Journal,* 44(6): 1229-1249.

Garcia-Castro, R. and Aguilera, R.V. 2015. Incremental Value Creation and Appropriation in a World with Multiple Stakeholders: Research Notes and Commentaries. *Strategic Management Journal,* 36: 137-147.

Gaya, H.J., Struwig, M. and Smith. E. 2013. 'Creating a sustainable competitive advantage at a high performing firm in Kenya'. *African Journal of Business Management*, 7(21): 2049-2058.

Geda, A. 2006. *The structure and performance of Ethiopia's financial sector in the pre- and post-reform period with a special focus on banking*. UNU-WIDER, World Institute for Development Economic Research, Research Paper No. 2006/112. Unpublished.

Geda, A. 2015. The role of private banks in deposit mobilization in Ethiopia. *Dashen Bank, 20th Anniversary Magazine*, 14-17.

Geisser, S. 1974. 'A Predictive Approach to the Random Effects Model'. *Biometrika*, 61 (1): 101–107.

Ghemawat, P. and Rivkin, J.W. 2006. *Creating competitive advantage*. Harvard Business School. Note 798062, Boston, MA: Harvard Business School.

Ghobadian, A. and Oregan, N. 2008. 'Where do we fit in the swings and roundabouts of strategy?' *Journal of Strategy and Management*, 1(1): 5-14.

Gholami, M.H. and Seyyed-Esfahani, M. 2012. 'An integrated framework for competitive market strategy selection by using fuzzy AHP'. *Technical Gazette*, 19(4): 769-780.

Gidey, B. 1987. *Currency and banking in Ethiopia*. Addis Ababa: Commercial Press.

Gjerde, O., Knivsfla, K. and Saettem, F. 2010. 'Evidence on competitive advantage and superior stock market performance'. *Managerial and Decision Economics*, 31: 277-301.

Goddard, J., Tavakoli, M. and Wilson, J.O.S. 2009. 'Sources of variation in firm profitability and growth'. *Journal of Business Research*, 62: 495-508.

Goldman, M. and McCoy, S. 2009. 'Branding and positioning'. In: Venter, P. and Jansen, M. eds. *Strategic marketing: Theory and applications for competitive advantage*. Cape Town: Oxford University Press. 211-246.

Gonzalez-Fidalgo, E. and Ventura-Victoria, J. 2002. 'How much do strategic groups matter?' *Review of Industrial Organization*, 21: 55-71.

Gotz, O., Liehr-Gobbers, K. and Krafft, M. 2010. 'Evaluation of structural equation models using the partial least squares (PLS) approach'. In: Vinzi, V.E., Chin, W.W., Henseler, J., Wang, H. eds. *Handbook of partial least squares*: *Concepts, methods and applications*. Berlin: Springer-Verlag. 691-711.

Grahovac, J. and Miller, D.J. 2009. 'Competitive advantage and performance: The impact of value imitation'. *Strategic Management Journal*, 30: 1192-1212.

Grant, R.M. 1991. 'The resource-based theory of competitive advantage: Implications for strategy formulation'. *California Management Review*, 33(3): 114-135.

Grant, R.M. 2008. *Contemporary strategy analysis*. 6th ed. West Sussex: John Wiley & Sons.

Grant, R.M. 2010. *Contemporary strategy analysis*. 7th ed. West Sussex: John Wiley & Sons.

Greco, M., Cricelli, L. and Grimaldi, M. 2013. 'A strategic management framework of tangible and intangible assets'. *European Management Journal*, 31: 55-66.

Grewal, D. and Levy, M. 2010. *Marketing*. 2nd ed. Boston: McGaw-Hill.

Grimm, C.M., Lee, H. and Smith, K.G. 2006. *Strategy as action: Competitive dynamics and competitive advantage*. New York: Oxford University Press.

Haenlein, M. and Kaplan, A.M. 2004. 'A beginner's guide to partial least squares analysis'. *Understanding Statistics*, 3(4): 283-297.

Hailu, Zeleke. 2007. *Insurance in Ethiopia: Historical development, present status and future challenges*. Addis Ababa: Master Printing Press.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. 2010. *Multivariate data analysis*. Englewood Cliffs: Prentice Hall.

Hair, J.F., Hufit, T.G., Ringle, C.M. and Sarstedt, M. 2014. *A primer on partial least squares structural equation modeling (PLS-SEM)*. California: Sage Publications.

Hair, J.F., Ringle, C.M. and Sarstedt, M. 2011. 'PLS-SEM: Indeed a silver bullet'. *Journal of Marketing Theory and Practice*, 19(2): 139-251.

Hair, J.F., Ringle, C.M. and Sarstedt, M. 2013. 'Editorial partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance'. *Long Range Planning*, 46: 1-12.

Hair, J.F., Sarstedt, M., Ringle, C.M. and Mena, J.A. 2012 'An assessment of the use of partial least squares structural equation modeling in marketing research'. *Journal of the Academy of Marketing Science*, 40: 414-433.

Hajipour, B., Talari, M. and Shahin, A. 2011. 'An investigation of the relationships between industry structure, strategy type, organizational characteristics and organizational performance: A case study of the food and chemical industries of Iran. [online]. *African Journal of Business Management*, 5 (16): 7085-7098. Available from: http://www.academicjournals.org/AJBM. [Accessed 17 December 2015].

Hall, R. 1992. 'The strategic analysis of intangible resources'. *Strategic Management Journal*, 13: 135-144.

Hall, R. 1993. 'A framework linking intangible resources and capabilities to sustainable competitive advantage'. *Strategic Management Journal*, 14: 607618.

Hansen, G.S. and Wernerfelt, B. 1989. 'Determinants of firm performance: The relative importance of economic and organizational factors'. *Strategic Management Journal*, 10(5): 399-412.

Hawawini, G., Subramanian, V. and Verdin, P. 2003. 'Is performance driven by industry or firm-specific factors: A new look at the evidence'. *Strategic Management Journal*, 24(1): 1-16.

Hawawini, G., Subramanian, V. and Verdin, P. 2005. 'Is performance driven by industry or firm-specific factors? A reply to McNamara, Aime and Vaaler'. *Strategic Management Journal*, 26(11): 1083-1086.

Hedman, J. and Kalling, T. 2003. 'The business model concept: Theoretical underpinnings and empirical illustrations'. *European Journal of Information Systems*, 12: 49-59.

Helfat, C.E. and Peteraf, M.A. 2003. 'The dynamic resource-based view: Capability lifecycles'. *Strategic Management Journal Strategic Management*, 24: 997-1010.

Helfat, C.E., Finkelstein, S., Mitchell, W., Peteraf, M.A., Singh, H., Teece, D. and Winter, S. 2007. *Dynamic capabilities: Understanding strategic change in organizations.* Malden, MA: Blackwell.

Henseler, J. 2010. 'On the convergence of the partial least squares path modeling algorithm'. *Comput Stat*, 25: 107-120.

Henseler, J. and Sarstedt, M. 2012. 'Goodness-of-fit indices for partial least squares path modeling'. [online]. *Comput Stat*. Available from: http://www. Springerlink.com/html [Accessed 22 April 2016].

Henseler, J., Ringle, C. and Sinkovics, R. 2009. 'The use of partial least squares path modeling in international marketing'. *Advances in International Marketing*, 20: 277-319.

Hitt, M.A., Bierman, L., Shimizu, K. and Kochhar, R., 2001. 'Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective'. Academy *of Management Journal*, 44: 13-28.

Ho, R. 2006. *Handbook of univariate and multivariate data analysis and interpretation with SPSS.* London: Taylor & Francis Group.

Hoffman, K.D. and Bateson, J.E.G. 2001. *Essential of services marketing: Concepts, strategies & cases*. 2nd ed. Austria: South-Western, Thomson Learning.

Hoffman, N.P. 2000. 'An examination of the "sustainable competitive advantage" concept: Past, present, and future'. *Academy of Marketing Science Review*, 20(4): 1-16.

Holian, M. J. and Reza, A. M. 2011. 'Firm and industry effects in accounting versus economic profit data'. *Applied Economics Letters*, 18:6, 527-529.

Hooley, G. and Greenley, G. 2005. 'The resource underpinnings of competitive positions'. *Journal of Strategic Marketing*, 13(2): 93-116.

Hooley, G., Broderick, A. and Moller, K. 1998. 'Competitive positioning and the resource-based view of the firm'. *Journal of Strategic Marketing*, 6: 97-115.

Hooley, G., Greenley, G., Cadogana, J. and Fahy, J. 2005. 'The performance impact of marketing resources'. *Journal of Business Research*, 58: 18-27.

Hooley, G., Greenley, G., Fahy, J. and Cadogan, J. 2001. 'Market-focused resources, competitive positioning and firm performance'. *Journal of Marketing Management*, 17(5-6): 503-520.

Hooley, G., Saunders, J. and Piercy, N. 2004. *Marketing and competitive positioning*. 3rd ed. Edinburgh: Pearson Education Ltd.

Hoopes, D.G., Madsen T.L. and Walker, G. 2003. Guest editors' introduction to the special issue: Why is there a resource-based view toward a theory of competitive heterogeneity?' *Strategic Management Journal*, 24: 889-902.

Hoskisson, R.E., Eden, L., Lau, M.C. and Wright, M. 2000. 'Strategy in emerging economies'. *Academy of Management Journal*, 43(3): 249-267.

Hoskisson, R.E., Hitt, M.A., Wan, W.P. and Yiu, D. 1999. 'Theory and research in strategic management: Swings of a pendulum'. *Journal of Management*, 25: 417-456.

Houthoofd, N. and Hendrickx, J. 2012. 'Industry segment effects and firm effects on firm performance in single industry firms, a focused issue on competence perspectives on new industry dynamics'. *Research in Competence-Based Management*, 6: 237-264.

Hoyle, R.H. 1995. *Structural equation modeling: Concept, issues, and applications*. California: Sage Publications.

Hulland, J. 1999. 'Use of partial least squares (PLS) in strategic management research: A review of four recent studies'. *Strategic Management Journal*, 20: 195-204.

Hussler, C., Penin, J., Dietrich, M. and Burger-Helmchen., T. 2012. 'Introduction strategic management and the economics of the firm: How to reconcile the brother enemies?' *Journal of Strategy and Management*, 5(4): 372-380.

Husso, M. and Nybakk, E. 2010. 'Importance of internal and external factors when adapting to environmental changes in SME sawmills in Norway and Finland: The manager's view'. *Journal of Forest Products Business Research*, 7(1): 1-14.

Ibrahim, N.M., Mohmood, R., and Abdullah, O.Y. 2016. 'Mediating role of competitive advantage on the relationship between entrepreneurial orientation and the performance of small and medium enterprises'. *International Business Management*, 10(12): 2444-2452.

Imperial Ethiopian Government. 1960. *Commercial Code of the Empire of Ethiopia*. Addis Ababa: Berhanena Selam Printing Press.

Imperial Ethiopian Government. 1960. *Maritime Code of the Empire of Ethiopia*. Addis Ababa: Berhanena Selam Printing Press.

Imperial Ethiopian Government. 1970. Negarit Gazata. *Insurance Proclamation No. 281/1970*, 30th year, No. 2. Addis Ababa.

Imperial Ethiopian Government. 1971. Negarit Gazata. *Insurance Regulations Legal Notice No. 393/1971*, 30th year, No. 14. Addis Ababa.

Ittner, C.D., Larcker, D.F. and Randall, T. 2003. 'Performance implications of strategic performance measurement in financial services firms'. *Accounting, Organizations and Society*, 28(7-8): 715-741.

Jarvis, D., MacKenzie, S. and Podsakoff, P. 2003. 'A critical review of construct indicators and measurement model misspecification in marketing and consumer research'. *Journal of Consumer Research*, 30(3): 199-218.

Judd, C.M. and Kenny, D.A. 1981. *Estimating the effects of social interventions*. Cambridge: Cambridge University Press.

Juga, J. 1999. 'Generic capabilities: combining positional and resource-based views for strategic advantage'. *Journal of Strategic Marketing*, 7(1): 3-18.

Kaleka, A. 2002. 'Resources and capabilities driving competitive advantage in export markets: Guidelines for industrial exporters'. *Industrial Marketing Management*, 31: 273-283.

Kamasak, R. 2011. 'Firm-specific versus industry structure factors in explaining performance variation'. *Management Research Review*, 34(10): 1125-1146.

Kamukama, N., Ahiauzu A. and Ntayi, J.M. 2011. 'Competitive advantage: Mediator of intellectual capital and performance'. *Journal of Intellectual Capital*, 12(1): 152-164.

Kaplan, R.S. and Norton, D.P. 1992. 'The balanced scorecard: Measures that drive performance'. *Harvard Business Review*, January-February, 1992.

Kaplan, R.S. and Norton, D.P. 1996. *Translating strategy in to action: The balanced scorecard*. Boston: Harvard University Press.

Kaplan, R.S. and Norton, D.P. 2001. *The strategy-focused organization: How balanced scorecard companies thrive in the new business environment*. Boston: Harvard University Press.

Kaplan, R.S. and Norton, D.P. 2006. *Alignment: Using the balanced scorecard to create corporate synergies*. Boston: Harvard Business School Press.

Kapur, D. and Gualu, A. 2012. 'Financial performance and ownership structure of Ethiopian commercial banks'. *Journal of Economics and International Finance*, 4(1): 1-8.

Karabag, S.F. and Berggren, C. 2013. 'Antecedents of firm performance in emerging economies: Business groups, strategy, industry structure, and state support'. *Paper to be presented at the 35th DRUID Celebration Conference 2013*, Barcelona, Spain, June 17-19.

Karabag, S.F. and Berggren, C. 2014. 'Antecedents of firm performance in emerging economies: Business groups, strategy, industry structure, and state support'. *Journal of Business Research*, 67: 2212-2223.

Karniouchina, E.V., Carson, S.J., Short, J.C. and Ketchen, D.J. 2013. 'Research notes and commentaries: Extending the firm vs. industry debate: Does industry life cycle stage matter?' *Strategic Management Journal*, 34: 1010-1018.

Kearney, C. 2012. 'Emerging market research: Trends, issues and future directions'. *Emerging Markets Review*, 13: 159-183.

Kim, B.Y. and Oh, H. 2004. 'An integrated approach to strategic management for the lodging industry'. *International Journal of Hospitality and Tourism Administration*, 4(2): 1-16.

Kim, L. and Lim, Y. 1988. 'Environment, generic strategies, and performance in a rapidly developing country: A taxonomic approach'. *Academy of Management Journal*, 31(4): 802-827.

Kim, Y.J., Song, J. and Koo, C. 2008. 'Exploring the effect of strategic positioning on firm performance in the e-business context'. *International Journal of Information Management*, 28: 203-214.

Kline, R.B. 2011. *Principles and practice of structural equation modeling*. 3rd ed. New York: The Guilford Press.

Knott, P. 2009. 'Integrating resource-based theory in a practice-relevant form'. *Journal of Strategy and Management*, 2(2): 163-174.

Kotha, S. and Nair, A. 1995. 'Strategy and environment as determinant of performance: Evidence from Japanese machine tool industry'. *Strategic Management Journal*, 16: 497-518.

Kotler, P. and Keller, K.L. 2006. *Marketing management*. 12th ed. New Delhi: Pearson Prentice-Hall.

KPMG, 2012. *Insurance in Africa, sector report*. [online]. Available from: www.kpmg.com/Africa. [Accessed 22 April 2016].

Lado, A.A., Boyd, N.G. and Wright, P. 1992. 'A competency-based model of competitive advantage: Towards a conceptual integration'. *Journal of Management*, 18(1): 77-91.

Laitinen, E.K. 2002. 'A dynamic performance measurement system: Evidence from small Finnish technology companies'. *Scandinavian Journal of Management*, 18: 65-99.

Langerak, F. 2003. 'The effect of market orientation on positional advantage and organizational performance'. *Journal of Strategic Marketing*, 11(2): 93-115.

Lavie, D. 2006. 'The competitive advantage of interconnected firms: An extension of the resource-based view'. *Academy of Management Review*, 31: 638-658.

Lebas, M. and Euske, K. 2007. 'A conceptual and operational delineation of performance'. In: Neely, A. ed. *Business performance measurement: Unifying theories and integrating practice*. 2nd ed. New York: Cambridge University Press. 125-139.

Lee, J. and Miller, D. 1996. 'Strategy, environment and performance in two technological contexts: Contingency theory in Korea'. *Organization Studies*, 17(5): 729-750.

Leedy, P.D. and Ormrod, J.E. 2010. *Practical research; planning and design*. 9th ed. New Jersey: Pearson Educational International Inc.

Leedy, P.D. and Ormrod, J.E. 2014. *Practical research; planning and design*. 10th ed. London: Pearson Educational Ltd.

Lepak, D.P., Smith, K.G. and Taylor, M.S. 2007. 'Value Creation and Value Capture: a Multilevel Perspective'. *Academy of Management Review*, 32 (1):180–194.

Li, J.J. and Zhou, K.Z. 2010. 'How foreign firms achieve competitive advantage in the Chinese emerging economy: Managerial ties and market orientation'. *Journal of Business Research*, 63: 856-862.

Lipczynski, J., Wilson, J. and Goddard, J. 2009. *Industrial organization: Competition, strategy, policy*. 3rd ed. England: Pearson Education Limited.

Liu, L., Timothy, V. and Gao, Y. 2011. 'Resource-based determinants of performance in the Tanzanian commercial banking subsector'. [online]. *African Journal of Business Management*, 5(15): 6640-6647. Available from: http://www.academicjournals.org/AJBM. [Accessed 26 June 2012].

Lockett, A., Thompson, S. and Morgenstern, U. 2009. 'The development of the resource-based view of the firm: A critical appraisal'. *International Journal of Management Reviews*, 11(1): 9-28.

Lopez-Gamero, M.D., Molina-Azorin, J.F. and Claver-Cortes, E. 2009. 'The whole relationship between environmental variables and firm performance: Competitive and firm resources as mediator variables'. [online]. *Journal of Environmental Management*. Available from: http://www.doi:10.1016/j.jenvman.2009.05.007. [Accessed 17 July 2014].

Louw, L. and Venter, P. 2006. *Strategic management: Winning in the South African workplace*. Cape Town: Oxford University Press.

Lucas, M.T. and Kirillova, O.M. 2011. 'Reconciling the resource-based and competitive positioning perspectives on manufacturing flexibility'. *Journal of Manufacturing Technology Management*, 22(2): 189-203.

Luo, Y. 1999. 'The Structure-Performance Relationship in a Transitional Economy: An Empirical Study of Multinational Alliances in China'. *Journal of Business Research*, 46: 15–30.

Lusch, R.F. and Laczniak, G.R. 1989. 'Macro-environmental forces, marketing strategy and business performance: A futures research approach'. *Journal of the Academy of Marketing Science*, 17(4): 283-295.

Ma, H. 1999. 'Creation and pre-emption for competitive advantage'. *Management Decision*, 37(3): 259-266.

Ma, H. 2000a. 'Toward an advantage-based view of the firm', *Advances in Competitiveness Research*, 8(1): 34-59.

Ma, H. 2000b. 'Competitive advantage and firm performance'. *Competitiveness Review*, 10(2): 15-32.

MacDonald, S.S. and Koch, T.W. 2006. *Management of banking*. 6th ed. New Delhi: South-Western, Cengage Learning.

MacKinnon, D., Lockwood, C.M. and William, J. 2004. 'Confidence limits for the indirect effect: Distribution of the product and resampling methods'. *Multivariate Behavioural Research*, 39(1): 99-128.

MacKinnon, D.P. 2008. *Introduction to statistical mediation analysis*. New York: Taylor & Francis Group.

MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G. and Sheets, V. 2002. 'Comparison of methods to test mediation and other intervening variable effects'. *Psychological Methods*, 7(1): 83-104.

Magretta, J. 2012. *Understanding Michael Porter: The essential guide to competition and strategy*. Boston: Harvard Business School Publishing.

Mahoney, J. and Pandian, J. 1992. 'The resource-based view within the conversation of strategic Management'. *Strategic Management Journal*, 13(5): 363–380.

Majumdar, S.K. and Bhattacharjee, A. 2014. 'Firms, markets, and the state: Institutional change and manufacturing sector profitability variances in India'. *Organization Science*, 25(2): 509-528.

Makadok, R. 2010. 'The interaction effect of rivalry restraint and competitive advantage on profit: Why the whole is less than the sum of the parts'. *Management Science*, 56: 356-372.

Makadok, R. 2011. 'Invited editorial: The four theories of profit and their joint effects'. *Journal of Management*, 37: 13-16.

Makadok, R. and Ross, D.G. 2011. 'Taking industry structuring seriously: A strategic perspective on product differentiation'. *Strategic Management Journal*, 34: 509-532.

Makhija, M. 2003. 'Comparing the resource-based and market-based views of the firm: Empirical evidence from Czech privatization'. *Strategic Management Journal*, 24: 433-451.

Mamvura, D. 2015. A comparative study of how banks responded to a turbulent and chaotic environment in Zimbabwe: 2000-2008. DBL Thesis. University of South Africa.

Marcoulides, G.A. and Chin, W.W. 2013. You write, but others read: Common methodological misunderstandings in PLS and related methods. In: Abdi, H., Chin, W.W., Vinzi, V.E., Russolillo, G. and Trinchera, L. eds. *New perspectives in partial least squares and related methods*. Springer Proceedings in Mathematics and Statistics, Vol 56. New York: Springer Science+Business Media, 31-64.

Mason, E.C. 1939. 'Price and production policies of large-scale enterprise'. *American Economic Review*, 29: 61-74.

Mason, E.C. 1949. 'The current status of the monopoly problem in the United States'. *Harvard Law Review*, 62: 1265-1285.

Mauri, A.J. and Michaels, M.P. 1998. 'Firm and Industry Effects with Strategic Management: An Empirical Examination'. *Strategic Management Journal*, 19: 211-219.

McGahan, A. 1999. 'The Performance of US Corporations: 1981-1994'. *The Journal of Industrial Economics*, 47:373-398.

McGahan, A.M. and Porter, M.E. 1997. 'How much does industry matter, really?' *Strategic Management Journal*, 18: 15-30.

Mehra, A. 1996. 'Resource and market-based determinants of performance in the U.S. banking industry'. *Strategic Management Journal*, 17: 307-322.

Meyers, L.S., Gamst, G. and Guarino, A.J. 2006. *Applied multivariate research: Design and interpretation*. New Delhi: Sage publications.

Miller, T.L., Triana, M., Reutzel, C.R. and Certo, S.T. 2007. 'Mediation in strategic management research: Conceptual beginnings, current application, and future recommendations'. *Research Methodology in Strategy and Management*, 4: 295-318.

Mintzberg, H., Ahlstrand, B. and Lampel, J. 1998. *Strategy safari: A guide tour though the wilds of strategic management*. New York: The Free Press.

Molina, M.A., Pino, I.B. and Rodrıguez, A.C. 2004. 'Industry, management capabilities and firms' competitiveness: An empirical contribution'. *Managerial and Decision Economics*, 25: 265-281.

Montgomery, C.A. and Wernerfelt, B. 1991. 'Sources of superior performance: Market share versus industry effects in the U.S. brewing industry'. *Management Science*, 37(8): 954-959.

Morgan, N.A., Vorhies, D.W. and Mason, C. 2009. 'Market orientation, marketing capabilities, and firm performance'. *Strategic Management Journal,* 30: 909-920.

Narver, J.C. and Slater, S. 1990. 'The effect of market orientation on business profitability'. *Journal of Marketing,* 54(4): 20-35.

National Bank of Ethiopia. 2008. *Directive Number SBB/44/2008*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2009. *Banking industry risk management survey report*. Addis Ababa: Bank Supervision Directorate, National Bank of Ethiopia.

National Bank of Ethiopia. 2010/11. *Annual Report*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2011. *Directive Number SBB/50/2011*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2011/12. *Annual Report*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2012/13. *Annual Report*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2013. *Licensing and supervision of insurance business, minimum pair up capital for insurers, Directive Number SIB/34/2013*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2013/14. *Annual Report*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2014/15. *Annual Report*. Addis Ababa: National Bank of Ethiopia.

National Bank of Ethiopia. 2015/16. *Annual Report*. Addis Ababa: National Bank of Ethiopia.

Neely, A. 2005. 'The evolution of performance measurement research: Developments in the last decade and a research agenda for the next'. *International Journal of Operations and Production Management,* 25(12): 1264-1277.

Neely, A. 2007. *Business Performance Measurement: Unifying theories and integrating practice*. 2nd ed. Cambridge: Cambridge University Press.

Neuman, W.L. 2007. *Basics of social research: Qualitative and quantitative approaches.* 2nd ed. Boston: Pearson Education, Inc.

Newbert, S.L. 2007. 'Empirical Research on the resource-based view of the firm: An assessment and suggestions for future research'. *Strategic Management Journal,* 28: 121-146.

Newbert, S.L. 2008. 'Value, rareness, competitive advantage, and performance: A conceptual-level empirical investigation of the resource-based view of the firm'. *Strategic Management Journal*, 29(7): 745-768.

Newbert, S.L. 2014. 'Assessing performance measurement in RBV research'. *Journal of Strategy and Management,* 7(3): 265-283.

Nham, P.T. and Hoang, V.H. 2011. 'Building an integrated framework of strategic management theories to explain performance of firm in one industry'. [online]. *Journal of Global Management Research, Institut Fidal Inc.* Available from: http://ideas.respec.org. [Accessed 21 March 2013].

Norreklit, H. 2000. 'The balance on the balanced scorecard: A critical analysis of some of its assumptions'. *Management Accounting Research,* 11: 65-88.

Norreklit, H. 2003. 'The balanced scorecard: What is the score? A rhetorical analysis of the balanced scorecard'. *Accounting, Organizations and Society,* 28: 591-619.

Nothnagel, K. 2008. *Empirical research within resource-based theory: A meta-analysis of the central propositions.* Wiesbaden: Gabler.

O'Cass, A. and Julian, C. 2003. 'Examining firm and environmental influences on export marketing mix strategy and export performance of Australian exporters'. *European Journal of Marketing,* 37, 3(4): 366-384.

O'Cass, A. and Ngo, V.L. 2007. 'Balancing external adaptation and internal effectiveness: Achieving better brand performance'. *Journal of Business Research,* 60: 11-20.

O'Cass, A. and Weerawardena, J. 2010. 'The effects of perceived industry competitive intensity and marketing-related capabilities: Drivers of superior brand performance'. *Industrial Marketing Management,* 39: 571-581.

O'Shannassy, T. 2008. 'Sustainable competitive advantage or temporary competitive advantage improving understanding of an important strategy construct'. *Journal of Strategy and Management,* 1(2): 168-180.

Pan, S.L., Tan, B., Huang, J. and Poulsen, B. 2007. 'The development paths of non-strategic capabilities'. *European Management Journal,* 25(5): 344-358.

Pankhurst, R. 1963. 'The Maria Theresa dollar in pre-war Ethiopia'. *Journal of Ethiopian Studies,* 1(1): 8-26.

Parnell, J.A., Lester, D.L., Long, Z. and Koseoglu, M.A. 2012. 'How environmental uncertainty affects the link between business strategy and performance in SMEs: Evidence from China, Turkey, and the USA'. *Management Decision*, 50(4): 546-568.

Parnell, J.A. 2010. 'Strategic clarity, business strategy and performance'. *Journal of Strategy and Management*, 3(4): 304-324.

Parnell, J.A., O'Regan, N. and Ghobadian, A. 2006. 'Measuring performance in competitive strategy research'. *International Journal of Management and Decision Making*, 7(4): 408-417.

Pavlou, P.A. and El Sawy, O.A., 2011. 'Understanding the elusive black box of dynamic capabilities'. *Decision Sciences Journal*, 42(1): 239-273.

Pearce, J.A. and Robinson, R.B. 2005. *Formulation, implementation, and control of competitive strategy*. 9th ed. Boston: McGraw-Hill Irwin.

Pearce, J.A. and Robinson, R.B. 2009. *Formulation, implementation, and control of competitive strategy* 11th ed. Boston: McGraw-Hill.

Pecotich, A., Hattie, J. and Low, L.P. 1999. 'Development of *industruct:* A scale for the measurement of perceptions of industry structure'. *Marketing Letters*, 10(4): 409-22.

Penrose, E.T. 1959. *The theory of the growth of the firm*. Oxford: Basil Blackwell.

Pertusa-Ortega, E.M., Molina-Azorín, J.F. and Claver-Cortés, E. 2010. 'Competitive strategy, structure and firm performance'. *Management Decision*, 48(8): 1282-1303.

Peteraf, M.A. 1993. 'The Cornerstones of competitive advantage: A resource-based view'. *Strategic Management Journal*, 14(3): 179-191.

Peteraf, M.A. and Barney, J.B. 2003. 'Unraveling the Resource-Based Tangle'. *Managerial and Decision Economics*, 24: 309-323.

Peteraf, M.A. and Bergen, M.E. 2003. Scanning dynamic competitive landscapes: A market-based and resource-based framework'. *Strategic Management Journal*, 24: 1027-1041.

Peteraf, M.A. and Reed, R. 2007. Managerial discretion and internal alignment under regulatory constraints and change. *Strategic Management Journal*, 28(11): 1089-1112.

Podsakoff, N.P., Shen, W. and Podsakoff, P.M. 2006. 'The role of formative measurement models in strategic management research: Review, critique, and implications for future research'. In: Ketchen, D. and Bergh, D.D. eds. *Research Methodology in Strategy and Management*. Volume 3. Amsterdam: Elsevier Ltd. 197-252.

Porter, M. E. 1979. 'How Competitive Forces Shape Strategy'. *Harvard Business Review*, March–April: 137–156.

Porter, M.E. 1980a. 'Industry structure and competitive strategy: Keys to Profitability'. *Financial Analysts*, July-August: 30-41.

Porter, M.E. 1980b. *Competitive strategy; techniques for analyzing industries and competitors*. New York: The Free Press.

Porter, M.E. 1985. *Competitive advantage: Creating and sustaining superior performance*. New York: The Free Press.

Porter, M.E. 1991. 'Towards a dynamic theory of strategy'. *Strategic Management Journal*, 12: 95-117.

Porter, M.E. 1996. 'What is strategy?' *Harvard Business Review*, November-December, 61-78.

Porter, M.E. 1998. *Competitive advantage: Creating and sustaining superior performance: With a new introduction*. New York: The Free Press.

Porter, M.E. 2008. 'The five competitive forces that shape strategy'. *Harvard Business Review*, January, 24-40.

Powell, T.C. 1996. 'How much industry matter? An alternative empirical test'. *Strategic Management Journal*, 17: 323-334.

Powell, T.C. 2001. 'Competitive advantage: Logical and philosophical considerations'. *Strategic Management Journal*, 22: 875-888.

Powell, T.C. 2003. 'Strategy without Ontology: Research Notes and Commentaries'. *Strategic Management Journal*, 24: 285–291.

Prahalad, C.K. and Hamel, G. 1990. 'The core competencies of the corporation'. *Harvard Business Review*, May-June, 1990. 1-15.

Preacher, K. and Hayes, A. 2004a. 'SPSS and SAS procedures for estimating indirect effects in simple mediation models'. *Behavior Research Methods, Instruments, and Computers*, 36(4): 717-731.

Preacher, K. and Hayes, A. 2004. 'SPSS and SAS procedures for estimating indirect effects in simple mediation models'. *Behavior Research Methods, Instruments, & Computers*, 36 (4): 717-731.

Preacher, K. and Hayes, A. 2008. 'Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models'. *Behavior Research Methods,* 40(3): 879-891.

Priem, R. and Butler, J. 2001. 'Is the resource-based 'view' a useful perspective for strategic management research?' *Academy of Management Review,* 26(1): 22-40.

Quinn, R. and Dutton, J.E. 2005. 'Coordination as energy-in-conversation'. *Academy of Management Review,* 30(1): 36-57.

Raduan, C., Jegak, U., Haslinda, A. and Alimin, I. 2009. 'Management, strategic management theories and the linkage with organizational competitive advantage from the resource-based view'. *European Journal of Social Sciences,* 11(3): 402-418.

Ramaswamy, K., Thomas, A.S. and Litschert, R.J. 1994. 'Organizational performance in a regulated environment: The role of strategic orientation'. *Strategic Management Journal,* 15: 63-74.

Ray, G., Barney, J.B. and Muhanna, W.A. 2004. 'Capabilities, business processes, and competitive advantage: Choosing the dependent variable in empirical tests of the resource-based view'. *Strategic Management Journal,* 25: 23-37.

Reed, R. and Defillippi, R.J. 1990. 'Causal ambiguity, barrier to imitation, and sustainable competitive advantage'. *The Academy of Management Review,* 15(1): 88-102.

Reinartz, W., Haenlein, M. and Henseler, J. 2009. 'An empirical comparison of the efficacy of covariance-based and variance-based SEM'. *International Journal of Research in Marketing,* 26: 332-344.

Rigby, D. and Bilodeau, B. 2015. *Management tools and trends 2015.* [online]. Boston: Bain & Company Inc. Available from: <http://www.bain.com/management_tools/home.asp html > [Accessed 7 September 2016].

Ringle, C.M., Sarstedt, M. and Zimmermann, L. 2011. 'Customer satisfaction with commercial airlines: The role of perceived safety and purpose of travel'. *Journal of Marketing Theory and Practice,* 19(4): 459-472.

Ritala, P. and Ellonen, H.K. 2010. 'Competitive advantage in interfirm cooperation: Old and new explanations'. *Competitiveness Review: An International Business Journal*, 20(5): 367-383.

Rivard, S., Raymond, L. and Verreault, D. 2006. 'Resource-based view and competitive strategy: An integrated model of the contribution of information technology to firm performance'. *Journal of Strategic Information Systems,* 15: 29-50.

Roquebert, J. A., Phillips, R. L. & Westfall, P. A. 1996. 'Markets vs. management: What drives profitability'? *Strategic Management Journal,* 17(8): 653–664.

Rubio, A. and Aragon, A. 2009. 'SMES competitive behavior: Strategic resources and strategies'. *Journal of the American Academy of Management*, 7(3): 171-190.

Rumelt, R. 1991. 'How much does industry matter'? *Strategic Management Journal* 12(3): 167-185.

Rumelt, R., Schendel, D. and Teece, D. 1991. 'Strategic management and economics'. *Fundamental Research Issues in Strategy and Economics*, 12: 5-29.

Rumelt, R.P., Schendel, D.E. and Teece, D.J. 1994. *Fundamental issues in strategy: A research agenda*. Boston: Harvard Business School Press.

Sambasivam, Y. and Ayele, A.G. 2013. A study on the performance of insurance companies in Ethiopia. [online]. *International Journal of Marketing, Financial Services and Management Research*, 2(7): 138-150. Available from: < http://www.indianresearchjournals.com/html > [Accessed 1 January 2016].

Schaefer, C. 1992. The Politics of Banking: the Bank of Abyssinia (1905-1931). *International Journal of African Historical Studies*, 25 (2): 361-389.

Scherer, F.M. 1980. *Industrial market structure and economic performance.* Boston: Houghton Mifflin.

Scherer, F.M. and Ross, D. 1990. *Industrial market structure and economic performance.* Boston: Houghton-Mifflin.

Schmalensee, R. 1985. 'Do markets differ much?' *American Economic Review*, 75: 341-351.

Schumacker, E. and Lomax, R.G. 2010. *A beginner's guide to structural equation modeling*. 3rd ed. New York: Taylor & Francis Group.

Sengun, Y. 2003. 'A literature review and integrative performance measurement framework for multinational companies'. *Marketing Intelligence and Planning*, 21(3): 134-142.

Sheehan, N.T. and Foss, N.J. 2007. 'Enhancing the prescriptiveness of the resource-based view through Porterian activity analysis'. *Management Decision*, 45(3): 450-461.

Sheehan, N.T. and Foss, N.J. 2009. 'Exploring the roots of Porter's activity-based view'. *Journal of Strategy and Management*, 2(3): 240-260.

Short, J.C., Ketchen, D.J., Palmer, T.B. and Hult, G.T.M. 2007. 'Firm, strategic group and industry influences on performance'. *Strategic Management Journal*, 28(2): 147-167.

Short, J.C., McKelvie, A., Ketchen, D.J. and Chandler, G.N. 2009. 'Firm and industry effects on firm performance: A generalization and extension for new ventures'. *Strategic Entrepreneurship Journal*, 3(1): 47-65.

Sigalas, C. and Economou, P.V. 2009. 'Searching for a new paradigm in competitive strategy: The use of financial statements in mapping strategy'. *Investment Research and Analysis Journal*, 4(1): 45-56.

Sigalas, C. and Economou, P.V. 2013. 'Revisiting the concept of competitive advantage: Problems and fallacies arising from its conceptualization'. *Journal of Strategy and Management*, 6(1): 61-80.

Sigalas, C., Economou, P.V. and Georgopoulos, N.B. 2013. 'Developing a measure of competitive advantage'. *Journal of Strategy and Management*, 6(4): 320-342.

Sirmon, D.G., Hitt, M.A., Ireland, R.D. and Gilbert, B.A. 2011. 'Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects'. *Journal of Management*, 37(5): 1390-1412.

Sobel, M.E. 1982. 'Asymptotic confidence intervals for indirect effects in structural equation models'. *Sociological Methodology*, 13: 290-312.

South, S.E. 1981. 'Competitive advantage: The cornerstone of strategic thinking'. *Journal of Business Strategy*, 1(4): 15-25.

Spanos, Y.E. and Lioukas S., 2001. 'An examination into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective'. *Strategic Management Journal*, 22: 907-934.

Spanos, Y., Zaralis, G. and Lioukas, S. 2004. 'Strategy and industry effects on profitability: Evidence from Greece'. *Strategic Management Journal*, 25: 139-65.

Spulber, D.F. 2003. 'The intermediation theory of the firm: Integrating economic and management approaches to strategy'. *Managerial and Decision Economics*, 24: 253-266.

Stoelhorst, J.W. and Raaij, E.M. 2004. 'On explaining performance differentials marketing and the managerial theory of the firm'. *Journal of Business Research*, 57: 462-477.

Stone, M. 1974. 'Cross-validatory choice and assessment of statistical predictions'. *Journal of the Royal Statistical Society,* 36(2): 111-147.

Stonehouse, G. and Snowdon, B. 2007. 'Competitive advantage revisited: Michael Porter on strategy and competitiveness'. *Journal of Management Inquiry,* 16(3): 256-273.

Strandskov, J. 2006. 'Sources of competitive advantage and business performance'. *Journal of Business Economics Management,* VII (3): 119-129.

Tabachnick, B. and Fidell, L.S. 2007. *Using Multivariate Statistics*. 5th ed. Boston: Pearson Education, Inc.

Tabachnick, B. and Fidell, L.S. 2013. *Using Multivariate Statistics*. 6th ed. Boston: Pearson Education, Inc.

Takata, H. 2016. 'Effects of industry forces, market orientation, and marketing capabilities on business performance: An empirical analysis of Japanese manufacturers from 2009 to 2011'. *Journal of Business Research,* 69: 5611-5619.

Tang, Y.C. and Liou, F.M. 2010. 'Does firm performance reveal its own causes?' The role of Bayesian inference. *Strategic Management Journal,* 31: 39-57.

Tarziján, J. and Ramirez, C. 2010. 'Firm, industry and corporation effects revisited: A mixed multilevel analysis for Chilean companies'. *Applied Economics Letters,* 18(1): 95-100.

Tavitiyaman, P. 2009. The impact of industry forces on resource competitive strategies and hotel performance. DPhil Thesis. Oklahoma State University.

Tavitiyaman, P., Hailin, Q. and Zhang, H., Q. 2011. 'The impact of industry force factors on resource competitive strategies and hotel performance'. *International Journal of Hospitality Management,* 30: 648-657.

Teece, D.J. 2007. 'Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance'. *Strategic Management Journal,* 28: 1319-1350.

Teece, D.J. 2012. Dynamic capabilities: Routines versus entrepreneurial action. *Journal of Management Studies,* 49: 8.

Teece, D.J., Pisano, G. and Shuen, A. 1997. 'Dynamic capabilities and strategic management'. *Strategic Management Journal,* 18(7): 509-533.

Teece, D.J., Rumelt, G., Dosi, G. and Winter, S. 1994. Understanding corporate coherence: Theory and evidence'. *Journal of Economic Behavior and Organization,* 23: 1-30.

Tenenhaus, M., Vinzi, E.V., Chatelin, Y.M. and Lauro, C. 2005. 'PLS path modeling'. *Computational Statistics and Data Analysis*, 48(1): 159-205.

Thompson, A., Peteraf M., Gamble, J.E. and Strickland, A.J. 2012. *Crafting and executing strategy: The quest for competitive advantage: Concepts and cases*. Global Edition. 18th ed. New York: McGraw Hill.

Thompson, A., Strickland, A.J. and Gamble, J.E. 2010. *Crafting and executing strategy: The quest for competitive advantage: Concepts and cases*. 17th ed. Boston: McGraw Hill.

Thompson, J. and Martin, F. 2005. *Strategic management: Awareness and change*. 5th ed. Hampshire: South-Western Cengage Learning.

Thompson, J. and Martin, F. 2010. *Strategic management: Awareness and change*. 6th ed. Hampshire: South-Western Cengage Learning.

Tseng, Kuo-An, Lan, Yu-Wen, Lu, Hao-Chun and Chen, Pin-Yu. 2013. 'Mediation of strategy on intellectual capital and performance'. *Management Decision*, 51(7): 1488-1509.

Tuan, N.P. and Yoshi, T. 2010. 'Organizational capabilities, competitive advantage and performance in supporting industries in Vietnam'. *Asian Academy of Management Journal*, 15(1): 1-21.

Venkatraman N. and Ramanujam, V. 1986. 'Measurement of business performance in strategy research: A comparison of approaches'. *The Academy of Management Review*, 11(4): 801-814.

Venkatraman, N. and Ramanujam, V. 1987. 'Measurement of business economic performance: An examination of method convergence'. *Journal of Management*, 13(1): 109-122.

Villalonga, B. 2004. 'Intangible resources, Tobin's *q*, and sustainability of performance differences'. *Journal of Economic Behavior and Organization*, 54: 205-230.

Vinzi, V.E., Trinchera, L. and Amato, S. 2010. 'PLS path modeling: From foundations to recent developments and open issues for model assessment and improvement'. In Vinzi, V.E., Chin, W.W., Henseler, J. and Wang, H. eds. *Handbook of partial least squares*: *Concepts, methods, and applications*. Berlin: Springer-Verlag. 47-82.

Voelpel, S.C., Leibold, M. and Eckhoff, R.A. 2006. 'The tyranny of the balanced scorecard in the innovation economy'. *Journal of Intellectual Capital*, 7(1): 43-60.

Waktola, G. 2015. 'Human capital development (HCD) in the Ethiopian banking sector: An old way is no way'. *Dashen Bank SC 20th Anniversary Magazine*, 19-25.

Walley, K. and Thwaites, D. 1996. 'A review, synthesis and interpretation of the literature on competitive advantage'. *Journal of Strategic Marketing,* 4: 163-179.

Warnier, V., Weppe X. and Lecocq, X.F.L. 2013. 'Extending resource-based theory: Considering strategic, ordinary and junk resources'. *Management Decision,* 51(7): 1359-1379.

Weerawardena, J., O'Cass, A. and Julian, C. 2006. 'Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance'. *Journal of Business Research,* 59: 37-45.

Wernerfelt, B. 1984. 'A resource-based view of the firm'. *Strategic Management Journal,* 5(2): 171-180.

Wernerfelt, B. 1989. 'From critical resources to corporate strategy'. *Journal of General Management,* 14: 4-12.

Wernerfelt, B. and Montgomery, C.A. 1988. 'Tobin's q and the importance of focus in firm performance'. *The American Economic Review,* 78(1): 246-250.

Wetzels, M., Odekerken-Schröder, G. and Oppen, C. 2009. 'Using PLS path modeling for hierarchical construct models: Guidelines and empirical illustration'. *MIS Quarterly,* 33(1): 177-195.

Wiggins, R.R. and Ruefli, T.W. 2002. 'Sustained competitive advantage: Temporal dynamics and the incidence and persistence of superior economic performance'. *Organization Science,* 13: 81-105.

Wilden, R. and Gudergan, P. 2015. 'The impact of dynamic capabilities on operational marketing and technological capabilities: Investigating the role of environmental turbulence'. *Journal of the Academy of Marketing Science,* 43: 181-199.

Wilden, R., Gudergan, P., Nielsen, B. and Lings, I. 2013. 'Dynamic capabilities and performance: Strategy, structure and environment'. *Long Range Planning,* 46: 72-96.

Wilson, B. and Henseler, J., 2007. *Modeling reflective higher-order constructs using three approaches with PLS path modeling: A Monte Carlo comparison*. Australian and New Zealand Marketing Academy Conference, Otago, Australia, 791-800.

Wilson, C. 2012. 'The integrated propulsion strategy theory: A resources, capability and industrial organization'. *Journal of Management Policy and Practice,* 13(5): 159-171.

Winter, S.G. 2003. 'Understanding dynamic capabilities'. *Strategic Management Journal,* 20(10): 991-995.

Wold, H. 1982. 'Soft modeling: The basic design and some extensions'. In: Joreskog, K.G. and Wold, H. eds. *Systems under indirect observation: Causality, structure, prediction*, Vol 2. North Holland, Amsterdam, 1-54.

Wu, L. 2010. 'Applicability of the resource-based and dynamic-capability views under environmental volatility'. *Journal of Business Research*, 63: 27-31.

Yamin, S., Gunasekaran, A. and Mavondo, F.T. 1999. 'Relationship between generic strategies, competitive advantage and organizational performance: An empirical analysis'. *Technovation*, 19: 507-518.

Zahirul, H. 2014. '20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research'. *The British Accounting Review*, 46: 33-59.

Zahra, S.A., Sapienza, H.J. and Davidsson, P. 2006. 'Entrepreneurship and dynamic capabilities: A review, model and research agenda'. *Journal of Management Studies*, 43(4): 917-55.

Zemzem, A. and Gashaw, D. 2014. 'Structure competition of banking industry in Ethiopia'. *Birritu*, National Bank of Ethiopia, 1(117): 18-31.

Zollo, M. and Winter, S.G. 2002. 'Deliberate learning and the evolution of dynamic capabilities'. *Organization Science*, 13: 339-351.

Zott, C. 2003. 'Dynamic capabilities and the emergence of intra-industry differential firm performance: Insights from a simulation study'. *Strategic Management Journal*, 24: 97-125.

Appendices

Appendix I: Ethical Approval Letter

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SBL
GRADUATE SCHOOL OF BUSINESS LEADERSHIP
UNISA

SCHOOL OF BUSINESS LEADERSHIP
RESEARCH ETHICS REVIEW COMMITTEE (GSBL CRERC)

03 June 2014

Ref #: 2014_SBL/DBL_015_FA

Supervisor: Professor Serumaga - Zake Philip
Student researcher: Mr YT Bekele

This is to certify that the application for ethics clearance submitted by

Mr YT Bekele (Student Number: 72750774)

for the study

Firm and industry effects on competitive advantage and performance of service firms in Ethiopia

*has received **ethics approval**.*

The ethical clearance is granted to the research project as submitted to the School of Business Leadership Ethics Review Committee and is granted for the duration of the project, final approval was granted on 03 June 2014. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated to the School of Business Leadership Research Ethics Review Committee. An amended application could be requested if applicable.

It is your responsibility to ensure that the research project adheres to the values and principles expressed in the UNISA Research Ethics Policy, which can be found at the following website: http://www.unisa.ac.za/cmsys/staff/contents/departments/res_policies/docs/Policy_Research%20Ethics_rev%20app%20Council_22.06.2012.pdf

Yours faithfully

Ms N Motloi
Acting Chairperson
GSBL CRERC

Appendix II: Survey Questionnaire

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

DOCTOR OF BUSINESS LEADERSHIP (DBL) QUESTIONNAIRE TO BE COMPLETED BY PRESIDENTS, V/PRESIDENTS, CEOs, DIRECTORS, MANAGERS, DEPARTMENT HEADS AND TOP LEVEL LEADERS OF BANKS AND INSURANCE COMPANIES

January 2015

Dear Respondent,

I, the undersigned, am conducting a research on the **"Firm and industry effects on competitive advantage and performance of financial services in Ethiopia"** at UNISA Graduate School of Business Leadership. This research is conducted in partial fulfillment of the Doctoral Degree in Business Leadership (DBL). The study is intended to examine the extent to which firm and industry factors affect the competitive advantage and performance of financial services particularly banks and insurance companies in Ethiopia.

I kindly request your cooperation in completing the questionnaires indicated below. I would like to assure you that the information you provide in this survey will be used for the stated purpose and it will be kept confidential. The University of South Africa will also take the responsibility towards maintaining confidentiality to the information that you will provide.

Thank you in advance for your cooperation and assistance, despite your hectic schedule, in sharing your valuable experience and opinion.

Promoter (Advisor): Professor Serumaga-Zake Philip, email: serumpa@unisa.ac.za
Co-Promoter : Professor Ernest Neuland, email: ewneuland@yahoo.com

With best regards,

Yifru Tafesse
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UNISA
Phone (cell phone) 0911882571/0912791085
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Introduction

The survey questionnaire has four major parts, namely Firm Effects (measured using its resources and capabilities), Industry Effects (measured using the five-forces), Competitive Advantage, and Performance. To create further clarity and common understanding on these concepts, brief explanations are given below. There are also some descriptive questions that you will explain your opinion.

Please indicate your level of agreement to each question **in comparison to your competitors** and put **"x"** mark using the following five point measurement scale:

5 = Strongly Agree (SA)
4 = Agree (A)
3 = Not Sure (NS)
2 = Disagree (D)
1 = Strongly Disagree (SD

Part I: Firm Effects

This part of the questionnaire measures your company's effects on competitive advantage and performance using its resources. Resources classified as tangible, intangible, and dynamic capabilities of your company.

Tangible Assets (TANG)

Tangible Assets include financial and physical assets such as real estates, financial investments (such as bonds, stocks, shares, etc.), cash reserves, cash flows, equipment, branches that can be valued and reflected on your balance sheet.

Intangible Assets (INTANG)

Intangible Assets includes company reputation and image, customer service reputation, organization structure, organization policies, and organization culture, that are not included in the balance sheet,

Dynamic Capabilities (DC)

Dynamic capabilities are managerial and organization processes that include coordination and integration, learning, and reconfiguration/transformation of tangible and intangible assets.

Dimensions		Level of agreement				
		SD	D	NS	A	SA
Resources		1	2	3	4	5
The following lists of resources and capabilities, compared with your competitors, are more valuable, rare (something your competitors lack), difficult to copy, and exploitable using proper organization. Please indicate your level of agreement to what extent they contribute to the competitive advantage and performance of your company						
	Tangible Asset (TANG)					
1	Buildings and other physical resources (such as ATM and POS machines in case of banks, number of branches, real estate, etc)					
2	Cash reserves and liquidity position of my company					

3	Our branches are located in best locations					
4	Financial investments (e.g., in interest bearing accounts, in company shares, in equity positions in other companies, in government instruments), Cash (on hand/at bank) earned from operations.					
5	Raised financial capital (e.g., debt from secured bank loans, equity from the issuance of shares or bonds)					
	Intangible Asset (INTANG)					
6	The organizational structure (i.e., the operating and reporting structure) of the company					
7	The overall skills, creativity, experiences, and know-how of employees of the company					
8	Organizational culture such as shared organizational values, norms, beliefs, attitudes, behaviors, and team spirit among employees.					
9	Organizational policies (e.g., recruitment, compensation, reward, training) are designed to acquire, develop, and retain the human talent of the firm.					
10	Relationships that employees and managers have established with external stakeholders (e.g., customers, agents, suppliers, partners) for the benefit of the firm					
11	The reputation and image of our company is the best in the financial industry					
12	Our company has good customer service reputation					
13	Product/service reputation of our company is better compared to competitors					
	Dynamic Capability (DC)					
14	Our company has the ability to systematically monitor changes in the external environment (such as business opportunities and threats)					
15	The company develops and implements business plan					
16	Coordination of internal processes and operations among departments in the company					
17	The company adopts modern management tools and techniques					
18	The management can assigns and deploys resources to introduce new products or services, improve processes, and establishes new branches in order to seize opportunities					
19	The company has practice of systematic 'on the job' training					
20	The company has regular in-house training programs					
21	The company has effective team-working					
22	Our company responds to competitive strategic moves timely					
23	Our company continuously adapts itself to shifting customer needs better than competitors					

Part II: Industry Effects

Items under this part deal with factors/forces of industry structure that affect the competitiveness and performances of your company. These industry forces include entry barriers for newcomers, rivalry/competition among existing companies, bargaining power of buyers/customers, bargaining power of suppliers, and threats of substitute products. Please rate the competitiveness of your company for each of the items indicated below in comparison with your competitors in the financial industry.

		SD	D	NS	A	SA
Entry barriers to newcomers (Entry)		1	2	3	4	5
24	In our industry, new competitors have to enter at a highly visible large scale, and face or risk strong reaction from existing firms					
25	New firms must spend a large amount of capital on risky and unrecoverable upfront advertising and/or for research and development					
26	Large capital and/or financial resources are required for entry into our Industry					
27	New entrants into our industry have to spend heavily to advertisements in order to build their brand names and to overcome existing brand loyalties.					
28	Government policy and laws create difficulties and barriers to newcomers in to the finance industry/business					
29	Newcomers into our industry face strong retaliation by existing companies (e.g. through price cutting, promotion etc)					
30	Our company has economics of scale advantage due to huge capital, intensive advertising, many branches and large scale operation					
31	We have strong business relationships with sister companies that result in better advantage and protections from competitors					
Competition/rivalry among existing companies (Riv)						
32	Competitors are many in number with almost same sizes					
33	The growth rate of the industry is generally low					
34	There is lack of service/product differentiation among competing companies					
35	Competition in the industry is cut-throat and each firm fights to increase its market share					
36	In our industry, firms have the resources for vigorous and sustained competitive action and for retaliation against competitors					
37	In our industry, advertising battles occur frequently and are highly intense					
38	Competition is highly price-based (frequent price-cutting to match competitors)					
39	In our industry, competitive moves from one firm have noticeable effects on other competing firms and thus incite retaliation and counter moves					
Bargaining Power of Customers (BPCU)						
40	Customers can easily switch or change to other competitors since our customers incur low cost of switching or changing to competitors					
41	There are many number of customers relative to companies serving in the financial industry					

42	The services we sell to our customers are not unique/differentiated from our competitors					
43	Customers have high negotiation power for price reduction, and other benefits					
44	Customers usually engage in backward vertical integration (they move to invest to the service they used to buy)					
45	Customers incur high cost when they want to switch to buy from our competitors					
46	Our customers are usually well informed about the price and services of our company					
Bargaining Power of Suppliers (BPS)		SD 1	D 2	NS 3	A 4	SA 5
47	The suppliers product quality can affect the final quality in this industries product					
48	It is difficult or costly to switch suppliers of inputs/resources from one supplier to another since they sell highly differentiated products/inputs to our company					
49	Industry suppliers of inputs/resources are limited or few in number					
50	The suppliers of our industry's products can and do demand and gain concession					
51	Suppliers can pose threats of forward integration with our competitors					
52	Suppliers are powerful to us, thus charging higher prices or reducing quality of inputs					
Threats of Substitute Products (TSP)						
53	Our services can be substituted by other cheaper services easily					
54	Customers can easily buy or use other substitute services with little or no extra cost.					
55	The services/products of the industry in which we compete have no intrinsic characteristics from which it is EASY to find substitutes					

Part III: Competitive Advantage

Competitive advantage is a company's advantage over its competitor or group of competitors in a given market or industry. There two sources of competitive advantage i.e **cost advantage** and **differentiation advantage**. Please evaluate the competitive advantage of your company in terms of the following dimensions compared to your competitors:

Cost Advantage (COA)		SD 1	D 2	NS 3	A 4	SA 5
56	Our company achieves economies of scale so as to reduce unit cost better than competitors					
57	Our company has employed process innovation and automation of operations to reduce cost of service delivery.					
58	Our company has established and created interrelationships with sister companies and shares marketing and other costs better than competitors					
59	Our company applies tight cost control mechanisms better than competitors					
60	We have achieved a cost leadership position in the industry.					

61	The company has got cost advantage due to its early entry and actions or has got pioneering cost advantage better that its competitors.					
Differentiation Advantage (DA)		SD	D	N	A	SA
		1	2	3	4	5
62	Our company gives more emphasis to marketing promotion and invests higher than competitors to differentiate the company and build awareness and favorable image					
63	Our company provides prompt customer services (such as loan request approval/claim settlement, etc) better than competitors.					
64	Our services are unique that offer superior benefits to customers					
65	The company responds to market needs faster than competitors					
66	The company has better rate of new product/ service innovations than competitors					
67	Our branches locations are convenient with easy access to customers better than competitors					

Part IV: Performance

Performances of both banks and insurance companies are being explained in terms of market performances i.e new customer acquisition, customer satisfaction, and market share, and financial performances such as return on asset (ROA), profit margin, and net profit. Please evaluate the performance of your company over the **last three years** *compared* or in r*elative* to competitors using a five point scale from much below average to much above average as indicated here under:

1 = Much below average (MBA)
2 = Below Average (BA)
3 = Not Sure (NS)
4 = Above average (AA)
5 = Much above average (MAA)

Marketing Performance (MP) over the last three years		MBA	BA	NS	AA	MAA
		1	2	3	4	5
68	Rate of acquiring new customers compared to competitors					
69	Level of Customer Satisfaction compared to competitors					
70	Market share compared to competitors					
Financial Performance (FP) over the last three years						
71	Return On Asset (ROA) compared to competitors					
72	Profit margins compared to competitors					
73	Overall profit level achieved compared to competitors					

Demographic Profile

Put "x" mark under the appropriate box.

Gender	M	F		
Education level	College Diploma	First Degree	Master Degree	Doctorate Degree
Your age	Less than 40	41-50 years	51-60 years	more than 60 years
Work experience	Less than 10 years	11 – 20	21 – 30	More than 30
Type of Industry	Bank	Insurance		
Year established				

Thank you.

Yifru Tafesee
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Email: yifrutaf2006@gmail.com

Appendix III: Research Cooperation Letters for Bank and Insurance (Samples)

UNISA university of south africa

12th May, 2015

Ref. No. UNISA/ET/SBL/ORG/18/12-5-15

Oromia International Bank
Addis Ababa

Subject: Research Cooperation

Dear Sir,

This is to request your assistance and cooperation to Mr. Yifru Tafesse Bekele, student number 72750774, a student of Doctor of Business Leadership (DBL) program at University of South Africa Graduate School of Business Leadership (UNISA-SBL) who is doing his thesis on "Firm and Industry Effects on Competitive Advantage and Performance of Financial Services in Ethiopia".

The Business School will observe any confidentiality requirements as requested regarding any information made available to him in assisting with this study. The student must give his commitments as well to the confidentiality requirement.

On behalf of the UNISA-SBL, I thank you for your willingness and assistance that will be extended to him.

Kind regards,

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UNISA university of south africa

12th May, 2015

Ref. No. UNISA/ET/SBL/ORG/18/12-5-15

Nile Insurance SC
Addis Ababa

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Kind regards,

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Appendix IV: Multivariate Outlier Analysis

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mahalanobis Distance	205	99.5%	1	0.5%	206	100.0%

Descriptive

			Statistic	Std. Error
Mahalanobis Distance	Mean		2.9853659	.22475127
	95% Confidence Interval for Mean	Lower Bound	2.5422326	
		Upper Bound	3.4284992	
	5% Trimmed Mean		2.5737937	
	Median		2.1370659	
	Variance		10.355	
	Std. Deviation		3.21794853	
	Minimum		.06651	
	Maximum		29.76185	
	Range		29.69534	
	Interquartile Range		2.74008	
	Skewness		3.855	.170
	Kurtosis		24.557	.338

Extreme Values

			Case Number	Value
Mahalanobis Distance	Highest	1	198	29.76185
		2	130	15.50383
		3	113	13.61178
		4	78	12.74207
		5	188	12.12051
	Lowest	1	64	.06651
		2	192	.10647
		3	26	.11739
		4	168	.14385
		5	74	.15237[a]

a. Only a partial list of cases with the value .15237 are shown in the table of lower extremes.

Mahalanobis Distance Stem-and-Leaf Plot

```
 Frequency    Stem &  Leaf

    17.00        0 . 01111112222234444
    31.00        0 . 5555566667777888888888899999999
    24.00        1 . 000000011111222333444444
    24.00        1 . 555555555556666778899999
    21.00        2 . 000011111112233333444
    20.00        2 . 55555566677777889999
     8.00        3 . 01122344
    13.00        3 . 5555566678889
     5.00        4 . 02223
    11.00        4 . 55666666777
     4.00        5 . 0033
     7.00        5 . 5556899
     3.00        6 . 023
     1.00        6 . 9
     4.00        7 . 2333
     1.00        7 . 7
    11.00 Extremes    (>=8.1)

 Stem width:   1.00000
 Each leaf:       1 case(s)
```

The critical chi-square value for df 73 items at p<0.001 is approximately 115.

Appendix V: Skewness and Kurtosis Statistics

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SMEAN(TanG1)	206	3.68	1.280	-.750	.169	-.624	.337
SMEAN(TanG2)	206	4.10	1.007	-1.211	.169	1.036	.337
SMEAN(TanG3)	206	3.81	.924	-.813	.169	.427	.337
SMEAN(TanG4)	206	3.66	1.020	-.451	.169	-.675	.337
SMEAN(TanG5)	206	3.47	.990	-.394	.169	-.178	.337
SMEAN(Intang6)	206	3.81	.904	-.893	.169	.476	.337
SMEAN(Intang7)	206	3.95	.877	-.781	.169	.349	.337
SMEAN(Intang8)	206	3.90	.942	-.758	.169	.265	.337
SMEAN(Intang9)	206	3.81	.987	-.657	.169	-.275	.337
SMEAN(Intang10)	206	3.84	.886	-.666	.169	.082	.337
SMEAN(Intang11)	206	4.00	1.005	-.709	.169	-.473	.337
SMEAN(Intang12)	206	3.88	.889	-.599	.169	-.237	.337
SMEAN(Intang13)	206	3.65	.871	-.454	.169	.014	.337
SMEAN(DC14)	206	3.55	.907	-.326	.169	-.524	.337
SMEAN(DC15)	206	4.00	.841	-1.003	.169	1.086	.337
SMEAN(DC16)	206	3.79	.796	-.643	.169	.547	.337
SMEAN(DC17)	206	3.53	.963	-.476	.169	-.176	.337
SMEAN(DC18)	206	3.76	.914	-.586	.169	-.022	.337
SMEAN(DC19)	206	3.67	.925	-.676	.169	-.105	.337
SMEAN(DC20)	206	3.67	.951	-.595	.169	-.288	.337
SMEAN(DC21)	206	3.69	.854	-.451	.169	-.328	.337
SMEAN(DC22)	206	3.22	1.005	-.079	.169	-.847	.337
SMEAN(DC23)	206	3.25	.977	.027	.169	-.666	.337
SMEAN(Firmasset)	206	3.7400	.58688	-.777	.169	.614	.337
SMEAN(Entry24)	206	3.15	1.217	-.076	.169	-1.101	.337
SMEAN(Entry25)	206	3.09	1.117	.020	.169	-.976	.337
SMEAN(Entry26)	206	4.03	1.021	-1.086	.169	.559	.337
SMEAN(Entry27)	206	3.74	.971	-.747	.169	-.017	.337
SMEAN(Entry28)	206	3.84	1.077	-.690	.169	-.591	.337
SMEAN(Entry29)	206	2.88	1.143	.244	.169	-.871	.337
SMEAN(Entry30)	206	3.39	1.105	-.324	.169	-.840	.337
SMEAN(Entry31)	206	3.21	1.155	-.239	.169	-.746	.337
SMEAN(Rivalry32)	206	3.04	1.132	.035	.169	-1.299	.337
SMEAN(Rivalry33)	206	2.98	1.128	.296	.169	-1.169	.337
SMEAN(Rivalry34)	206	4.17	.868	-1.238	.169	1.453	.337

SMEAN(Rivalry35)	206	3.94	1.008	-1.026	.169	.607	.337
SMEAN(Rivalry36)	206	3.03	.888	-.061	.169	-.576	.337
SMEAN(Rivalry37)	206	2.99	.983	.051	.169	-1.007	.337
SMEAN(Rivalry38)	206	3.42	1.309	-.293	.169	-1.251	.337
SMEAN(Rivalry39)	206	3.24	.950	.001	.169	-.691	.337
SMEAN(BPC40)	206	4.03	.877	-1.326	.169	2.231	.337
SMEAN(BPC41)	206	3.71	.880	-.651	.169	-.190	.337
SMEAN(BPC42)	206	4.08	.925	-1.288	.169	1.550	.337
SMEAN(BPC43)	206	3.58	1.143	-.363	.169	-1.047	.337
SMEAN(BPC44)	206	2.94	.948	.009	.169	-.201	.337
SMEAN(BPC45)	206	2.32	.927	.682	.169	.084	.337
SMEAN(BPC46)	206	3.52	.959	-.610	.169	-.298	.337
SMEAN(BPS47)	206	3.50	1.003	-.564	.169	-.078	.337
SMEAN(BPS48)	206	2.69	.960	.305	.169	-.432	.337
SMEAN(BPS49)	206	3.21	1.027	-.316	.169	-.676	.337
SMEAN(BPS50)	206	3.22	.746	-.503	.169	.770	.337
SMEAN(BPS51)	206	2.85	.822	-.002	.169	-.107	.337
SMEAN(BPS52)	206	3.11	.947	.056	.169	-.487	.337
SMEAN(TSPS53)	206	2.61	1.159	.343	.169	-.954	.337
SMEAN(TSPS54)	206	2.71	1.184	.260	.169	-1.028	.337
SMEAN(TSPS55)	206	3.04	1.054	.017	.169	-1.053	.337
SMEAN(CA56)	206	3.03	1.002	-.119	.169	-.693	.337
SMEAN(CA57)	206	3.56	1.027	-.692	.169	-.432	.337
SMEAN(CA58)	206	3.03	1.121	-.059	.169	-.775	.337
SMEAN(CA59)	206	3.26	.972	-.166	.169	-.397	.337
SMEAN(CA60)	206	2.89	.917	.381	.169	.000	.337
SMEAN(CA61)	206	3.03	1.063	-.136	.169	-.755	.337
SMEAN(DA62)	206	2.72	1.029	.318	.169	-.821	.337
SMEAN(DA63)	206	3.34	.951	-.665	.169	-.275	.337
SMEAN(DA64)	206	2.98	.973	.008	.169	-.812	.337
SMEAN(DA65)	206	2.97	.939	.087	.169	-.555	.337
SMEAN(DA66)	206	2.89	.994	.233	.169	-.847	.337
SMEAN(DA67)	206	3.48	.939	-.632	.169	-.148	.337
SMEAN(MP68)	206	3.33	.959	-.486	.169	-.371	.337
SMEAN(MP69)	206	3.50	.803	-.322	.169	-.415	.337
SMEAN(MP70)	206	3.34	1.098	-.280	.169	-.982	.337
SMEAN(FP71)	206	3.60	.941	-.746	.169	.051	.337
SMEAN(FP72)	206	3.59	1.075	-.586	.169	-.531	.337
SMEAN(FP73)	206	3.63	1.088	-.733	.169	-.285	.337
Valid N (listwise)	206						