The Effect of bank specific Sources of competitive advantage on performance:
In the case of Ethiopian private commercial banks

A Thesis Submitted to School of Commerce, Graduate Studies,
Addis Ababa University

In partial fulfillment of the requirements for the degree of
Master of Art in Marketing Management

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Advisor: Temesgen Belayneh (PhD)

June, 2018
Addis Ababa
Statement of Declaration

I, the undersigned, declare that this study entitled “The Effect of bank specific Sources of competitive advantage on performance: In the case of Ethiopian private commercial banks” is my original research work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been duly acknowledged.

Mengistu Molla

Signed: ___________ Date: ______________
Confirmation

This is to certify that this study, “The Effect of bank specific Sources of competitive advantage on performance: In the case of Ethiopian private commercial banks”, undertaken by Mengistu Molla for the partial fulfillment of requirements for the Degree of Master of Art in Marketing Management at School of Commerce-Graduate Studies-Addis Ababa University, is an original work and not submitted earlier for any degree either at this University or any other University.

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List of Acronyms and Abbreviations

AIB – Awash International Bank
BaS – Bank Size
BeIB – Berhan International Bank
BIB – Bunna International Bank
CBBE – Construction & Business Bank of Ethiopia
CBK - Central Bank of Kenya
CBO – Cooperative Bank of Oromia
CuB – Customer Base
CBE - Commercial Bank of Ethiopia
DB – Dashen Bank
GrP – Gross Profit
M & A - Merger and Acquisition
NBE - National Bank of Ethiopia
NoB – Number of Branches
NeP – Net Profit
NIB – Nib International Bank
RBV - Resource Based View
S-C-P Structure-Conduct-Performance
ToC – Total Capital
ToE – Total Investment & Expense
Abstract

RBV posits tangible firm’s resources are vital for superior business performance, as main source of competitive advantage. Private commercial banks in Ethiopia are facing stiff competition necessitating the design of competitive strategies to guarantee their performance. They have to know how and to what extent their internal resources affect their performance and then build competitive strategies to acquire these resources. This study aimed at examining the effect of bank specific tangible resources as sources of competitive advantage on the performances of private commercial banks in Ethiopia. Both explanatory and descriptive research designs were employed. While population of the study was 16 private commercial banks, purposive sampling technique was adopted to reach at 6 target banks, after selecting two senior banks from each three categories. 2009/10 to 2016/17 Panel data of target banks was collected and multivariate regression model with diagnostic tests were applied using STATA software. The study found bank size, total capital and total investment & expense were positively and significantly affected performances, while number of branch negatively and significantly affected performance. Bank size, total capital and total investment & expense used as sources of competitive advantage by the larger private banks while number of branch was not. The larger banks were mainly beneficiaries while the medium banks were competent relative to the smaller. We recommend medium banks to focus on internal growth and small banks on external growth either through mergers or acquisitions to gain competitive advantage. Theses private banks should have to revisit their aggressive branch expansion to moderate and multi channel distribution.

Keywords: Competitive Advantage, Performance, Private Commercial Banks, firm specific resources, Resource-based view
Chapter One

Introduction

1.1. Background of the Study

The issue of firm performance has been central in strategy research for decades and encompasses most other questions that have been raised in the field, as for instance, why firms differ, how they behave, how they choose strategies and how they are managed, Porter (1991). In today’s dynamic business environment, competitive advantage driven competitiveness is very crucial for superior performance. In order to have superior performance and survive, firms should establish and improve competitive advantage over their competitors.

In the 1990s, with the rise of the resource-based approach, strategy researchers’ focus regarding the sources of sustainable competitive advantage shifted from industry to firm specific effects, Spanos and Lioukas (2001). Initiated in the mid-1980s by Wernerfelt (1984), Rumelt (1984) and Barney (1986), the RBV has since become one of the dominant contemporary approaches to the analysis of sustained competitive advantage.

Priem and Butler (2001) fully acknowledge that the resource-based view has contributed to the explanation and prediction of the sustainability of competitive advantage by identifying the conditions that entail sustainability. The Resource-based View of organizations has gained its reputation as a vital theory since it combines the strategic and organizational insights on the firm’s competitive advantage, Khalid and Paul (2014).

A central premise of the resource-based view is that firms compete on the basis of their resources and capabilities, Peteraf and Bergen (2003). It addresses the fundamental question of why firms are different and how firms achieve
competitive advantage by deploying their resources. It specifies firm resources namely; the attributes of a firm’s physical, human and organizational capital that enable a firm to conceive of and implement strategies that improve its efficiency and effectiveness as the main potential determinants of firms’ competitive advantage, Barney (1991).

This theory emphasizes the firm’s internal resources as the fundamental determinants of competitive advantage and performance. It posits tangible organizational resources are vital for superior business performance and competitive advantage, Galbreath (2004). Lippman and Rumelt (2003) assert firms’ financial or physical assets can generate high value for competitive advantage with minimal threat from replication.

The success of firms hinges crucially on their ability to sustain competitive advantage and achieve superior performance. Almarri & Gardiner (2014) highlighted the attainment of competitive advantage is enhanced when resources are deployed to create value for customers leading to superior performance. Performance is a central issue for firms because it would have a significant impact on their survival.

According to Meutia & Ismail (2012), the foundations of a firm's performance, profitability and competitive advantage would normally be reflected through its resources. They emphasized that firms have different categories of resources and the application of this internal resources allow for the possibility of a different path to growth.

Barney (1991) classified resources as physical capital resources, human capital resources and organizational capital resources. RBV defines resources as physical assets, intangible assets, and organizational capabilities that the firm owns and controls, Wernerfelt (1984). Resources are either tangible (e.g. financial or physical) or intangible (e.g. employee’s knowledge, experiences and skills and firm’s reputation), mobilized to create a sustainable competitive
advantage, Galbreath (2004), and Grant (2010). Wernerfelt (1984) asserts companies acquire competitive advantage through resources, tangible and intangible.

Accordingly, several firm specific tangible and intangible factors, directly or indirectly, affect and jointly determine the competitive strength and performance of an individual firm. The challenge is the identification of the firm specific factors, and how and to what extent they affect firm’s performance and competitiveness.

This study therefore, tried to address these questions through a new model of firm resources which incorporates the firm specific (internal firm resources) factors as sources of competitive advantage and specified how and to what extent these factors affect the performance of private commercial banks in Ethiopia, with a special focus on the target banks’ tangible assets.

1.2. Background of the Banking Industry in Ethiopia

The banking industry in Ethiopia like the rest of the world has continued to undergo regulatory and financial reforms. These reforms have brought about many structural changes in the banking sector of the country, Tilahun (2016).

The current structure of Private indigenous commercial banking business in Ethiopia has an age of not more than two decades, Awash (international) bank SC being an ice breaker established in 1995. The industry comprises one state-owned development bank and 17 commercial banks, one of them is the dominant CBE which is a state owned bank. CBE was merged with the Construction and Business bank in 2015, which was another state owned, making the composition of the commercial banking industry to one state owned and 16 private commercial banks.

Currently, there are 16 private commercial banks authorized to operate in Ethiopia. These banks have fuelled an aggressive branch expansion drive to
increase branch network of the banking industry. Further, branches of these banks were usually concentrated in a similar area even sometimes they opened branch offices on the same building, provide almost similar type of services and compete for the same type of customers, making the competition stiffer and threaten the attractiveness of the sector, which ultimately reduces the profitability of the players in the industry, Tilahun (2016).

The stiffer competition exerts pressure on these banks to be proactive and to formulate successful strategies that facilitate proactive response to anticipated and actual changes in the competitive environment, Johnson & Scholes (2008).

By employing the Panzar and Rosse econometric model to assess the degree of competition in banking industry in Ethiopia, Zerayehu, Kagnew, & Teshome (2013), found that CBE takes a significant share of the industry’s branch, asset, and deposit.

Besides concentration as an indicator of competition in the Ethiopian banking sector, Zerayehu, Kagnew, & Teshome (2013), employed profitability measures and found as the scale variable has a positive and significant effect on revenues.

According to Melaku (2016), due to the stiff competition that we are currently observing, private commercial banks are facing challenges in meeting their objectives that they set. Besides, looking their respective existing operations, he also argued that most of these private banks are exhibiting to the low efficiency hypothesis.

Hailemichael (2012) further added as intensive competition is observed among private commercial banks. Size and efficiency, as means for competitive advantages, was found to be the main significant factors in explaining the market power of Ethiopian banks.
1.3. Statement of the Problem

The private commercial banks in Ethiopia are experiencing increased competition since the last few years mainly resulting from increased new entrants into the market and their extensive branch expansions (Zerayehu, Kagnew & Teshome 2013). The sector has witnessed entrance of many banks to the unbanked and under banked population, mainly in the rural areas. This makes the competition stiffer and threatens the attractiveness of the sector, which ultimately would reduce the profitability of the players in the industry.

According to Melaku (2016), the stiff competition that we are currently observing in the Ethiopian banking sector is leading most of private commercial banks to exhibit the low efficiency hypothesis. With the stiff competition that we are currently, majority of the private banks are facing challenges in meeting their objectives they set.

Similarly, Hailemichael (2012) looked as intensive competition is observed among private commercial banks. Bank Size and efficiency, as sources of competitive advantages, were found to be the main significant bank specific factors in explaining the market power of the dominant once.

Moges (2017) also stated that the significant and positive impact of Bank size on bank performance can be taken as a good signal for the Ethiopian private commercial banks to merge and to have scale advantage. Furthermore, (Zerayehu, Kagnew & Teshome 2013) observed that scale variable has a positive and significant effect on revenues, implying that banks with larger equity capital have proportionally higher gross revenue. They added as they are competing in terms of service quality and efficiency, branch network expansions, advertising and prices, put in the order of their significance.

Their findings supported the general assumptions for the existence of strong link between having strategic resources and firm performance by the resource-
Based view proponents. Reviewing the effectiveness of Porter’s generic competitive strategies adopted by Awash and Dashen Banks, Tilahun (2016), found a positive association between the adopted competitive strategies and their performance. Berhanu (2015) found that aggressive branch expansion is not advantageous for AIB. As a result he suggested the bank to revisit its aggressive branch expansion strategy.

However, none of these studies tried to investigate the tangible internal resources that are sources of competitive advantages of these competent private commercial banks other than the listed above bank specific factors, while there are other tangible bank specific sources of competitive advantages that affect their performance. Further, as to the researcher’s knowledge, no comparative studies among the private commercial banks (by categorizing more competent, competent and in competent) were conducted using panel data to investigate how & to what extent these factors affects their performance.

Showing this gap, Dulo (2006), stated as there was a need to formulate a study by incorporating more bank specific source of competitive advantage, specifically to understand their effects on the performance of private commercial banks in Ethiopia.

Hence, adding other tangible bank specific resources that might be sources of competitive advantage and testing how & to what extent they affect for these private commercial banks’ performance needs further research.

This researcher, therefore, aimed to bridge these gaps by carrying out a research that would find out the major tangible bank specific sources of competitive advantage, test whether there existed a link between having internal bank specific resources {number of branch, bank size, total capital, customer base, and total expense} and these banks’ performance, investigate
how & to what extent these factors affect their performance, and suggest models of growth strategies.

1.4. Basic Research Questions

1.4.1. Main Research Question

The main research question of the study was:

Does Bank Specific Sources of Competitive Advantage have effects on Ethiopian private commercial banks’ Performance?

1.4.2. Sub Research Questions

The research questions below were that formed the focal point of the work follow from the research objectives below:

1) To what extent does number of branch, as bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?
2) To what extent does Bank size, as bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?
3) To what extent does total capital, as bank specific sources of competitive advantages affect performance of Ethiopian private commercial banks?
4) To what extent does customer base, as bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?
5) To what extent does total investment & expense, as bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?
1.5. Objectives of the Study

1.5.1. General Objective of the Study

The general objective of the study was to investigate whether tangible bank specific source of competitive advantage has an effect on Ethiopian private commercial banks’ performance.

1.5.2. Specific Objectives of the Study

Specifically; the study would have the following specific objectives;

1) To investigate the extent number of branch, as tangible bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?

2) To investigate the extent Bank size, as tangible bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?

3) To investigate the extent total capital, as tangible bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?

4) To investigate the extent customer base, as tangible bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?

5) To investigate the extent total investment & expense, as tangible bank specific sources of competitive advantage, affect performance of Ethiopian private commercial banks?
1.6. **Definition of Terms**

17.1. **Conceptual Terms**

I. **Competitive advantage**: the superiority gained by an organization when it can provide the same value as its competitors but at a lower price, or can charge higher prices by providing greater value through differentiation, Porter, (1985). Further, according to Khalid and Paul (2014), competitive advantage is the ability to create more value than rivals, and therefore generate higher returns on investment.

II. **Resources**: are either tangible (e.g. financial or physical) or intangible (e.g. employee’s knowledge, experiences and skills and firm's reputation), mobilized to create a sustainable competitive advantage (Galbreath 2004; Grant 2010). Tangible resources are easily identified and evaluated because physical resource and financial resource are recorded in the firm’s financial statements.

17.2. **Operational Terms**

A. **Commercial bank**: is a financial institution which performs the functions of accepting deposits from the general public and giving loans with the aim of earning profit.

B. **Performance**: the ability of a bank to generate outcomes measured in terms of Gross-Profit, and Net-Profit.

C. **Capital**: borrowed and owned.

1.7. **Significance of the Study**

The findings of this study would be important as it would added to the existing knowledge on the strategies adopted by commercial banks in gaining competitive advantage. The study would thus form a basis upon which other
studies would be done by creating knowledge gap and adding to the existing literature review.

It would be of importance to the inefficient private commercial banks, by highlighting the sources of competitive advantages for the once that are strong private commercial banks, the once that are less competitive advise to gain this advantage through acquiring these sources thus improving their performance.

Finally, the study would add knowledge on the field of commercial banks competitive advantage. Recommendations for future work were provided towards the end of this paper.

1.8. Delimitation/Scope of the Study

This study was targeted to find out the effect of tangible Bank specific sources of competitive advantage on the financial performance of selected private commercial banks.

Regarding the scope for performance measures/indicators, (Rohana, Roshayani, Nooraslinda, Siti 2015) used gross profit, net profit and total reserves as a performance measures to examined the effects of organization's tangible as resources competitive advantage for Malaysian cooperatives. On the other hand, Alemayehu (2006) also compares the performance of the Ethiopian financial sector considering deposit mobilizations, among others, as a performance measures. The researcher adopted measures of performance by selecting gross Profit, and net-profit.

According to Galbreath (2004), and Grant (2010), resources are either tangible (e.g. financial or physical) or intangible (e.g. employee’s knowledge, experiences and skills and firm’s reputation). This research was also bounded to tangible resources: number of branch, Bank size, total capital, customer base, and total investment & expense that were believed to affect performances of private commercial banks.
It covered 6 private commercial banks (AIB, DaB, NIB, CBO, BeIB, and BiB). Eight years panel data of these banks i.e. from 2010 to 2017 used for the intended analysis purposes.

1.9. Organization of the Paper

This thesis comprised five chapters; the rest of the chapters is organized as follow:

**Chapter two** of this thesis had theoretical, empirical, and conceptual parts. The first discussed with the theoretical concepts of resource based view, porter’s five model. Second part focused on recent literature in the area. The last part looked in conceptual framework of integrating the above two. **Chapter three** described the research design and approach, methodology, sources of data, the data collection methodology, methods of data analysis. **Chapter four** provided the substance of my own contribution, the actual data collected analysis. The analysis of the collected data was discussed and findings were interpreted. The **fifth** and last chapter of this thesis provided summery, conclusions, recommendations as well as hint for future research.
This chapter provided a detailed description of three main concepts namely: theoretical, empirical, and conceptual parts focusing on competitive advantage. Sourcing from the findings of other studies the section further discussed factors that affect firm's performance.

2.1. Theoretical Review

2.1.1. Competitive Advantage Theory

To gain or to maintain competitive advantage is one of the fundamental goals of doing business. Common to all theories of the firm is the search for competitive advantage, which requires the identification of inputs that are likely to generate rents i.e. a resource-based source of competitive advantage. Such inputs are found in imperfect factor markets, that is, markets that are not perfectly competitive, Laura and Keith (2000).

Competitive advantage is obtained when an organization develops or acquires a set of attributes (or executes actions) that allow it to outperform its competitors. The development of theories that help explain competitive advantage has occupied the attention of the management community for the better part of half a century (2014).

Competitive advantage is the ability to create more value than rivals, and therefore generate higher returns on investment, Khalid and Paul (2014). A firm is said to have a competitive advantage when it is implementing a value-creating strategy not simultaneously being implemented by any current or potential competitors. Resources which are valuable and rare may be sources of competitive advantages, Rene Spirig (2011).
A firm experiences competitive advantages when its actions in an industry or market create economic value and when few competing firms are engaging in similar actions. Competitive advantage is measured using indicators such as market coverage, market share, profitability and efficiency, Barney (2002). Organizations therefore must be aware of their strengths and weaknesses, as they have to develop strategies on how to outperform competitors with the given resources bundles and capabilities.

Landeiro (2000), used two approaches to distinguish concerning the sources of competitive advantage in the banking sector: one that focused size that was in relation to market power; and another that emphasized efficiency and was inspired by the theories of firm resources and capacities. He added, size represents a source of competitive advantage, founded on a perspective of economies of scale and scope.

2.1.2. Resource Based View Theory

Though the origins of the resource-based view can be traced back to earlier research, this influential body of research within the field of Strategic Management was named by Wernerfelt in his article a Resource-Based View of the Firm in 1984. The RBV of the firm draws attention to the firm’s internal environment as a driver for competitive advantage and emphasizes the resources that firms have developed to compete in the environment, Wang (2014). Extant literature showed the concept of RBV was a useful tool to investigate the relationship between firm resources and firm success.

Contrary to Porter’s focus on industry, Penrose (1959) and others Prahalad & Hamel, (1990); Rumelt, (1991) have emphasized the importance of the (heterogeneous) resources that firms use, as the primary source of competitive advantage. Furrer, Thomas, & Goussevskaia, (2008) suggested that since the 1980s onwards, the focus of studies in strategic management has changed
from the structure of the industry (MBV) to the firm’s internal structure, with resources and capabilities. This approach to strategy is known as the RBV.

According to Khalid and Paul (2014), the RBV of the firm is a strategic management theory that is widely used by managers in project management; it examines how resources can drive competitive advantage. It has to date been a promising theory that examines how resources can drive competitive advantage. It emphasizes the firm’s resources as the fundamental determinants of competitive advantage and performance. It has its root in the organizational economics, where theories of profit and competition associated with the writings of Schimpeter (1934) and Penrose (1959), focus on the internal resources of the firm as the major determinant of competitive success.

What distinguishes the RBV from other theories of the firm is how firms attempt to realize profit maximization, Conner (1991). According to the focus on resources, a firm's success is due to joint resources and capabilities which an enterprise owns and which makes it different from its competitors. The theory assumed that the higher the amount of resources an organization has over the competitors the more competitive it would become.

RBV literature categorizes resources into a variety of forms. According to Barney (1991), resources can be classified into physical capital resources, human capital resources and organizational capital resources. RBV defines resources as physical assets, intangible assets, and organizational capabilities that the firm owns and control, Wernerfelt (1984).

Resources are either tangible (e.g. financial or physical) or intangible (e.g. employee’s knowledge, experiences and skills and firm’s reputation), mobilized to create a sustainable competitive advantage, Galbreath, (2004); Grant, (2002). Wernerfelt (1984) asserts companies acquire competitive advantage through resources, tangible and intangible. Intangible resources are by nature, diverse
and immobile, with individualistic disposition and are relatively resistant to duplication.

According to Meutia & Ismail (2012), the foundations of a firm's progress, profitability and sustained competitive advantage would normally be reflected through its specific resources. They emphasized that firms have different categories of resources, which consists both tangible and intangible. Tangible resources are classified to include both physical resources and financial resources, which are expected to affect performance.

Grant (2002) pointed out tangible resources are easily identified and evaluated because physical resource and financial resource are recorded in the firm's financial statements. Physical resource includes land and buildings (size, location), plant, equipment, machinery and tools (with technical sophistication), whilst financial resources alludes to the firm's ability to efficiently utilize its financial resource to maximize profits. Inmyxai and Takahashi, (2010).

The physical resources of a firm have an impact on performance. Correspondingly, a firm's propensity towards breakthrough transactions depends on the availability of financial resources, and conversely, a firm may be curtailed towards innovating strategies when financial resources are limited (Lee, C. Lee, Pennings 2001).

In this study, tangible resources were classified to include both physical resources and financial resources of private commercial banks, which were expected to affect performance. Inmyxai and Takahashi, (2010) opined that tangible assets may still have a significant role in the performance of firms. Galbreath (2004) noted that tangible assets provide higher utility towards a firm's success compared to intellectual property. In addition, Lippman and Rumelt, (2003) and Kazozcu (2011) stressed firms capable of creating above average utility value of their assets; financial or physical were positioned to
mobilize these assets for a competitive edge, enjoying minimal threats of being replicated.

The findings of Galbreath (2005) confirmed that intangibles as sets precede tangible assets significantly in deriving firm success. However, in contrast to the preceding conclusion, Inmyxai & Takahashi (2010) argued that tangible resources have more profound effect on firm performance compared to intangible resources.

This was consistent with the findings of Galbreath (2004) and Fahy (2002) who found that tangible resources have a significant impact on firm performance compared to intangible resources. Inmyxai & Takahashi (2010) also found that business finance is also one of the critical resources that allow firms to engage in strategic business that can sustain firm performance.

In this context, it was realistic both in theory and practice, to examine the relationship between these bank specific tangible resources and performance.

2.1.3. Porter’s five forces model

Porter (1985) argues that competitive advantage can help firms erect entry barriers through economies of scale. He then outlined an analytical framework for understanding the effects of industry structure on the profit potential of firms within an industry.

Porter's (1980) framework builds on the structure-conduct-performance (S-C-P) paradigm from industrial organization economics. The essence of this paradigm was that the firm’s performance in the marketplace depends critically on the characteristics of the industry in which it competes, i.e., the structure Porter, (1981). In a move away from the traditional S-C-P paradigm, he acknowledges the role of firms in formulating appropriate competitive strategy to achieve superior economic performance, competitive strategy that may change the industry rules in the firm’s favor.
Porter (1980) proposes an analytical framework to assess the attractiveness of an industry, the group of firms producing products that are close substitutes for each other. He identifies five basic competitive forces seen as threats to the firm profits: threat of entry, threat of substitution, bargaining power of buyers, bargaining power of suppliers, and rivalry among current competitors. The collective impact of these five forces, the underlying structure of an industry, determines the intensity of industry competition and the ability of firms in the industry to make profits.

In formulating strategy, firms commonly make an overall assessment of their own competitive advantage via an assessment of the external environment based on the five forces model, Porter (1985). In this perspective, a firm's sources of market power explain its relative performance. High barriers to entry for new competitors in an industry lead to reduced competition and hence better performance.

According to him, competitive advantage is an advantage over competitors gained by offering consumers greater value, either by means of lower prices or by providing greater benefits and services that justifies a higher price. Creating competitive advantage is dependant of having the right source of competitive advantages which can be within or without the firm.

Rumelt (1991) stated that the most important determinants of profitability are firm-specific rather than industry-specific. Prahalad and Hamel (1990) suggested that competitive advantage based on resources and capabilities is more important than just solely based on products and market positioning in term of contributing to sustainable competitive advantages.

Thus, bringing together the firm’s resources and porter’s five basic competitive forces model (the competitive environment) in a single framework could help to understand how resources contribute to performance, Priem and Butler, (2001, and how resources influence competitive dynamics, Foss (1998).
2.2. Empirical Review

Capital should be an important variable in determining bank profitability, although in the presence of capital requirements, it may proxy risk and also regulatory costs. Okpanachi, (2010) found out from his study that highly capitalized banks had positive abnormal returns to their shareholders. Kwast and Roses’s (1982) also found out from their study that banks’ capital has a direct relationship with profitability, as more and more money is pump into the business, more profit will be recorded.

In imperfect capital markets, well-capitalized banks need to borrow less in order to support a given level of assets, and tend to face lower cost of funding due to lower prospective bankruptcy costs, Moges (2017). He also added that in the presence of asymmetric information, a well-capitalized bank could provide a signal to the market that a better-than-average performance should be expected.

On the other hand, number of bank branches is the total number of branches of each private commercial bank opened during the review period. Kozo and Kazumine (2010), explained as adequate levels of branch expansion have positive impacts on both cost and profit efficiencies of banks.

Threatened by the costs emanated from aggressive branch expansion, Deiterich, (2014), observed that banks have been moving steadily in developing their offerings electronically, with a long-term vision of reducing branches and services by developing self-service centers. Reducing branches and staff would lower overheads, allowing the banks to become lower-cost providers and enabling them to become more profitable and competitive.

The commercial banks in Ethiopia are expanding their branches aggressively. The aggressive branch expansion is continuing in the capital city where relatively educated society exists and where better telecommunication network
is available. However, Berhanu (2015) found that aggressive branch expansion is not advantageous for AIB. As a result he suggested the bank to revisit its aggressive branch expansion strategy.

Total assets of the bank measured as bank size. In most of the finance literature, the total assets of the banks are used as a proxy for bank size. Size is used to capture the fact that larger banks are better placed than smaller banks in harnessing economies of scale in transactions to the plain effect that they will tend to enjoy a higher level of profits. Consequently, a positive relationship is expected between size and profit, Indranarain, (2009).

Herald and Heiko (2009) founds that although insignificant once controlled by other variables bank size have an effect on performance. A smaller bank has to generate less profit in absolute terms to achieve the same profit growth than large banks.

Similarly, Smirlock, (1985) investigated 2700 unit banks and found that bank size/share had a positive significant relationship with profitability and not concentration. He also found that growth in the market had a positive significant relationship with profits. Total assets of the banks are used as a proxy for bank size. This was represented by natural logarithm of total assets (log A) Smirlock, (1985).

2.3. Conceptual Framework

The resource-based view emphasized the firm’s specific resources as the fundamental determinants of competitive advantage and performance. It contended that the possession of strategic resources provides an organization with a golden opportunity to develop competitive advantages over its rivals. These competitive advantages in turn can help the organization enjoy strong profits, Barney (1991).
From a RBV perspective, resources are viewed as the tangible and intangible assets a firm uses to choose and implement its strategies, Barney (2001). Firm resources includes all assets, capabilities, organizational processes, firm attributes, information, knowledge, and so forth controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness. According to this theory, a firm’s performance is affected by firms’ specific resources and capabilities, Barney (1991).

Porter (1980) proposes the five forces model to assess the ability of firms to earn in an industry by understanding the rules of competition determining an industry’s attractiveness and then by shaping competitive strategy. Wernerfelt, (1984) recognize that the resource-based perspective and industrial organization tools, such as Porter’s five forces model, complement each other in explaining the sources of firm performance.

Accordingly, this paper extended the resource-based view of the firm to give an overview of the connections between firm specific resources as a source of competitive advantage and performance. Specifically, it developed a conceptual framework explaining bank specific sources of competitive advantage and performance that incorporate the resource-based view of the firm by narrowing scope of firm’s resources to consist only tangible (physical and financial) assets of the banks.

On the basis of this framework, it showed how bank specific resources, as a source of competitive advantage, affect performance of private commercial banks in Ethiopia.

This proposed conceptual framework integrated both the theoretical and empirical findings and summarized as follows:
Fig.1. Effects of bank specific source of competitive advantage on performance

Source: Own design based on the literatures reviewed.
Chapter Three

Research Design and Methodology

This chapter discusses the research design and approach, sampling design, sources of data, the data collection methodology, methods of data analysis, and model specification.

3.1. Research Approach

In order to investigate the impact of tangible bank specific sources of competitive advantage on the performance of private commercial banks, the study used a quantitative approach using panel data collected from secondary sources.

3.2. Research Design

This study employed both explanatory and descriptive research designs. Explanatory research design attempted to clarify why and how there is a relationship between two or more aspects of a situation. Therefore, it employed to show the cause and effect relationship between the independent and dependent variables in this research.

It used to test the effect of the independent variables on the dependent once using secondary panel data collected and were also analyzed and described using this design.

These designs were therefore appropriate as the researcher was at a position to investigate the effect of firm specific sources of competitive advantage on the financial performance of selected private commercial banks.
3.3. Sampling Design

3.3.1. Target Population

The target populations of the study were 6 of the 16 private commercial banks (AIB, DaB, NIB, CBO, BeIB, and BIB), at their headquarters.

3.3.2. Sampling Frame

The sampling frame was source materials from which the sample was selected. In this research, the participants of the study were private commercial banks authorized to operate in Ethiopia fulfilling the requirements set by the regulatory body (NBE). In addition, market share based on total asset and year of establishment were employed for framing the samples.

3.3.3. Sampling Technique

There were 16 total private commercial banks. The banks were grouped into three categories (big, average, and small as can be seen in Table 4.10) based on their total asset by 2016 and then two relatively senior banks were selected from each of the three groups. Thus, purposive sampling method was used to select target banks.

3.4. Sources of Data

3.4.1. Secondary Sources

Sources for secondary data were collected from the National Bank of Ethiopia and the target private commercial banks’ published records, annual reports, and financial reports for the years from 2009/10 to 2016/17.

Furthermore: relevant laws, directives, regulations policies, books, journals, unpublished materials and reports are reviewed.
3.5. Data Analysis Methods and procedures

The completed data was checked for completeness, edited, sorted, classified and coded according to common themes. The STATA (version 13) statistical computer software is used for the analysis as it was more users friendly and most appropriate for analysis in advanced level.

3.6. Research Ethics

There were certain ethical protocols that were followed by the researcher. The first was appreciating for their cooperation and time to help the research to get the annual reports and other necessary secondary data of the bank. One other ethical measure exercised by researcher was assuring them that all their bank data kept strictly anonymous and confidential and only used for academic purposes.

There were also ethical measures that were followed in the data analysis. To ensure the integrity of data, the researcher checked the accuracy of encoding of the secondary data. This was carried out to ensure that the statistics generated from the study were truthful and verifiable.

3.7. Model Specification

Berger and Humphrey (1992) used multiple regressions to analyze the effects of bank specific factors on performance. Similarly, (Rohana, Roshayani, Nooraslinda, Siti 2015) employed multiple regression analysis to explore the influence of firm specific factors on performance.

Accordingly, the researcher adopted the multivariate regression model and necessary diagnostics are used to test the cause and effect relationships between the dependent and independent variables.
This model tries to determine the relative effect of each of the independent variables on the dependent once and their implications with respect to achieving competitive advantage in the private commercial banks.

According to Landeiro (2000), regression analysis was concerned with the statistical dependence among variables used in parallel and the theoretically established causality relations. It was employed to determine the effect of independent variable on dependent variable. Thus, both the strength of the relationship between variables and the influence of independent variable on the dependent variable was assessed.

Regression is able to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value of the dependent variable. Regression method was thus used due to its ability to test the nature of influence of independent variables on a dependent variable.

Having considered that, linear regression analysis was used as the approach to analyze the data.

The hypothesized relationships were modeled as follows:

For this study, the functional relationship was given as:

$$\text{PERFOR} = f \{\text{NoB}, \text{BaS}, \text{ToC}, \text{CuB}, \text{ToE}\}$$

Where:

PERFOR is performance of private commercial banks (the dependent variable)

The cause and effect model of the relationship was specified as follow:

$$\text{PERFOR} = \beta_0 + \beta_1 \text{NoB} + \beta_2 \text{BaS} + \beta_3 \text{ToC} + \beta_4 \text{CuB} + \beta_5 \text{ToE} + e$$
Where:

**PERFOR** = performance of private commercial banks (measured by gross and profit);

$\beta_0$ = Constant Term;

$\beta_1$, $\beta_2$, $\beta_3$ and $\beta_4$ = Beta coefficients;

$\text{NoB}$ = N° of Branch;

$\text{BaS}$ = Bank size;

$\text{ToC}$ = Total capital;

$\text{CuB}$ = Customer Base;

$\text{ToE}$ = total expense

$e$ = Error Term;

3.7.1. The Dependent Variable

The dependent variable for this study was performance (PERFOR). This was the output created by the private commercial banks as result of having better competitive advantages of firm specific resources. Performance in this study was based on two types of revenues: gross profit and net profit.

**Gross-Profit (GrP)**: is the total profit before provisions for tax; and **Net-Profit (NeP)**: is the profit after the provisions for tax of the selected private commercial banks recorded during the fiscal years from 2009/10 to 2016/17.
3.7.2. The Independent Variables

These are variables that cause a change in the dependent variable. They are also called explanatory variables. For the purpose of this study, the following are the independent variables:

**Number of Branch (NuB):** is the total number of branch network opened; **Bank Size** - **Bas:** expressed as logarithm of total assets is the total assets; **Total Capital (ToC):** is the total capital; and **Customer Base (CuB):** is the total depositors’ account opened. **Total Investment & Expense (ToE):** is the total investment & expense of each bank. All these variables were expected as they affect the dependent variable positively and significantly.
Chapter Four:
Results and Discussions

4.1. Results

4.1.1. Descriptive analysis of the dependent and independent variables

Table 4.1. Panel data descriptive analysis of dependent & independent variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>year</td>
<td>2013.5</td>
<td>2.315535</td>
<td>2010</td>
<td>2017</td>
<td>N = 48</td>
</tr>
<tr>
<td>between</td>
<td>0</td>
<td>2013.5</td>
<td>2013.5</td>
<td></td>
<td>n = 6</td>
</tr>
<tr>
<td>within</td>
<td>2.315535</td>
<td>2010</td>
<td>2017</td>
<td></td>
<td>T = 8</td>
</tr>
<tr>
<td>grp</td>
<td>4.16e+08</td>
<td>3.34e+08</td>
<td>-600000</td>
<td>1.18e+09</td>
<td>N = 48</td>
</tr>
<tr>
<td>between</td>
<td>3.08e+08</td>
<td>1.25e+08</td>
<td>8.48e+08</td>
<td></td>
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<td>2.59e+07</td>
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<td></td>
<td>T = 8</td>
</tr>
<tr>
<td>nep</td>
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<td>2.59e+08</td>
<td>-600000</td>
<td>1.00e+09</td>
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<td>7.87e+07</td>
<td>6.20e+08</td>
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</tr>
<tr>
<td>within</td>
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<td>7.45e+08</td>
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<td>nob</td>
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<td>3.80e+08</td>
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</tr>
<tr>
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<tr>
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<tr>
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<td>1.02e+08</td>
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<td>N = 48</td>
</tr>
<tr>
<td>between</td>
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<td>6.24e+08</td>
<td>2.40e+09</td>
<td></td>
<td>n = 6</td>
</tr>
<tr>
<td>within</td>
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<td>1.36e+07</td>
<td>7.17e+09</td>
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<td>T = 8</td>
</tr>
<tr>
<td>toe</td>
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<tr>
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<td></td>
<td>n = 6</td>
</tr>
<tr>
<td>within</td>
<td>4.50e+08</td>
<td>-1.47e+08</td>
<td>1.93e+09</td>
<td></td>
<td>T = 8</td>
</tr>
</tbody>
</table>

Source: xtsum year grp nep nob bas toc toe results from STATA version 13

A descriptive statistics has conducted for the dependent variable (performance measured with gross profit and net profit of private commercial banks) and
independent variables (banks’ branches, banks’ size measured by total capital, total cost, and total investment & expense). It includes mean, standard deviation, minimum, maximum, and observations statistics value. The result of the descriptive statistics and its interpretations are presented as follows.

The overall mean, minimum and maximum of one of the independent variable, gross profit was 4.16 million, -6 million and 1.18 billion ETB, respectively. The other dependent variable was net profit and therefore its overall mean, minimum and maximum were 2.98 million, -6 million and 1 billion ETB. The negative minimum value indicated as some of the private commercial banks were in loss during the last eight years under considered.

The overall means for the independent variables, number of branches, bank size measured with total asset, total capital and total investment & expense were 105 branches, 11.3 billion, 1.46 billion, and 637 million ETB, respectively. Table 4.1 above also indicated that, the minimum values of these independent variables were 4 branches, 380 million, 102 million, and 14.3 million ETB, respectively. Similarly, the maximum values of these independent variables were 340 branches, 42 billion, 7.35 billion, and 2.44 billion ETB, respectively.

### 4.1.2. Fixed or Random: Hausman test results

In order to explore the bank specific sources of competitive advantage of the Ethiopian private commercial banks, the researcher used panel data set for the period from 2009/2010 to 2016/2017.

The first task while conducting a panel data estimation is to run a hausman test. A Hausman test is required to decide whether random effect estimator (RE) or fixed effect estimator (FE) has to be chosen for estimation. It basically tests whether the unique errors (u) are correlated with the regressors, the null hypothesis is they are not, Green (2008). As can be seen in annex table 4.3 below, the hausman test result shows that random-effect model should be used to estimate the model, since the p-value is greater than 0.05.
Further, after random effect test model was selected, Breusch-Pagan Lagrange multiplier (LM) testing was run to decide between a random effects regression and a simple OLS regression of random effects.

The null hypothesis in the LM test is that variances across entities is zero. This is, no significant difference across units (i.e. no panel effect).

The LM test for random effects result in annex table 4.4 is 0.2809% and 1% for nep & grp respectively, which are greater than 0.05%. Here researcher failed to reject the null and conclude that random effects is not appropriate and therefore a simple OLS regression was used.

4.1.3. Diagnostic Test results

Before the multivariate regression model analysis: multicollinearity, non normality, heteroskedasticity, and Autocorrelation tests were executed to know if the assumptions were violated or not. Accordingly, the output of the tests which are displayed by STATA version 13 were presented and interpreted.

Multicollinearity was tested using the variance inflation factor and tolerance levels as diagnosis result shown in Table 4.5, and found to be well within the satisfactory range. In addition, an analysis of the Shapiro-Wilk W normality test statistics suggests that the dependent variables and continuous independent variables are not distributed normally, as result seen in Table 4.6.

The test of heteroskedasticity is a test of the second assumption of OLS estimator that says the variance of errors is constant. The researcher used the Breusch-Pagan / Cook-Weisberg test and result as can be seen under appendix Table 4.7 shows as there is no presence of heteroskedasticity and therefore fails to reject the null hypothesis of homoscedasticity presence.
Autocorrelation test was also executed, as we can see it on Table 4.8 under the appendix section, and the result indicates as no autocorrelation problem.

As such, these variables are transformed by computing normal scores using Van der Waerden's transformation. A regression analysis was performed with the transformed variables of bas and nob. The variable cub (customer base) was dropped from the model because of its collinearity problem.

4.1.4. Model Results

Having found evidence in favour of the existence of competitive advantage, based on formula specified below, the main bank specific factors that affect performances of Ethiopian private commercial banks will identified in accordance with model specified for this research work.

Looking the overall results of the model, we find $R^2$ values of 0.881 and 0.874 implying the model has a very good fitness and thus a high forecasting power.

This means that only about 11.93% and 12.6% of the systematic variations in the gross profit and net profit, respectively, are left unexplained hence captured by the stochastic error term $(e)$ in the estimate model.

This implies that the regression line has a very good fit and thus a high forecasting power of the model.
Results from **regressing** on private commercial banks in Ethiopia's perspective look as follows.

As can be seen in table 4.2 above, the multiple regression model estimation results tell us how and to what extent bank specific resources relate with and affect to performances of private commercial banks in Ethiopia. Results from the model with a special concern from the dependent (gross profit and net profit) variables perspective looks as follows.
Results on Gross-Profit

The result from the model indicates that bank-specific factors such as total capital, total investment & expense, total assets, and number of branches are all significant at 5 percent level of significance.

Further, the result also shows that the amount of variance of gross-profit explained by the total capital, total investment & expense, bank size in terms of total assets, and number of branches is 88.14%. This indicates that 88.14% of the variance in gross-profit scores can be predicted from these four independent variables mentioned above.

While the bank size in terms of total asset is positive and strongly related, and variables total capital and total investment & expense are moderately and positively related with that of gross-profit, but the variable number of branch is negatively and strongly related to the dependent variable (gross-profit) of these private commercial banks under consideration.

Results on Net-Profit

These investigated bank-specific factors levels of relationship with and effect on the dependent variable (net-profit), as can be seen on table 4.2 above, indicates relatively similar results as that of gross-profit. Accordingly; total capital, total investment & expense, bank size in terms of total assets, and number of branches are all significant at 5 percent level of significance.

In addition to this fact, it also shows that the amount of variance of net-profit explained by the total capital, total investment & expense, bank size in terms of total assets, and number of branches is 87.38%. Meaning, 88.14% of the variance in net-profit achieved can be predicted from these four independent variables.

While total investment & expense and bank size in terms of total asset are positive and strongly related, and total capital is averagely and positively
related with that of net-profit; the variable number of branch is negatively and strongly related with the net-profit of these private commercial banks under consideration.

4.2. Discussions

The results of the model presented in Table 4.2 are now discussed in terms of tests of each of the research questions.

The first research focus try to find how bank specific source of competitive advantages {number of branch, Bank size, total capital, and total investment & expense} relate with performance (measured in terms of gross profit and net-profit) of Ethiopian private commercial banks.

The results in Table 4.2 reveal a positive and significant relationship of total capital, bank size, and total investment & expense for performance as measured by gross profit and net-profit. This finding is consistence with the earlier studies of Indranarain, (2009), and Herald & Heiko (2009)

Based on these results, the insignificant relationships between these bank specific factors and performance based on gross profit and net profit indicate that private commercial banks are utilizing and developing their internal resources in creating competitive advantage that is crucial in enhancing firm performance.

On the other hand, the variable number of branch is negatively and significantly related to performance measured by gross profit and net-profit. This could be due to the reason that the stiff competition driven branch expansion strategies currently observing among the private banks is leading branches to be inefficient.

Disadvantages from the aggressive branch expansion strategy driven inefficiencies has been argued in past studies, Berhanu (2015), suggesting that
AIB to revisit its aggressive branch expansion strategy and recommend as moderate branch expansion along ATM/POS expansion is better for AIB from profit perspective.

The second research issue demands to know to what extent bank specific sources of competitive advantages {number of branch, Bank size, total capital, and total investment & expense} affect performance (measured in terms of gross profit and net-profit) of Ethiopian private commercial banks.

Of the bank-specific sources of competitive advantages, the size of the bank, measured by the logarithm of total assets, is positive. According the results in Table 4.2, the values for the model for predicting the dependent variables (gross profit and net profit) by the independent variable (market size) are 3.06 and 2.36, respectively.

These coefficients tells us the fact that, a unit increase in total assets of these private commercial banks leads to an increase in their gross-profit and net-profit approximately by 3.06 and 2.36, respectively. The study confirms that the size of bank has a positive impact on performances of private commercial banks.

This finding agrees with the work of Moges (2017) and Smirlock (1985) which found that market share had a positive significant relationship with profitability and not concentration. Smirlock (1985), not only believed that market share influenced profitability but growth in the market created more opportunities for the bank, thus generating more profits. He also found that growth in the market had a positive significant relationship with profits.

Thus, increases in bank size in terms of total asset translate into more performance, resulting probably from cost advantages or capacity to impose higher fees or innovative & diversified services. This suggests that a unit increase in total assets enhances performance and become source of competitive advantage among the private commercial banks in Ethiopia. In
other words, the small-sized banks could be challenged to achieve the goals they set, supporting the findings of Melak (2016).

The coefficients of total capital are also positive and significant at 5 percent level of significance with respect to gross profit and net profit. Results in Table 4.2 revealed that the values for the model for predicting gross profit and net profit by total capital are 0.043 and 0.033, respectively. These coefficients tells us the fact that, a unit increase in total capital of these private commercial banks leads to an increase in their gross-profit and net-profit approximately by 0.043 and 0.033, respectively.

These result are consistent with many empirical studies, Okpanachi, (2010) found out from his study that highly capitalized banks had positive abnormal returns to their shareholders. Kwast and Roses’s (1982) also found out from their study that banks’ capital has a direct relationship with profitability, as more and more money is pump into the business, more profit will be recorded.

From this, it is crystal clear to understand that capital is an important indicator as a source of the strength of private commercial banks in Ethiopia. In essence a direct implication of these banks capital requirement is that it limits the risk profile of investment of a bank and therefore affects its capacity to achieve a target level of profitability.

Accordingly, given the current small banks dominated banking industry in Ethiopia, private commercial banks that are relatively with better capital adequacy have better competitive advantages over their smaller competitors.

The table also suggests that change in the total investment & expense is positive and significant at 1 percent level of significance with respect to gross profit and net profit. The values for the model for predicting gross profit and net profit by total expense are 0.24 and 0.21, respectively. These coefficients tells us the fact that, a unit increase in total investment & expense of these
private commercial banks leads to an increase in their gross-profit and net-profit approximately by 0.24 and 0.21, respectively.

In the Ethiopian case, almost all private commercial banks do not have their own buildings and operated from rented premises with skyrocketing rents. Investment & expense such as interest expenses, salary and benefits, general and administrative expenses, provision for doubtful loans and advances are the mandatory and key prerequisites for profitability and banks’ survivable. The revenues they are generating is based on the amount of investment & expense they invest. Thus, increasing this proportion of investment & expense automatically translates into higher level of performance. This premises works as far as cost efficiency is considered.

This might be mainly due to the reason that the increase in services offered and the current branch expansion have resulted in a rising demand for skilled staff, which in turn has led to an increase in salaries. This trend will expect to increase in a year to come as far as the current stiff competition among the private commercial banks will continue.

Therefore, banks that have enough resources to cover the fundamental investment & expense needed for expansions, adopt timely banking technologies, innovate and diversify bank services are going to be advantages in the banking industry competitive arena.

The last finding in Table 4.2 indicates the behavior of the explanatory variable, number of branch, on the performances of Ethiopian private commercial banks. It shows as number of branch is negatively and significantly related to performance measured by gross profit and net-profit at 5 percent level of significance. The coefficients are -2.24 and -1.92 for gross profit and net profit, respectively.

These coefficients tells us the fact that, a unit increase in number of branch of these private commercial banks affects negatively to their gross-profit and net-
profit approximately by -.24 and -1.92, respectively. This could be due to the reason that the stiff competition driven branch expansion strategies currently observing among the private banks is leading branches to be inefficient.

This aggressive branch expansion strategy driven inefficiencies has been argued in past studies, Berhanu (2015), suggesting that AIB to revisit its aggressive branch expansion strategy and recommend as moderate branch expansion along ATM/POS expansion is better for AIB from profit perspective.

The finding tells us, the variable number of branch is not used as a source of competitive advantage among private commercial banks in Ethiopia. Majority of private commercial banks made joint ventures among themselves to share their ATM and POS machines they own all over the country. This could be one among the reasons that make branch not to be source of competitive advantage for these aggressively expanding their branches.
Chapter Five:

Summary, Conclusion and Recommendations

5.1. Summary

This study examines the Effect of bank specific Sources of competitive advantage on performance of selected Ethiopian private commercial banks.

The multivariate regression model was adopted to test the cause and effect relationships between performance (dependent) and bank specific factors (independent variables) using the panel data from 2010 to 2017 fiscal years.

To fit the model, multicollinearity, normality, heteroskedasticity, and Autocorrelation tests were executed by using the variance inflation factors, Shapiro-Wilk W test, Breusch-Pagan / Cook-Weisberg test, and panel correlated standard errors, respectively. Accordingly, model was fitted after dropping the variable cub (customer base) from the model because of its multicollinearity problem.

The results of the model presented in Table 4.2 indicates that the $R^2$ values of 0.881 and 0.874, which shows that overall fitness of the model is good.

Of the bank-specific sources of competitive advantages, the size of the bank, measured by the logarithm of total assets, is positive and significant at 5 percent level of significance. According the results in Table 4.2, the values for the model for predicting the dependent variables (gross profit and net profit) by the independent variable (market size) are 3.06 and 2.36, respectively. Increases in bank size in terms of total asset translate into more performance, resulting probably from cost advantages or capacity to impose higher fees or innovative & diversified services. This suggests that a unit increase in total assets enhances performance and become source of competitive advantage
mainly for larger and may also be for the medium level private commercial banks in Ethiopia.

Table 4.2 indicates as coefficients of total capital are also positive and significant at 5 percent level of significance with respect to both gross profit and net profit. The result revealed that the values for the model for predicting gross profit and net profit by total capital are 0.043 and 0.033, respectively. These coefficients tell us the fact that these private commercial banks that have superior amount of capital are more advantageous to grow their performance better than those which lacks this internal resource.

The table also suggests that change in the total investment & expense is positive and significant at 5 percent level of significance with respect to both gross profit and net profit. The values for the multivariate model for predicting gross profit and net profit by total expense are 0.24 and 0.21, respectively. Investment & expense such as interest expenses, salary and benefits, general and administrative expenses, provision for doubtful loans and advances are the mandatory and key prerequisites for profitability and banks’ survivable.

The revenues they are generating is based on the amount of investment & expense they invest. This trend will expect to increase in a year to come as far as the current stiff competition among the private commercial banks will continue. Therefore, banks that have enough resources to cover the fundamental investment & expense needed for expansions, adopt timely banking technologies, innovate and diversify latent bank services are going to be advantages in the banking industry competitive arena.

The last finding in Table 4.2 indicates as number of branch is negatively and significantly related to performance measured by gross profit and net-profit at 5 percent level of significance. The coefficients values for the model for predicting gross profit and net profit by it are 0.24 and 0.21, respectively.
This could be due to the reason that the stiff competition driven by branch expansion strategies currently observing among the private banks is leading branches to be inefficient. Extensive bank branch structures are a high-cost operation and good cost efficiencies are hard to achieve.

The finding tells us, the variable number of branch is not used as a source of competitive advantage among private commercial banks in Ethiopia. Majority of private commercial banks made joint ventures among themselves to share their ATM and POS machines they own all over the country. This could be one among the reasons that make branch not to be source of competitive advantage for these aggressively expanding their branches.

5.2. Conclusion

In line with the RBV perspective, competitive advantage is generated from within an organization’s resources. The organization’s resources are its main source of competitive advantage, (Barney, 1991). Hence, in order to achieve the competitive advantage, companies have to vigilantly analyze their internal sources of competitive advantage and be able to exploit these resources.

Accordingly:

📚 From the study, it was concluded that banks size with total asset is positively and significantly affecting performances of privet commercial banks in Ethiopia and the larger private banks are using their total assets to a very large extent in gaining competitive advantage in the market.

💡 The study concludes that total capital and total investment & expense are positively and significantly affecting the performances of privet commercial banks in Ethiopia and the larger private banks are using these internal resources to gaining competitive advantage in an average extent.
The study also concludes that aggressive branch expansion is negatively affecting performance of private commercial banks in Ethiopia and therefore is not currently source of their competitive advantage, rather needs to be revisited.

The existence of being advantages from economies of scale and cost advantages related to bank size are indications for barriers to entry in to the banking industry leading the bigger ones to be more advantageous.

The research’s finding finally concludes that total assets, total capital and total investment & expense are using as sources of competitive advantage by the larger private banks, while aggressive branch expansion is not.

5.3. **Recommendations**

The following were the recommendations of the study:

Though branch has typically been regarded as the most generic channel in the distribution arsenal, the study recommends that all private commercial banks should have to revisit their inefficient aggressive branch expansion strategy and then developing integrated, multi channel distribution strategies which enable the branch to deliver superior experiences.

The significant and positive impact of Bank size, total capital, and total investment & expense can be taken as a good signal for these private banks that are at medium level to focus on internal growth strategy to increase their sources of competitive advantage.

The significant and positive impact of Bank size, total capital, and total investment & expense can be a good signal for these private banks that are at smaller level to focus on the external growth strategy either through mergers or acquisitions to have scale advantage.
The study finally recommends that considering the fact bank size, total capital, and total investment & expense were found to be the significant bank specific factors in gaining competitive advantage among Ethiopian private banks, the NBE has the opportunity of amending to increase the minimum capital adequacy requirements of commercial banks by adopting different regulations.

This may also provide an opportunity for the banks for consolidation or acquisition of some of the smaller banks, who may struggle to meet the liquidity requirements of new banking regulations.

5.4. Suggestions for Further Research

The study was carried to identify the effect of bank specific tangible resources as sources of competitive advantage on the performances of private commercial banks in Ethiopia.

The researcher therefore recommends that another study be carried to assess the effects of bank specific intangible factors on the performances of private banks in Ethiopia in gaining competitive advantage in the market. This would allow for comparison between tangible and intangible bank specific resources in gaining competitive advantage among the private commercial banks in Ethiopia.

The researcher also recommends for further research to investigate the pre and post merger performance changes occurred as a result of the merger between CBE and CBBE, and even evaluating the merger process and branding strategy it adopted needs further study.
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Appendix I

Table 4.3. Hausman fixed random test

<table>
<thead>
<tr>
<th></th>
<th>(b)</th>
<th>(B)</th>
<th>(b-B)</th>
<th>sqrt(diag(V_b-V_B))</th>
</tr>
</thead>
<tbody>
<tr>
<td>fixed</td>
<td>.0566724</td>
<td>.0429242</td>
<td>.0137481</td>
<td></td>
</tr>
<tr>
<td>random</td>
<td>.1407623</td>
<td>.2392805</td>
<td>-.0985183</td>
<td>.0056638</td>
</tr>
<tr>
<td>lnnob</td>
<td>6483704</td>
<td>-2.24e+08</td>
<td>2.30e+08</td>
<td>7.27e+07</td>
</tr>
<tr>
<td>lnbas</td>
<td>7.01e+07</td>
<td>3.06e+08</td>
<td>-2.36e+08</td>
<td>8.31e+07</td>
</tr>
</tbody>
</table>

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

\[ \chi^2(2) = (b-B)'[V_b-V_B]^{-1}(b-B) \]

= 1.30

Prob>\chi2 = 0.5228

(V_b-V_B is not positive definite)

Source: hausman fixed random effect test result of STATA version 13
Table 4.4. Breusch and Pagan Lagrange multiplier (LM) test for random effects

Breusch and Pagan Lagrangian multiplier test for random effects

\[ \text{nep}[^{id,t}] = Xb + u[^{id}] + e[^{id,t}] \]

Estimated results:

\[ \begin{array}{lll}
\text{Var} & \text{sd} = \sqrt{\text{Var}} \\
\text{nep} & 6.71\text{e}+16 & 2.59\text{e}+08 \\
\text{e} & 8.55\text{e}+15 & 9.25\text{e}+07 \\
\text{u} & 7.57\text{e}+13 & 8698216 \\
\end{array} \]

Test:  \text{Var}(u) = 0

\[ \begin{array}{ll}
\text{chibar}2(01) = & 0.34 \\
\text{Prob} > \text{chibar}2 = & 0.2809 \\
\end{array} \]

\[ \text{. xttest0} \]

Breusch and Pagan Lagrangian multiplier test for random effects

\[ \text{grp}[^{id,t}] = Xb + u[^{id}] + e[^{id,t}] \]

Estimated results:

\[ \begin{array}{lll}
\text{Var} & \text{sd} = \sqrt{\text{Var}} \\
\text{grp} & 1.12\text{e}+17 & 3.34\text{e}+08 \\
\text{e} & 1.41\text{e}+16 & 1.19\text{e}+08 \\
\text{u} & 0 & 0 \\
\end{array} \]

Test:  \text{Var}(u) = 0

\[ \begin{array}{ll}
\text{chibar}2(01) = & 0.00 \\
\text{Prob} > \text{chibar}2 = & 1.0000 \\
\end{array} \]

Source: random effects results of STATA version 13 statistical software
Table 4.5. The variance inflation factors test for checking Multicollinearity

```
.vif

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>bas</td>
<td>5.68</td>
<td>0.176032</td>
</tr>
<tr>
<td>nob</td>
<td>4.44</td>
<td>0.225226</td>
</tr>
<tr>
<td>intoe</td>
<td>3.39</td>
<td>0.295216</td>
</tr>
<tr>
<td>toc</td>
<td>1.60</td>
<td>0.623316</td>
</tr>
</tbody>
</table>

Mean VIF 3.78
```

Table 4.6. Shapiro-Wilk W test test for checking non normality

```
.predict r, resid

.swilk r

Shapiro-Wilk W test for normal data

| Variable | Obs | W      | V     | z     | Prob>|z|
|----------|-----|--------|-------|-------|-----|
| r        | 48  | 0.96263| 1.702 | 1.132 | 0.12891 |
```
Table 4.7. Breusch-Pagan/Cook-Weisberg test for checking Heteroskedasticity

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of grp

\[ \text{Prob} > \text{chi}^2 = 0.1281 \]
\[ \text{chi}^2(1) = 2.32 \]

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of nep

\[ \text{Prob} > \text{chi}^2 = 0.0678 \]
\[ \text{chi}^2(1) = 3.34 \]
Table 4.8. Panel correlated standard errors test for checking Autocorrelation

Linear regression, correlated panels corrected standard errors (PCSEs)

| Group variable: | id | Number of obs = 48 |
| Time variable:  | year | Number of groups = 6 |
| Panels:         | correlated (balanced) | Obs per group: min = 8 |
| Autocorrelation:| no autocorrelation | avg = 8 |
|                 |       | max = 8 |
| Estimated covariances = 21 | R-squared = 0.8814 |
| Estimated autocorrelations = 0 | Wald chi2(4) = 1140.85 |
| Estimated coefficients = 5 | Prob > chi2 = 0.0000 |

| grp   | Panel-corrected Coef. | Std. Err. | z    | P>|z|   | [95% Conf. Interval] |
|-------|-----------------------|-----------|------|-------|----------------------|
| toc   | 0.0429242             | 0.0247225 | 1.74 | 0.083 | -0.0055311 to 0.0913795 |
| lnnob | -2.24e+08              | 4.48e+07  | -4.99| 0.000 | -3.11e+08 to -1.36e+08 |
| toe   | 0.2392805              | 0.0502175 | 4.76 | 0.000 | 0.1408561 to 0.337705  |
| lnbas | 3.06e+08               | 4.53e+07  | 6.77 | 0.000 | 2.18e+08 to 3.95e+08   |
| _cons | -5.79e+09              | 8.43e+08  | -6.87| 0.000 | -1.44e+09 to -4.14e+09 |
### Table 4.9. List of Ethiopian private commercial banks and year of establishments

<table>
<thead>
<tr>
<th>No.</th>
<th>Private commercial bank’s name</th>
<th>Year of establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Awash International Bank</td>
<td>1994</td>
</tr>
<tr>
<td>2</td>
<td>Dashen Bank</td>
<td>1995</td>
</tr>
<tr>
<td>3</td>
<td>Abyssinia Bank</td>
<td>1996</td>
</tr>
<tr>
<td>4</td>
<td>Wegagen Bank</td>
<td>1997</td>
</tr>
<tr>
<td>5</td>
<td>United Bank</td>
<td>1998</td>
</tr>
<tr>
<td>6</td>
<td>Nib International Bank</td>
<td>1999</td>
</tr>
<tr>
<td>7</td>
<td>Cooperative Bank of Oromia</td>
<td>2004</td>
</tr>
<tr>
<td>8</td>
<td>Lion International Bank</td>
<td>2006</td>
</tr>
<tr>
<td>9</td>
<td>Oromia International Bank</td>
<td>2008</td>
</tr>
<tr>
<td>10</td>
<td>Zemen Bank</td>
<td>2008</td>
</tr>
<tr>
<td>11</td>
<td>Bunna International Bank</td>
<td>2009</td>
</tr>
<tr>
<td>12</td>
<td>Berhan International Bank</td>
<td>2009</td>
</tr>
<tr>
<td>13</td>
<td>Abay Bank</td>
<td>2010</td>
</tr>
<tr>
<td>14</td>
<td>Addis International Bank</td>
<td>2011</td>
</tr>
<tr>
<td>15</td>
<td>Debub Global Bank</td>
<td>2012</td>
</tr>
<tr>
<td>16</td>
<td>Enat Bank</td>
<td>2013</td>
</tr>
</tbody>
</table>

Source: [www.nbe.gov.et](http://www.nbe.gov.et)
### Table 4.10. Categories of private banks based on their total assets by 2016

<table>
<thead>
<tr>
<th>No.</th>
<th>Private commercial bank’s name</th>
<th>Category Level</th>
<th>Target banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Awash International Bank</td>
<td></td>
<td>AIB, DaB</td>
</tr>
<tr>
<td>2</td>
<td>Dashen Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>United Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Abyssinia Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Wegagen Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Nib International Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Oromia International Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Cooperative Bank of Oromia</td>
<td>Medium</td>
<td>NIB, CBO</td>
</tr>
<tr>
<td>9</td>
<td>Lion International Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Zemen Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Berhan International Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Bunna International Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Abay Bank</td>
<td></td>
<td>BeIB, BIB</td>
</tr>
<tr>
<td>14</td>
<td>Enat Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Addis International Bank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Debub Global Bank</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: based on data from NBE, own calculation