

**DETERMINANTS OF FINANCIAL PERFORMANCE OF
INVESTMENT BANKS IN KENYA**

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DECLARATION

I declare that this research project is my original work and has not been presented in any other university or institution for an award.

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DEDICATION

I dedicate this research project to my family members and friends for their support, love and guidance to ensure this project was successfully completed. I value your support, love and patience.

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LIST OF ABBREVIATIONS

- CMA** - Capital Markets Authority
- CBK** - Central Bank of Kenya
- GDP** - Gross Domestic Product
- EA** - East Africa
- ES** - Efficient Structure
- EU** - European Union
- MP** - Market Power
- NPV** - Net Present Value
- NSE** - Nairobi Securities Exchange
- ROA** - Return on Assets
- ROE** - Return on Equity
- RONA** - Return on Net Assets
- SCP** - Structure Conduct Performance
- US** - United States of America

ABSTRACT

Investment banks are an important component of the economy today as they provide essential services that enable movement of capital in the economy. As a result of the global financial crisis of 2008 which triggered from collapse of investment banks in the US, there has been increased interest among scholars, policy makers, regulators and industry practitioners to better understand factors which influence financial performance of investment banks, since it is believed that firms that consistently make profits are in a position to be stable during crisis periods and contribute significantly to financial stability of a country. This study explored effect of size, liquidity, leverage and operating efficiency on investment banks' profitability. The study research design was descriptive utilizing secondary data for the years 2013 to 2017 from 10 the investment banks licensed as at the end of 2017 and were fully operational during the entire study period. Diagnostic tests were performed with a view to determine normality and multicollinearity. Descriptive statistics, correlation and regression were utilized to perform data analysis while significance was determined at 5% level. This study finds that investment bank size and leverage had an insignificant negative effect on profitability of investment banks while liquidity had an insignificant positive influence on investment bank profitability. The study also found that operating efficiency had a significant negative effect on profitability of investment banks' expressed as a Return on Assets (ROA). It was found that independent variables studied accounts for 49.6% of the variation in profitability. The study concludes that of all determinants tested in this study, only operating efficiency significantly determined financial performance of investment banking firms in Kenya. The study recommends that managers of investment banks develop strategies to manage operating costs to be within target levels to mitigate the potential of high unplanned costs diminishing investment bank's profitability.

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

Investment banks are an important component of the economy today as they provide crucial services that are essential to the movement of capital in the economy (Hunter, 2003). They perform role of intermediaries that help unite providers of capital with those who need to use it to exploit profitable investment opportunities. They also trade in equity and debt securities where they act as brokers, helping connect sellers to buyers of these financial assets. Additionally, investment banks act as transaction advisors to firms seeking to restructure their capital sources either by issuing more shares through initial public offerings, rights issues and private placements or absorbing different types of leverage including bonds, loans and commercial papers. They similarly provide fund management services for individuals, pension funds as well as institutional investors in addition to playing a key role in structuring and advising on mergers & acquisitions of companies. In Kenya, there were 14 investment banks as at the end of 2017 (CMA Annual Report, 2017).

Like in most businesses, shareholders of investment banks seek to make maximize return from their investment. There are many factors that influence an investment bank's profitability, and these include internal factors as well as those that originate from the external environment it operates in. Internal factors can be controlled by managers of these firms; these include decisions they make daily regarding the company's sources of capital, level of expenditure as well as management of liquidity (Onuonga, 2014). External factors which impact profitability of investment banks are arise from the legal and economic environment in which they operate and include

factors such as interest rates, GDP growth rates, inflation, recession, boom, regulations, market growth and market structure (Staikouras & Wood, 2011).

Factors that determine financial performance of firms is anchored in financial theory. The Structure, Conduct, Performance (SCP) hypothesis which is also known as Market Power (MP) hypothesis (Bain, 1956) says profitability of companies is affected by its industry's market structure. It argues that a market structure characterized by concentration allows firms to utilize its power in the market, such that it can impact its financial performance positively. This, it attributes it to the possibility of collusion by players to set high prices. Agency theory is the other theory that explains factors that impact financial performances of a firm. It posits that agency costs in a firm arise from an inherent conflict of interest pitting the shareholders (principal) and management (agent). The conflict often adversely affects profitability of the firm when management, who shareholders have placed the responsibility of making crucial decisions at the firm, acting instead in their interest and over and above that of stockholders. Free Cash Flow hypothesis advanced by Jensen (1988) explains the influence of free cash flow on financial performance of a firm. It argues that when managers have high amounts of free cash flow at their disposal, they are more likely to invest it in projects with a sub-optimal net present value (NPV) resulting in lower profits for the firm.

Empirical studies done locally, focus mainly on factors influencing profitability of commercial banks with most works focusing on how macroeconomic indicators which affect profitability of the commercial banking sector. Studies into investment banking sector in Kenya is also very limited and there is therefore a contextual gap in the area.

There exists a research gap as studies reviewed have shown that macroeconomic factors' effect of on profitability of investment banks and that firm specific factors such as financial characteristics and corporate governance practices could explain most of the variability in profitability. To fill this gap, this study focused on firm specific factors with a key role in determining financial performance of investment banking firms in Kenya.

1.1.1 Financial Performance

Financial performance denotes achievements of a firm in money terms over a reporting period, typically annually, expressed as profits or loss made during the period. Profitability is the main measure of financial performance of a firm. Profit is the most common motivator for entrepreneurs and it represents their return for investing money, resources and time in the business (Ogbadu, 2009). Stierwald (2010) defines profit as the result when total expenses incurred by a firm in the course of doing business are deducted from total income during that period.

Profitability of investment banks is commonly expressed by two alternative ways of measuring i.e. Return on Assets (ROA) as well as Return on Equity (ROE) (Flamini et al.,2009). ROA defined as the ratio of profits to assets, is the manager's propensity to utilize a firm's assets to generate profit (Saona, 2012). ROA means the amount of return earned from each dollar worth of assets. However it may contain a bias given that it incorporates off balance sheet income and expenses. It' also a reflection the efficiency with which the investment bank's managers utilize the firm's assets and resources towards generating income for the business (Sehrish & Khalid, 2010). ROA is a good indicator of the management's efficiency in applying organization's assets to generate earnings.

ROE on the other hand is profit to equity ratio of a company. It is the level of monetary returns received by shareholders on their equity and is a reflection of the firm's equity earning power (Saona, 2012). Firms with lower equity as compared to debt will commonly report higher ROE, and lower ROA and vice versa. Since ROE does not take into account risks associated with high debt, financial experts often choose ROA to measure investment bank profitability (Garcia et al., 2009)

1.1.2 Determinants of Financial Performance of Investment Banks

Factors which influence financial performance of investment bank are grouped into two wide categories, i.e. those internal and those external to the firm. Factors internal to the firm are those capable of being controlled by the firm's management whereas external factors typically relate to the environment that an investment bank operates and are mostly outside the control of management. Internal factors can be controlled by managers of these firms including decisions they make regarding the company's sources of capital, level of expenditure, liquidity and corporate governance practices at the firm (Onuonga, 2014).

External factors that impact investment banks profitability arise from the economic and legal environment including level of economic growth, exchange rates, interest rates, inflation and changes in the regulatory environment (Sudin, 2004).

1.1.3 Investment Banks in Kenya

There existed 14 investment banking firms in Kenya as at the end of 2017 (CMA Annual Report, 2017). Investment banks are non-deposit taking financial institutions licensed by the CMA to provide professional advisory services to companies that wish to issue securities to the public. Other services offered by investment banks include engaging the business of a stockbroker as well as acting as agents during IPOs and sale of

government and corporate bonds in the primary market (CMA Annual Report, 2002). Investment banks in Kenya additionally offer transaction advisory services to firms undertaking mergers and acquisitions, takeovers and restructuring of its capital structure. They also offer professional advice to the government during privatization of state corporations.

The first two investment banks in Kenya were licensed by the CMA in 2002 following the issue of new regulations that redefined the market structure of the capital markets sector (CMA Annual Report, 2012). Majority of the present-day investment banks in Kenya were previously stockbrokers, and most of them upgraded their licenses since in addition to stockbroking, an investment banking license allows them to offer more services. The number of licensed investment banks peaked at 19 in 2010 before some downgraded their licenses to become stockbrokers after new capitalization requirements were introduced.

The growth of Investment Banking in Kenya is attributed to the number of Initial Public Offers (IPOs) mainly due to privatizations of state companies between 2002 and 2012. The investment banking sector in Kenya has faced many challenges including reputational damage due to collapse of five brokerage firms between 2002 and 2010.

1.2. Research Problem

The investment banking sector globally had undergone major transformations over the last three decades and has become a major component of the global financial system. As a result of the global financial crisis of 2008 which started after the collapse of investment banks in the US, there has been increased interest among scholars, policy makers, regulators and industry practitioners to better understand factors that determine financial performance of investment banks, since firms that consistently make profits

are better able to be prepared for crisis hence aiding significantly the soundness of the financial sector.

A review of literature reveals that relatively little effort has gone into research to establish factors which determine performance of investment banks as compared to other banking sectors such as commercial banks. Anbar & Deger (2011) conducted research on factors determining Turkish banking institutions profitability, where findings indicated that performance is as a function of banks specific and select macroeconomic factors including size, income from non interest sources and the credit-assets ratio. Clair (2004) found that macroeconomic indicators including exchange rates, interest rates, level of unemployment, and the aggregate demand in the economy had an effect on bank performance.

With respect to investment banks, researchers have observed that their financial performance are explained by a confluence of internal and external determinants. Internal determinants of financial performance, often referred as micro or firm-specific factors, originate from the investment banks' own internal characteristics as well as results of decisions and strategies pursued by management of these organizations. External factors on the other hand are variables that are do not relate to specific firms or its management but relate mostly to the legal and economic environment it operates in (Athanasoglou, Brissimis & Delis, 2005).

Zaina (2017) studied how Kenyan investment banks' profitability is influenced by macroeconomic variables. She finds a positive correlation between investment banks' return on capital employed & money supply in economy, while financial performance was negatively impacted by GDP growth rates, exchange rate and inflation. Her focus was on external determinants and did not cover internal factors that determine

profitability. Further she found that macroeconomic factors had a limited effect on Kenyan investment banks profitability and she postulated factors unique to the firm could have a greater influence on performance and recommended further studies in this area.

Literature review conducted reveal a lack of consensus among scholars and researchers on the effect of internal factors including firm size, liquidity, leverage, operating efficiency, diversification, ownership concentration and duality in ownership and management; on financial performance of financial institutions. There is therefore a knowledge gap and as a result, the subject could benefit from more studies to add to the existing body of knowledge. A contextual gap also exists since most of the research done in this area focused on commercial and not the investment banking sector, including Otieno (2012), Gitonga (2016), Otambo (2016) and Kimeu (2017). This study sought to find an answer to the research question i.e. Which factors determine financial performance of Kenyan investment banks?

1.3. Research Objective

This study's objective is finding out factors that determine financial performance of investment banks in Kenya.

1.4. Value of the Study

This study will be of value to researchers and academic as they will refer to the findings of this study as empirical evidence of the theories on factors that determine profitability of investment banks. Findings of this study will be an addition to the existing what is known about factors that affect financial performance of investment banks as well as present a foundation for other studies in this field.

The research will also be of importance to boards of directors and management of the investment banks on factors that can improve financial performance of the firms under their stewardship. The study will also be of value to customers when selecting an investment bank since good financial performance of an investment bank contributes to safety of client funds held by these companies.

The study will equally help policy makers and regulators in formulating appropriate policies and regulations for the industry towards fostering long term profitability and stability of the sector.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

This chapter focus on contextual issues in investment banking and factors that affect profitability of firms. It also outlines a detailed analysis the research by scholars globally around factors that determine performance with specific emphasis on investment banks. The chapter additionally explains the theories that anchor this study and thereafter presents a conceptual framework adopted to measure financial performance of investment banks. A summary of gaps that this study aims to fill is highlighted at the tail end of this chapter.

2.2. Theoretical Review

This subsection's focus is the theoretical framework that anchors this study. The value of this section is to narrow the range of fact that this study will focus on. It also highlights which research approaches will result in the most meaning, it summarizes what is already known about the study subject and predicts further facts that could be established from this study.

2.2.1 Market Power Hypothesis

Market Power hypothesis traces its origin to 1956 when Joe Staten Bain undertook one of the earliest studies the structure of the market affects performance of firms. The Market Power (MP) theory that is known also as Structure-Conduct-Performance (SCP) hypothesis posits structure of the industry a firm operates in has an influence on its performance. It argues that a concentrated market structure supports the use by market power by a market player in ways that impacts its financial performance positively. It attributes this to the possibility of collusion by players to set high prices.

Berger et al. (2004) in their study involving US banks observed that banks that operated in local markets characterized by high concentration pursued pricing tendencies that are normally show the use of market power as posited in the SCP theory. However, when the bank's market share was included in the regression equation used in their analysis, there was no longer a strong relationship between concentration and profitability. On the contrary, Guerrero et al. (2005) after a research covering nineteen banking firms in the south American country of Mexico, found no evidence of the SCP hypothesis.

From studies reviewed so far, the market power theory have been undertaken covering banks in Europe and US few analyses covering emerging and developing markets. Goddard et al. (2001) found that most banking research in these two regions that sought to test the SCP hypothesis find some correlation between concentration and financial performance, however to a relatively low extent.

The market power hypothesis is relevant in this context because the study involves finding out the effect of size on the profitability of investment banks.

2.2.2 Efficient Structure Hypothesis

This hypothesis is another effort at explaining the why profitability of firms is positively related to concentration of the industry a firm operates in and was advanced by Demsetz (1973) is the Efficient Structure hypothesis. The ES theory directly challenged the assertion that high market concentration results in higher profitability for firms. He argued that if a firm is more efficient than its competitors, it can maximize its profits and its market share will increase as a result, regardless of concentration and therefore higher profits is more attributable to efficiency than concentration. He argues that efficient banks tend to achieve high profits and as result grow to be more dominant, the

level of concentration in the market increases. Therefore, the causality relationship begins from an individual banks' being efficient, which enables it to grow its share of the market resulting in increased profitability for the bank.

The efficiency school of thought has tested this hypothesis using both direct and indirect barometers of how efficient firms are, with the two theories yielding same outcomes (Maudos, 1998). Despite the opposing positions advanced by these two theories (Market Power and Efficient Structure), the two theories are still popular areas of study by scholars seeking to explain drivers of performance of banking companies.

This theory is relevant to this study since this study seeks to determine if operating efficiency drives financial performance of investment banks.

2.2.3 Agency Theory

This theory traces its origin back in 1972 when Stephen Ross presented a paper which also featured in the American Economic Review forum in 1973 where he built on the theory of the firm. According to Ross, agency relationship exists where two parties one called agent who is acting in place of another, called the "principal" and decisions are made that affect the other. Jensen and Meckling (1976) argued on the need for separating ownership firms from control. The Agency theory posits that agency costs in a firm arise from an inherent conflict of interest pitting the shareholders (principals) and management (agent) (Meckling and Jensen, 1973; Jensen and Fama, 1986; Fama, 1980). This situation arises at a firm when management, who shareholders have placed the responsibility of making crucial decisions at the firm, are often than not non-owners of the firm, and therefore do not face and adverse consequences that may result from their decisions.

Agency theory explains that the separation of control from ownership of a firm that results when shareholders appoint directors who in turn hire people to manage a firm on shareholders behalf often leads to situation where these parties are conflicted (Kiel & Nicholson, 2003). The agency theory is concerned with understanding and coming up with a framework aimed at resolving problems that occur during the interaction between principals and their agents (Eisenhardt, 1989).

This theory is relevant to this study since corporate governance variables form part of the independent variables in this study.

2.2.4 Free Cash Flow Theory

The Free Cash Flow hypothesis advanced by Jensen (1988) argued that when managers have at their disposal high level of free cash, they have the tendency to invest it in ventures having a sub-optimal net present value (NPV) as opposed to paying dividends to shareholders. He defined free cash flow as that money that remains after a firm has set aside funds for all projects under its consideration that exhibit a positive NPV. Since the free cash flow is at the management's discretion to spend, it is often referred to as idle cash flows. Jensen argued that excess cash flow leads to wastage. Jensen (1993) undertook an empirical study of the agency problem where he observed that free cash flow was a major explanatory factor as to why investment return among US companies in the 1980s were below the required return rate for the firm given its cost of capital.

In addition to FCF, Jensen (1991) argued that main factor that results in increase in agency costs is self-interest motive of management. This was observed particularly when interests of shareholders and those of management were in conflict and shareholders' interest was almost always subordinated to those of management. Inadequate corporate governance arrangements usually lead to inefficiency in the

utilization of free cash flows since board of directors often pursue policies that is more attune to the interests of management over those that seek to maximize shareholder value (Brush, 2000).

The theory is relevant in this instance since this study seeks to determine if level of liquidity drives profitability of investment banks.

2.2.5 Trade-off Theory of Capital Structure

The trade-off theory is an extension of the works of Modigliani and Miller (1958). While a key assumption of the MM theory was that there were no taxes, the tradeoff theory incorporates the issue of taxation as well as the costs of bankruptcy. The trade-off theory was an important first step that laid the framework for the advancement of several theories that aim to guide on how firms should determine an optimal capital structure. The original MM theory is relevant for firms while selecting an optimum level of leverage because it results in tax shields. When level of debt used compared to equity rises, the lenders will tend to charge higher interest rates thereby increasing h risk of bankruptcy faced by a firm.

As per the trade-off theory, finance controllers should select a debit-equity mix that draws a good balance because tax rewards when debt is used and the bankruptcy costs that come along. This theory advises managers of companies with large amounts of physical assets and that make huge amounts of gross profits to take on more debt. Those companies that are less profitable and have assets that are intangible and risky to have a preference for equity to reduce the risk of bankruptcy.

The trade-off theory is of relevance in this case since leverage's impact on profitability is one of the variables under study.

2.3. Determinants of Financial Performance of Investment Banks

Factors that determine financial performance of investment banks include firm's size, liquidity position, level of leverage and its operating efficiency. These are explained in detail below:

2.3.1 Size

Firm size can be measured in many forms including as a factor of its total assets, total revenue, geographical presence and number of employees. The most commonly used measures for investment bank size include the level of equity capital, revenues, total assets and customers numbers (Schildbach, 2017). In most of finance literature read while undertaking this research, the proxy for firm size is its total assets and is commonly expressed a natural log. of its assets (Bikker & Hu (2002), Goddard et al. (2004), Cull et al., (2007) and Molyneux & Thornton (1992)). Bigger institutions are better positioned for harness economies of scale that goes to enable them to record higher profits. Resulting from this, the relation of firm size and its profits is mostly a positive one. Alkhazaleh & Almsafir (2014) argued that large banks have a stronger bargaining power arising from their specialization and that they enjoy economies of scale they have. In addition, empirical evidence indicates that size of a bank impact's its profitability in a positive manner mostly because of confidence investors have in it, its cost of raising capital is significantly lower (Tariq et al., 2014).

2.3.2 Liquidity

Liquidity is all the cash that a firm has left after considering all obligations relating to the current financial period. When external financing is not available to a firm, liquid assets can be used to finance operations and investments. Several theories exist that explain the linkage between liquidity and profitability of banks and financial

institutions in general. Following a research covering banks in the US, Osborne, Fuertes & Milne (2009), concludes that high liquidity is costs banks dearly, meaning higher liquidity lowers banks' profits. They also argue that low liquidity levels on the other hand pose a risk to their profitability due to the bank's inability to fund new business opportunities. A sustained liquidity crunch may also result in bankruptcy due to a firm's inability to pay its depositors and creditors. They argue that high liquidity is crucial in enabling investment banks to meet unexpected obligations and to meet all obligations during the times of low revenues. Jovanovic (1982) carried out research on the how liquidity impacts profitability of insurance industry in Kenya and finds that a positive influence of liquidity on the performance of insurance firms in Kenya.

2.3.3 Leverage

Leverage is the debt - equity mix that defines the firm's capital structure. Van Horne (2002) sees capital structure as the mix of long-term sources of capital employed by a firm. Traditional theory by Modigliani and Miller (1963) posit that high leverage is advantages to a firm because it forms a tax shield since interest expense is tax deductible. The main motivation of a firm using leverage is to maximize shareholder value under certain favorable economic conditions such as during prolonged periods of low interest rates. Financial leverage will enhance shareholder returns as long as the interest paid for its long-term loans is much below the return rate on net assets that the firm has. The mix of equity and debt used by a firm is however directly related to its bankruptcy risk (Pandey, 2005). An optimal capital structure is therefore crucial in an investment banks effort to manage both financial and business risk, achieve a favorable tax position, as well as respond with agility to growth opportunities. A high degree of leverage means that slight movement in turnover translates into big change in

profitability (ROE). Based on a study of 72 companies in five industries involving over 2,000 tests in various time periods, Murphy (1968) found that there was no likelihood for firms with high level of leverage to outperform others in terms of rates of return on common equity.

2.3.4 Operating Efficiency

Operating efficiency is the main measure of how a firm manages operating costs and is the ratio of total operational expenses to total income. Operating costs are expenses incurred in the normal operations of an investment bank excluding the cost of funds. The inability of most investment banks to exercise prudent management of their operating costs has in the past pushed their cost-income ratios to levels that are unsustainable. Costs constituted 71% of revenue across the investment banking industry globally in the year 2010, an increase of over 11% from a few years earlier (New Financial, 2010). Empirical studies also show that low operating costs often results in higher profitability for financial institutions. According to Chinoda (2014), costs such as provisions for doubtful and bad debts had a negative influence on performance of banks. Wright (2013) argues that investment banks will need to place more emphasis on reducing costs to boost their profitability instead of placing reliance on growth.

2.4. Empirical Review

Very few studies have tried to reveal factors affecting performance of investment banking firms; however, research has been done on other banking sectors such as commercial banks. Heffernan & Fu (2010) undertook a study on influence of macroeconomic indicators and finance ratios on profitability of banks and found them to have a significant influence on bank performance. Following a similar study, Clair

(2004) found that macroeconomic indicators including exchange rates, interest rates, level of unemployment, and the aggregate demand in the economy had an effect on bank performance.

Schertler (2003) researched on determinants of financial performance of European Private equity investments. He concluded that the selected macroeconomic variables are very much influential on financial performance of private equity investments. The study also showed that early stage investments are affected by institutional reputation.

Anbar & Deger (2011) researched on the factors determining profitability of Turkish commercial banks, and findings indicated that ROA and ROCE as a function of banks internal and macroeconomic indicators measure bank performance. The findings too showed that on real rate of interest affected performance of commercial banks in a significant way. These findings suggested therefore that for a bank to be profitable, it needs to increase its size and diversify revenue from non interest sources, ensuring that credit to asset ratio is at a minimum.

Said & Tumin (2011) undertook research on trends of commercial banks' financial ratios. They observed that factors among them bank size, operating expenses, credit level, liquidity, capital significantly impacted on the performance of Chinese and Malaysian banks. The study also documented evidence that operating ratios were significantly influenced banks in China as compared to Malaysia and on the flipside Chinese banks profitability was affected positively and significantly by credit and capital ratios.

Mamatzakis & Bermpei (2015) studied performance of US investment banks between 2000–2012 and the influence of corporate governance. Results showed that the number of board members affected performance negatively consistent with the Agency theory,

particularly where the members on the board was more than ten members. They also observed that operational complexity and performance were negatively correlated. The study revealed power asserted CEO impacted profitability in a positive way. Additionally, banks with higher proportion of shares held by its board tended to perform poorly. However, then the proportion of shares held by serving directors increased above a certain threshold, there was a favourable impact on bank profitability, meaning at this point, shareholders and board's objectives were aligned.

Kosmidou & Pasiouras (2007) did a study that to examine the specific characteristics in the banking sector that would impacts profitability of domestic and foreign commercial banks. They focused on 15 EU countries that operated over the year 1995-2001. The study showed that the bank internal features as well as macroeconomic factors they selected to study do not only affect both domestic and foreign banks profitability.

A study by Almajali, Alamro, & Al-Soub (2012) suggested that moderate liquidity helps firms achieve good financial performance and too much of it on leads to wastage. For the investment banks to gain public confidence, and therefore business, they need to have sufficient liquidity to meet the demands client needs (Chinoda, 2014). Liquidity is measured by expressing current liabilities as a proportion of current assets.

In Canada Shipilov (2006) studied the implications that a firm would have by specializing on a certain activity. By analysing networks within the Canadian investment banking industry, Shipilov found that both specialists and generalists performed better than banks of moderate specialization levels

Ongore, (2013) studied factors that influence financial performance of commercial banks in Kenya and discovered macroeconomic indicators' effect on profitability of

commercial banks to be insignificant. He concluded that board and management decisions contribute significantly on the financial performance.

Ng'ang'a (2016) in her study, established that macroeconomic variables impacts profits of insurance industry in Kenya. ROCE was used as the financial performance indicator. The results showed that macroeconomic factors are not suitable predictors of the financial performance of insurance industry of Kenya. Therefore, she suggested further studies to include other specific microeconomic factors.

Ongera (2015) studied the impact of strategies adopted on competitive advantage of investment banks in Kenya. He found customer-care, product diversification, innovation and information technology strategies as key drivers of competitive advantage.

Zaina (2017) studied how Kenyan investment banks' profitability is influenced by macroeconomic variables. She found that investment banks' return depend on capital employed and money supply, while GDP growth rates, currency rate and inflation have opposite movement with financial performance. She however concluded that 62% of firm's performance is explained other factors other than macro-economic variables covered by her study.

2.5. Literature Review Summary and Research Gap

The review of literature made it possible to familiarize with previous studies, thus facilitating interpretation of the study results. In addition, this section helped pull together, collate and summarize what's documented in the area to be studied. And

therefore, the review has analyzed and synthesized different results revealing gaps in information and areas where the research question still remains to be answered.

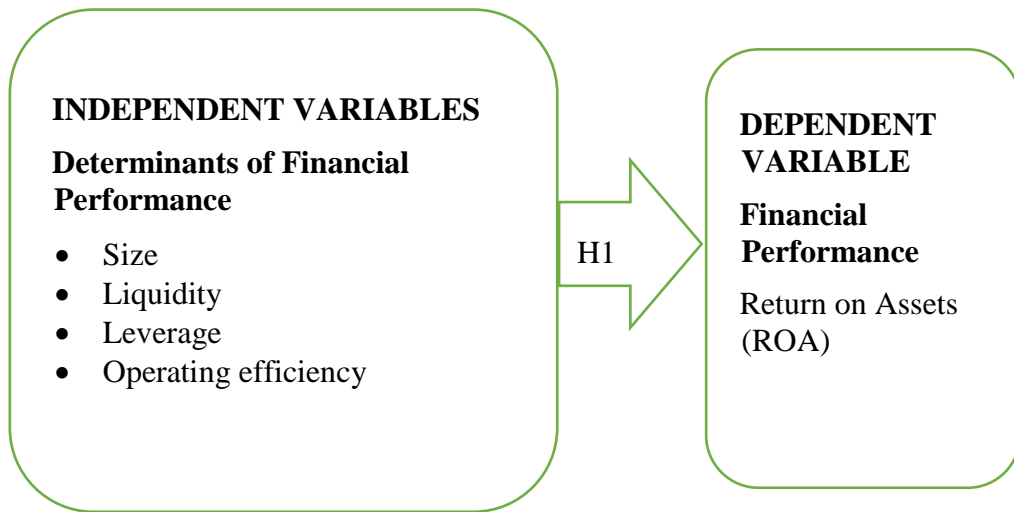
Empirical studies reviewed have shown mixed findings on factors that determine profitability of investment banks. This is largely on account of differences in time periods, examined countries, datasets and analysis techniques. It was also observed that the research studies done on investment banking have heavily focused on the developed countries. There is therefore, the need to determine effect factors which have an impact on financial returns of investment banks in Kenya. Most of research done also mainly focused on commercial banks' financial performance. There is a contextual gap and hence the need for a study focusing on investment banks. Empirical studies reviewed show that many research works have been done which covered various jurisdictions globally. However, very few researches have been done locally to highlight effect of industry and firm internal characteristics including aspects of corporate governance practices on investment banks profitability locally.

Similarly, a study of global literature suggested an apparent lack of consensus among financial scholars concerning factors impacting financial returns of investment banks. This lack of consensus suggests that determinants of financial performance of investment banking institutions is a concept that is still open for study. This is the gap that this study sought to bridge.

2.6. Conceptual Framework

This study aimed at identifying internal characteristics that determine financial performance of investment banks. Independent variables in this study includes Size, Liquidity, Leverage and Operating efficiency.

Figure 2.1: Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes research design utilized in this paper. It discusses population and sampling method, sampling technique, sample size, data collection methodologies and data analysis methods employed.

3.2 Research Design

This is the plan that the researcher has chosen to follow that leads him to answer the research question accurately, validly & objectively (Kerlinger, 1986). He states that a research design determines which type of analysis will be undertaken to obtain the desired results. Judgement over the success of the research design adopted is passed on whether or not one is able to get the solutions to his research question upon conclusion of his research.

Descriptive research design was selected since this type of design defines subjects by defining a profile of people, events or occurrences by collecting and tabulating data on frequency of variables under study (Cooper & Schindler, 2007). A descriptive explore design also ensures absolute explanation of the state of affairs and ensures no bias while collecting data and enables data collection from a significant target population at a cost-effective manner.

3.3 Population

Mugenda & Mugenda (2003) posited that the population targeted for a study need exhibit characteristics that are observable and that a scholar hopes to generalize upon conclusion of his research. This study covered 10 investment banks licensed in Kenya and were operational throughout the study period.

3.4 Data Collection

Secondary data contained in annual published financials of all investment banks as at December 31, 2017 was used in the study. The data covered a five year period between 2013 to 2017. Considering financial statements are prepared on the basis of internationally accepted accounting and financial reporting standards principles the contents are considered reliable.

3.5 Diagnostic Tests

Diagnostic tests were done on collected data to test for normality and multi-collinearity. Normality tests were conducted before data was analyzed to determine the normality of distribution of data in each variable used in the research. This was necessary since the purpose of the research is inferential.

After normality of data was tested, multi-collinearity tests were performed to determine whether there is similarity among the determinants included in the model. A good model for regression is where the determinant variables do not exhibit multicollinearity.

3.6 Data Analysis

Data analysis about examining data collected during the study with a view to make inferences and deductions. After collection of data, the same was edited, sorted for completeness and analyzed. Data analysis began with descriptive statistics showing absolute & relative frequencies, measure of dispersion and central tendency i.e. standard deviation and mean and respectively. Tables have been utilized to present numerical data with the explanations of observations being given in prose. Correlation table was undertaken to further understand the relationships between the dependent variable and the determinants.

Regression analysis was employed in addition to correlation analysis with a view to providing generalization of research findings. The regression equation used is outlined below:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

The variables are described below:

Table 3.1: Operationalization of Variables

Notation	Variable	How it Will be Measured
Y	Return on Assets (ROA)	Net profit/ Assets
X1	Size	Total Assets (Natural log.)
X2	Liquidity	Ratio of Cash and cash equivalents to Current Liabilities
X3	Leverage	Debt to equity ratio
X4	Operating efficiency	Operating expenses / Total revenue

α – constant also known as the Y intercept

β_1, \dots, β_n = coefficients for each factor.

ε - error term

Beta (β) coefficients in the above equation above depict the strength and direction of the correlation of the dependent and independent variables.

3.7 Test of Significance

Correlation coefficient (r) was utilized evaluate strength as well as direction of relationship among the dependent variable and each of the determinants. To reveal the proportion of the dependent variable that can attributed to the determinants, the Coefficient of determination also referred to as R square was calculated. It would be concluded that there was no strong correlation if the F values turn out to be less when compared against the table value at 5% confidence level.

In order to be able to determine how significant the regression model was, Analysis of Variance (ANOVA) was done. ANOVA is a very useful statistical tool that helps to establish the extent to which regression model forecasts the dependent variable by revealing statistical significance between the groups.

CHAPTER FOUR : DATA ANALYSIS, RESULTS AND INTERPRETATION

4.1 Introduction

This chapter explains observations after analysis. It details the response rate, diagnostic tests, descriptive statistics and results of co-relation analysis. It also outlines regression analysis findings and thereafter a discussion on the research outcomes.

4.1.1 Response Rate

The study sought to cover 14 investment banking firms licensed Kenya, but data was only available for 10 investment banks that had full operations from the year 2013 to the year 2017. Four firms excluded from the study were not fully operational for the entire period under study. The 10 investment banks made up a response rate of 71.43%, which was considered representative of all the investment banks in Kenya.

4.2 Diagnostic Tests

Diagnostic tests were carried out on the collected data to test for normality and multi-collinearity and the results are detailed below:

4.2.1 Normality Test

Normality test was performed with a view to determine the distribution of data in each variable used in the research. Kolmogorov-Smirnov tests to assess the normality of collected data was conducted.

Figure 4.1: Kolmogorov-Smirnov Normality Test

		ROA	Size	Liquidity Ratio	Leverage	Operational Efficiency
N		50	50	50	50	50
Normal Parameters m,n	Mean	.0460	20.6454	4.0746	.06200	.9100
	Std. Deviation	.0821	.4661	4.2958	.1171	.4464
Most Extreme Differences	Absolute	.142	.145	.298	.350	.158
	Positive	.101	.145	.298	.350	.158
	Negative	-.142	-.068	-.257	-.298	-.106
Test Statistic		.142	.145	.298	.350	.158
Asymp. Sig. (2-tailed)		.013 ^c	.040 ^c	.012 ^c	.082 ^c	.310 ^c
m. Normal distribution.						
n. Derived from data.						
d. Liliefors Significance Correction						

Suorce: Research Findings

Since the value Asymp.Sig > 0.05, this suggests normal distribution for size, liquidity, leverage and operating efficiency, therefore data is suitable for further analysis.

4.2.2 Multi-collinearity Test

After normality of data was tested, multi-collinearity tests were performed to look for signs of similarity among the determinants chosen for the study. Correlation that is strong will be seen if there is similarity among the independent variables in the study.

Results from this test are shown below:

Figure 4.2: Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Size	.972	1.028
Liquidity	.524	1.908
Leverage	.532	1.879
Operational Efficiency	.965	1.036

Dependent Variable: ROA

Source: Research Findings

From figure 4.2 above, the Variance Inflation Factor (VIF) for size, liquidity, leverage, operational efficiency is 1.028, 1.908, 1.879, 1.036 respectively. Since VIF is less than 10, it denotes absence of multicollinearity between the independent variables.

4.3 Analysis of Data and Presentation of Findings

4.3.1 Descriptive Statistics

4.3.1.1 Summary of Descriptive Statistics

Descriptive statistics are utilized to present summaries of data that is the mean(average), standard deviation, lowest and highest value for each variable. Table 4.1 highlights what was found.

Table 4.3 : Descriptive Statistics

	N	Min.	Max.	Mean	Std Deviation
ROA (Ratio)	50	-0.2091	0.2777	0.0461	0.0821
Size (Natural log)	50	19.7255	21.6144	20.6454	0.4667
Liquidity (Ratio)	50	1.2713	20.2422	4.0746	4.2958
Leverage (Ratio)	50	0	0.3922	0.0620	0.1171
Operating efficiency (Ratio)	50	0.001	3.1281	0.9099	0.4464

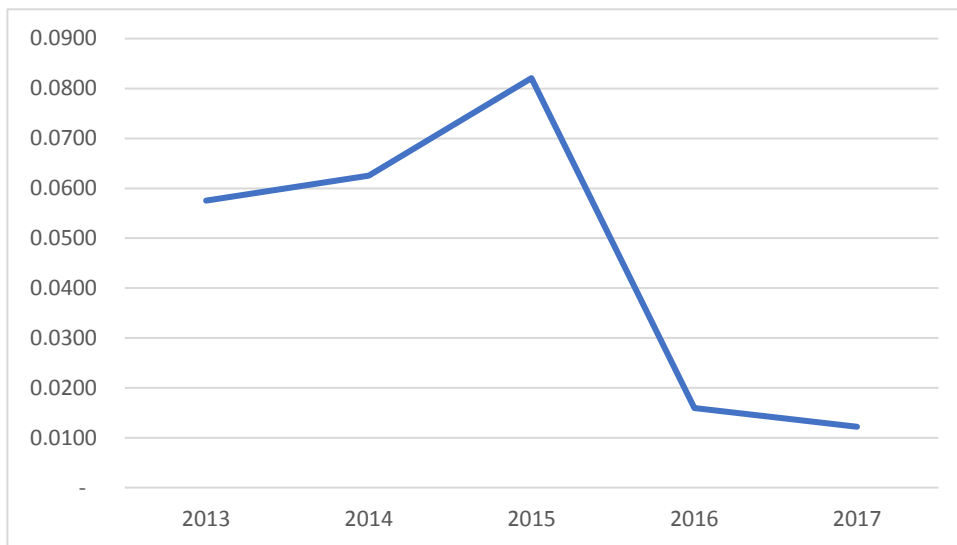
Source: Research

The table above show that average profitability of investment banking companies in Kenya s as expressed as return on assets is 0.0461; ROA being highest and lowest at 0.2777 and -0.2091 respectively. The analysis shows that the mean of size of investment banks converted into natural logarithm of total assets stood at 20.6454 with lowest and highest incidences at 19.7255 and 21.6144. Results indicate that the mean liquidity ratio

for investment banks is 4.0746 with low and high ratios of 1.2713 and 20.2422. The average leverage ratio is 0.0620 with lowest and highest values recorded at 0 and 0.3922 respectively, this denotes that investment banks in Kenya rarely rely on long term debt as a source of capital. Finally, the average operating efficiency ratio is 0.9099 with lowest as well as highest ratio being 0.001 and 3.1281 respectively. Data shows that on average, investment banks in Kenya spend about 91% of their total income on operating expenses.

4.3.1.2 Trend Analysis

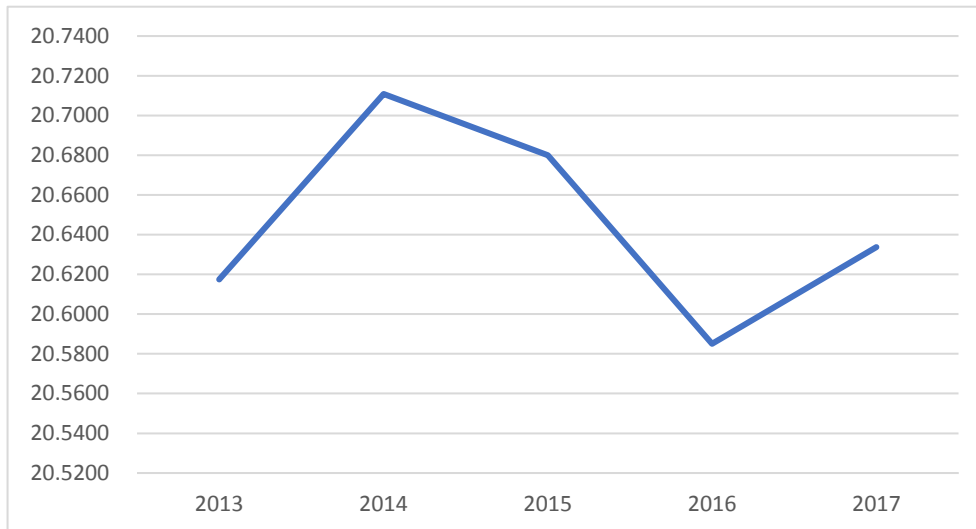
Figure 4.1: Return on Assets Trend



Source: Research Findings

Figure 4.1 shows that the average profitability of investment banking firms in Kenya as expressed as return from its assets (ROA) rose from 2013 to 2015 and then fell sharply in 2016 and fell slightly further in 2017.

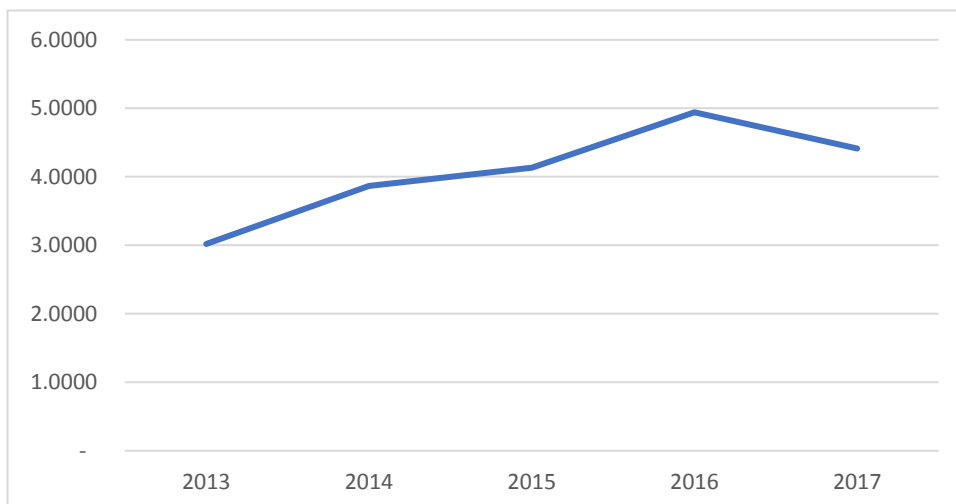
Figure 4.2: Size Trend



Source: Research Findings

Figure 4.2 illustrates the size trend as expressed as a natural log. of total assets. Figure indicates that average size for investment banks in Kenya grew between 2013 and 2014 then fell between 2014 and 2016. The average size however experienced growth in 2017.

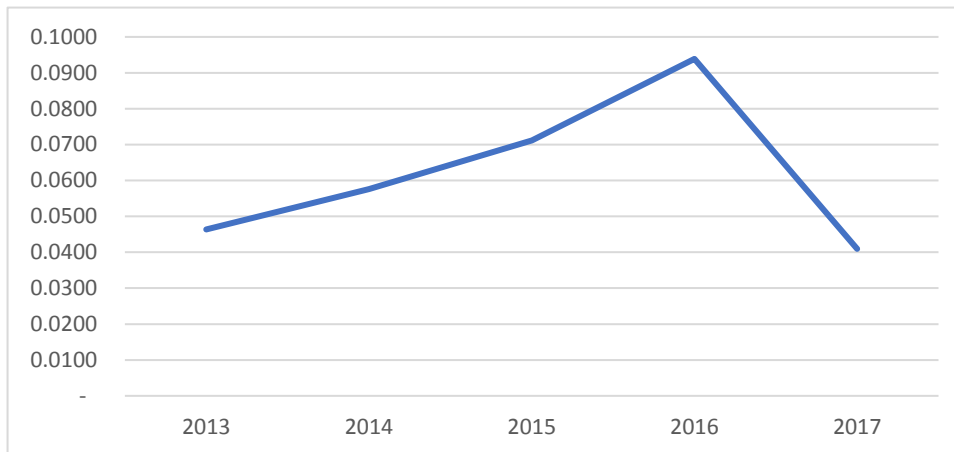
Figure 4.3: Liquidity Trend



Source: Research Data

The graph above shows liquidity for the investment banking sector in Kenya has been increasing gradually between 2013 and 2016. There was however a slight reduction in the average liquidity ratio in 2017.

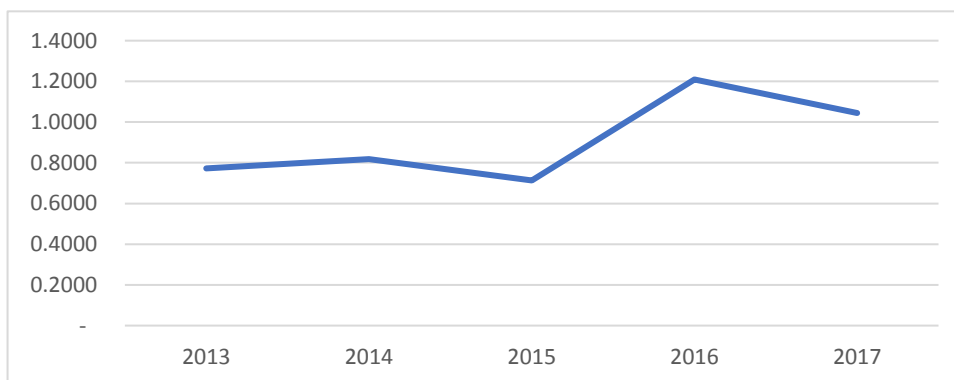
Figure 4.4: Leverage Trend



Source: Research Findings

Figure 4.4 shows minimal use of leverage by investment banks in Kenya and the proportion of debt to equity ranged from 4.6% to 9.6% over the period. The graph also indicates that debt-equity ratio increased between 2013 and 2016. There was however a reduction in 2017.

Figure 4.5: Operating Efficiency Trend



Source: Research Findings

Figure 4.5 shows that operating efficiency among investment banks in Kenya has been consistently poor over the study period and ranged between 71-121%. The lower the ratio, the better; with 50% commonly considered as the highest optimum ratio. This trend shows that operating efficiency ratio was largely unchanged between 2013 and 2015. However, it increased in 2016 and recoded a drop in 2017.

4.3.2 Correlation Analysis

Correlation analysis reveals how strong the association is between two continuous variables and was useful in establishing if there are possible connections between the variables. This is summed up below

Table 4.4: Correlation Analysis

		ROA	Size	Liquidity Ratio	Leverage Ratio	Operating efficiency
ROA	Pearson Corr.	1				
	Sig.(2-tailed)					
Size	Pearson Corr.	0.069	1			
	Sig.(2-tailed)	0.636				
Liquidity Ratio	Pearson Corr.	-0.104	-0.116	1		
	Sig.(2-tailed)	0.471	0.421			
Leverage Ratio	Pearson Corr.	-0.258	-0.118	0.679**	1	
	Sig.(2-tailed)	0.071	0.414	0.000		
Operating efficiency Ratio	Pearson Corr.	-0.655**	-0.097	-0.114	-0.001	1
	Sig.(2-tailed)	0.000	0.502	0.430	0.992	

**indicates where correlation is significant at 0.05 confidence level.

Source : Research Data

The result as depicted above show positive correlation between size and financial performance. This relationship is weak however as denoted by Sig 0.636 > 0.05. Results also indicate a weak negative correlation between liquidity ratio (Sig 0.471 > 0.05), leverage ratio (Sig 0.071 > 0.05) and investment banks' profitability. The findings however show strong negative correlation between operating efficiency (Sig 0.000 < 0.05) and investment bank profitability.

4.3.3 Regression Analysis

To get a better perspective of the relationship between the determinants, regression analysis was also performed. A regression is utilized to determine how important each determinant in the study was when it comes to influencing profitability. Regression analysis outcomes are detailed below including the model summary, ANOVA and regression coefficients.

4.3.3.1 Model Summary

Table 4.5 : Model Summary

Model	R	R. Squared	Adj. R. Square	Std. Error
1	.705 ^a	.496	.452	.060809003003423

a. Predictors: (Constant), Size, Liquidity, Leverage, Operating efficiency

Source: Research Findings

Table 4.5 above indicates that R-square is 0.496, meaning that, the determinants covered by this study lead to 49.6% of the variance of the dependent variable. Therefore, 50.4% of variability is attributable to determinants not covered by regression model.

4.3.3.2 ANOVA

ANOVA is the Analysis of Variance helps determine how perfect is the fit between the regression equation and collected data or how well it predicts the dependent variable.

Observations from ANOVA analysis are outlined below.

Table 4.6 ANOVA

Model		Sum of Sqres	df	Mean Squares	F	Sign.
1	Regression	.164	4	.041	11.091	.000 ^b
	Residual	.166	45	.004		
	Total	.330	49			

a. Dependent Variable is Return on Assets

b. Predictors are Constant, Operating efficiency, Leverage, Size, Liquidity Ratio

Table 4.6 indicates that the regression model does well at predicting the dependent accurately. The regression model's statistical significance as denoted by the Sig. column in the table above shows that $p < 0.05$, and suggests, overall, the regression model predicts fairly accurately the dependent variable.

4.3.3.3 Regression Coefficients

Table 4.7

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	0.265	0.393		0.675	0.503
	Size (X1)	-0.005	0.019	-0.027	-0.249	0.804
	Liquidity Ratio (X2)	0.00018	0.003	-0.010	-0.065	0.948
	Leverage (X3)	-0.179	0.102	-0.255	-1.760	0.085
	Operating Efficiency (X4)	-0.121	0.020	-0.659	-6.119	0.000
a. Dependent Variable is Return on Assets						

Sovrce : Research Findings

Results shown above in 4.7 generates the following equation

$$Y = 0.265 - 0.121(X4) + e$$

Table 4.7 shows regression coefficients suggest a negative but insignificant relationship between profitability and investment bank size as shown by beta value -0.005 and significance value of 0.808. It further indicates the existence of a positive but insignificant influence of liquidity on profitability. They also show there exists negative but insignificant association of leverage and performance. Finally, results show a significant relationship but negative between performance and operating efficiency as indicated by beta value (-0.121) and p value ($0.00 < 0.05$).

4.4 Interpretation of the Findings

The study finds that investment bank’s size exerts an insignificant negative impact on profitability of investment banking firms suggesting that the larger a firm, the lower its profitability and vice versa. This finding seems to contradict the

Market Power theory that posits that larger firms make more profits due to their use of market power to influence prices in ways that impact its financial performance positively. A similar study by Lipunga (2014) regarding the drivers of profitability among commercial banks in Malawi also had contrasting findings and he established that size of a bank had a positive effect on ROA. The contradicting findings here suggest that the negative effect of size on financial performance is likely unique to investment banks since the bulk of their revenues come from brokerage commissions, this may be more influenced by the firm's competitive strategy as opposed to asset and advisory fees which are not necessarily impacted by a firms asset size.

The study also found that liquidity ratio had a small positive but insignificant influence on financial performance. Meaning that the proportion of liquid assets to current liabilities maintained by an investment bank has little effect on its profitability. In contrast, Alemu (2015) established that liquidity had a statistically significant relationship with financial performance. According to Chinoda (2014), availability of liquidity enhances profitability of banks since it enhances its capacity to fulfill present and essential needs.

The study additionally found that leverage influences investment banks' profitability negatively although the effect is not statistically significant. This finding indicates that rise in leverage causes a reduction in profitability. The finding is in line with assertions of Trade-off theory which posits benefits of using debt upto a certain optimum level, as there are tax benefits since finance costs are deducted from gross income before income tax is computed. It has been noted by researchers however, this one included, firms generally have lower amounts of debt than is optimal. This study shows that the average debt to equity ratio among investment banks in Kenya is low at

about 6.2%. The study is however consistent with the second element of Trade-off theory that posit that debt use increase bankruptcy costs for firms which reduces profitability. Murphy (1968), during a study of 72 companies spread over five industries, found that there was no observable trend for companies that used higher levels of debt recording high rates of return on equity.

Finally, this study finds operating efficiency ratio had a negative and significant influence on financial performance, suggesting that low, meaning good operating efficiency affects positively investment banks profitability. The observation is in line with Efficient Structure theory that posits that the causality relationship between performance of a firm is rooted in it being efficient. Similar to this study, Chinoda (2014) after his study established that proportion of expenses to income had a negative association with Zimbabwean banks' profitability and a rise in operating efficiency ratio is, the lower the firm's profitability.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes research findings, draws conclusions reached and makes recommendations. It also covers limitations of the study and suggests areas that require further research.

5.2 Summary

This research aimed to establish determinants of financial performance of investment banks in Kenya. Independent variables included investment bank's size, liquidity, leverage and operating efficiency. Return on assets (ROA) which measures profits was the dependent variable. This study reviewed market power theory, efficient structure theory, agency theory, free cashflow theory and trade-off theory of capital structure. It sought to target 14 investment banking firms licensed to operate in Kenya, although data was obtained from 10 firms that were fully operational during the study period. This was a response rate of 71.42%, which is representative of all investment banks in Kenya.

Descriptive statistics results established that mean profitability as measured by ROA ratio for investment banks in Kenya is 0.0461. This means that for every 100 shillings invested in assets, investment banks in Kenya make a return of 4.61 shillings. The findings indicate that the average size of an investment bank converted into natural logarithm of total assets was 20.6454 translating to KShs. 743 million worth of assets. Findings revealed that Kenyan investment banks 'average liquidity ratio is 4.0746 meaning that they have four times liquid assets over current liabilities. The average leverage ratio was 0.0620 meaning that only 6.2% of long term capital among

investment banks in Kenya is made of debt which indicates that investment banks in Kenya rarely rely on long term debt as a source of capital. Finally, the average operating efficiency ratio is 0.9099 meaning that on average, investment banks in Kenya spend about 91% of their total income on operational expenses. The ratio is quite high suggesting that there is poor operating efficiency among investment banks in Kenya.

Correlation results established a weak positive correlation between size of an investment bank and its financial performance. Results also established a weak negative correlation between liquidity ratio, leverage ratio and investment banks' financial performance as measured by ROA. The findings however revealed a strong negative correlation between operating efficiency and investment bank profitability.

The regression model findings showed that the determinants that formed part of this study explained 49.6% of the variation in the dependent variable. It showed that pvalue ($0.00 < 0.05$) at 95% confidence level meaning the regression model used for the study was significant. The study showed evidence of a negative but insignificant relationship between liquidity, leverage on one hand and profitability on the other. Finally, this study finds significant negative association between operating efficiency and financial performance.

5.3 Conclusion

This study concludes that the most significant determinant of profitability of Kenyan investment banks is its operating efficiency. Meaning that investment banks that keep their ratio of operating costs to income low have the highest chance of making high profits. Operating efficiency therefore is key in determining financial performance of investment banks meaning low operating efficiency ratio implying low operational costs as compared to income, increase profitability of investment banks in Kenya. This

study also finds evidence of poor operating efficiency among investment banks in Kenya since on an average basis, 91% of revenue goes into meeting operating expenses.

The study also concludes that investment bank size as measured by its total assets does not significantly impact profitability. Contradicting findings in the study mean that there a limited extent to which an investment bank can increase earnings by increasing its assets, since the most of their revenues come from non-funded income i.e. commissions and advisory fees. These income streams are impacted more by competitive strategy as opposed to the amount of assets under its control.

The study also concludes that liquidity ratio's positive insignificant influence on investment bank performance. This means that the proportion of liquid assets to current liabilities maintained by an investment bank has little effect on its profitability. This means that unlike commercial banks that use liquidity to grant more loans and earn more income, higher levels of liquidity do not enable investment banks to generate more income since most of its income comes from commissions from brokerage services and fees from advisory services.

The study also concludes leverage exerts insignificant negative effect on financial performance of investment banks meaning that increased leverage may not necessarily increase profitability. Despite the advantages of debt as demonstrated in the trade-off theory, this study concludes that higher leverage had no significant impact of profitability of investment banks. This could be because most companies covered by this study had less debt level than the theory suggests is optimal

at about 6.2%. It was also concluded that the variables covered by this study accounts for 49.6% of the variation in profitability of investment banking firms in Kenya.

5.4 Recommendations

Based on the conclusions drawn, that operating efficiency has the largest impact on profitability of an investment bank over all other factors covered by this study, it is recommended that managers of investment banks develop strategies to manage operational costs within target levels. Such strategies would help to control and mitigate high and unplanned costs that end up having an adverse impact on investment bank's profitability.

This research also concludes that investment bank size as measured by its total assets has an insignificant impact on its profitability. CMA regulations have set and routinely varies minimum capital requirements for investment banks. Evidence from this study that suggest little impact of higher assets on financial performance of firms, regulatory authorities particularly the CMA should review regulations on minimum financial requirements to ensure a good balance is struck between the need for higher capitalization levels and its impact on financial performance of investment banks.

This study also shows that insignificant impact of higher liquidity on investment bank profitability. Based on this finding it is recommended that investment managers of banks maintain optimum levels of liquidity for their business and not too much of it since this does not increase its profitability. Excess liquidity also leads to expenditure on non-priority items as posited by the free cashflow theory.

The study also demonstrated that leverage had no significant effect on financial performance of investment banks. An increase in debt-to-equity ratio therefore, doesn't

necessarily boost profitability of an investment bank. It was also noted that use of leverage by investment banks was lower than what the tradeoff theory of capital structure suggests is optimal. As a result, it is recommended that managers of investment banks increase the use of leverage in place of equity since debt has tax advantages because interest expenses are deducted from profit before income tax is computed. This could enable investment banks to record higher net profits.

5.5 Limitations of the Study

This study focused on investment bank's size, liquidity, leverage and operating efficiency as the determinants of performance of investment banking firms in Kenya. This study examined these factors, which could be obtained from financial statements of investment banks. This was mainly because data was available on these variables for the entire period chosen for the study. It is possible that there are other variables not covered by this study that are better predictors of financial performance of investment banks, but they were not studied because data was available.

The study also only tested these quantitative factors, which influence profitability utilizing data found in financial statements published annually by investment banks. Since data in financial statements is prepared based on the basis of procedures that are standard, they have potential to exclude other aspects that determine financial performance such as corporate governance practices at these firms.

This study also relied on secondary data mainly annual financials of investment banks as submitted to the CMA. Secondary data is information that has been prepared by individuals and can be prone to error during its preparation, presentation and publication. They are also subject to bias and manipulation by managers wishing to reflect lower profits to reduce the amount of taxes payable of income. Expert analysis

of financial statements to detect inconsistencies and reclassify incorrectly classified items has the potential to improve the accuracy of data used.

This study also was limited to investment banks only. Therefore, results apply only to investment banks and caution should be exercised should one wish to apply the findings of this study to other economic sectors. Lastly, the study is country specific to Kenya and may be subject to the limitations of similar studies that covered only one country. Findings apply only to Kenya and may not be applicable to investment banks in other countries.

5.6 Suggestions for Further Research

This study sought to find determinants of profitability of investment banks and can in fact be replicated to other categories of players within the financial sector or other sectors of the economy covering firm specific factors affecting their financial performance. Additionally, the same study can be conducted using a different model and approach to further test determinants covered here. The study additionally suggests that another study be done in the same industry but be extended to cover a longer period of time in order to establish trends and further strengthen conclusions on what factors influence investment bank profitability.

Additionally, the independent variables that formed part of this study explained 49.6% of the variance of performance of investment banking firms in Kenya. This means there are other firm specific variables, which influence profitability of investment banks and further studies to establish them are required.

Lastly, literature review revealed relatively few studies conducted on investment banks as compared to commercial banks both globally and in Kenya and more studies are required to add to existing body of knowledge on various aspects of the sector.

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APPENDICES

Appendix 1: Kenyan Investment Banks (2013 - 2017)

1.	Africa Alliance Securities Limited
2.	Dyer & Blair investment bank Limited
3.	Equity investment Bank Limited
4.	Faida investment Bank Limited
5.	Genghis Capital Limited
6.	Kestrel Capital (EA) Limited
7.	NIC Capital Limited
8.	Renaissance Capital (Kenya) Limited
9.	SBG Securities Limited
10.	Standard Investment Bank Limited

Source: CMA Website (2018)

Appendix II: Data Collection Sheet

Name	Period	ROA	Size	Liquidity Ratio	Leverage Ratio	Operating Efficiency
African Alliance Kenya Investment Bank Limited	2013	0.1313	20.5195	3.0923	0.0000	0.6773
	2014	(0.0104)	20.5516	2.7753	0.0009	1.0258
	2015	0.1527	20.3477	3.0236	0.0000	0.7696
	2016	0.1022	20.1507	3.5281	0.0414	1.2643
	2017	0.0565	20.1755	3.5774	0.0000	1.1583
Dyer & Blair Investment Bank Limited	2013	0.0090	21.6144	1.3963	0.0000	1.4248
	2014	0.0798	21.5256	3.2149	0.0000	0.7769
	2015	0.0264	21.3521	2.1612	0.0202	0.8684
	2016	0.1449	21.4212	2.2891	0.0000	1.1735
	2017	0.0001	21.4302	2.1106	0.0000	1.2125
Equity Investment Bank Limited	2013	0.0464	19.7255	4.7146	0.0000	0.6578
	2014	0.0242	20.1835	1.6862	0.0034	0.9251
	2015	0.1258	20.4186	2.3751	0.0000	0.7843
	2016	0.0507	20.5689	2.1964	0.0000	0.6543
	2017	0.0707	20.8984	1.8627	0.0000	0.5302
	2013	0.0151	20.4658	2.4747	0.0714	0.8738
	2014	0.0639	20.3003	2.7711	0.1134	0.6119

Faida	2015	0.0335	20.2433	3.6605	0.0998	0.8857
Investment	2016	(0.0310)	20.2130	4.1424	0.0756	1.0986
Bank Limited	2017	0.0078	20.2111	4.4089	0.0786	1.1621
Genghis Capital	2013	0.0317	19.9052	1.9789	0.0000	0.8463
Limited	2014	0.2777	20.0581	3.0419	0.0039	0.8307
	2015	0.0320	20.3595	2.0943	0.0036	0.9126
	2016	(0.2091)	20.2965	1.3769	0.1739	3.1281
	2017	(0.1711)	20.5630	1.6642	0.0000	1.9431
Kestrel Capital	2013	0.0602	20.6891	1.2713	0.0000	0.5819
E.A. Limited	2014	0.0606	21.0326	1.2853	0.0000	0.7813
	2015	0.1201	20.3186	1.5974	0.0000	0.7835
	2016	0.0287	20.3345	1.5951	0.0000	1.0050
	2017	0.0068	20.1129	1.9515	0.0000	0.9824
NIC Capital	2013	0.0978	20.4281	8.3430	0.3922	0.3493
Limited	2014	0.0120	20.4192	14.7139	0.3855	0.8523
	2015	(0.0007)	20.4168	15.1840	0.3859	0.0010
	2016	(0.0175)	20.3879	20.2423	0.2834	1.3817

	2017	(0.0091)	20.3790	17.8734	0.2822	1.1547
Renaissance Capital (Kenya) Limited	2013	0.0067	21.1473	2.7614	0.0000	0.9386
	2014	(0.0636)	21.0324	5.3349	0.0000	1.0557
	2015	0.1075	21.1198	7.9885	0.0000	0.5961
	2016	0.0932	21.1879	9.2405	0.0000	0.5161
	2017	0.1100	21.3261	6.5844	0.0000	0.4957
SBG Securities Limited	2013	0.1581	20.9000	1.7039	0.0000	0.4768
	2014	0.1606	21.1161	1.4512	0.0000	0.4167
	2015	0.2162	20.7251	1.7231	0.0000	0.5989
	2016	(0.0114)	20.2898	1.4868	0.0000	0.9885
	2017	0.0401	20.5045	1.4343	0.0000	0.8503
Standard Investment Bank Limited	2013	0.0192	20.7797	2.4576	0.0000	0.9035
	2014	0.0210	20.8889	2.3943	0.0690	0.9026
	2015	0.0072	21.4981	1.5294	0.2025	0.9305
	2016	0.0088	21.0002	3.3210	0.3645	0.8822
	2017	0.0102	20.7369	2.6461	0.0488	0.8759

Source: CMA