RELATIONSHIP BETWEEN INVESTMENT IN INTANGIBLE ASSETS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA
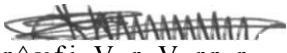
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D61/P/7048/04

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI
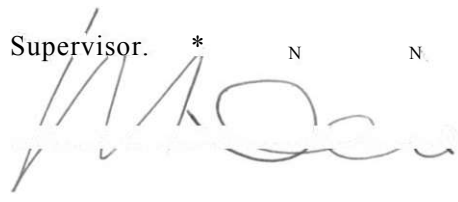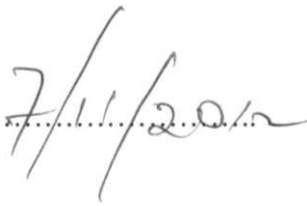
OCTOBER, 2012

DECLARATION

This Research Project is my original work and has not been presented for a degree in any other university.

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This Research Project has been submitted for examination with my approval as University Supervisor.

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ACKNOWLEDGEMENTS

DEDICATION

This study is dedicated to my family

ABBREVIATIONS

CBK Central Bank of Kenya

CRM Credit Risk Mitigation

GAAP Generally Accepted Accounting Principles

IA Intangible Assets

IFRS International Financial Reporting Standards

IT Information Technology

KBA Kenya Bankers Association

R&D Research and Development

ROA Return on Assets

ROE Return on Equity

SFAS Statement of Financial Accounting Standards

ABSTRACT

Commercial Banks in Kenya have undertaken strategic initiatives to improve financial performance. Some of these banks consider that the cumulative gains in efficiency are much greater over time than those, which come from irregular radical changes. However, many of these short- and medium-term gains are quickly eroded and absorbed into the industry standard and therefore cannot be depended upon as a prerequisite for survival and growth. The objectives of this study were to establish the relationship between computers fixed assets and financial performance of commercial banks in Kenya and to investigate the relationship between investment in intangible assets and financial performance of commercial banks in Kenya. Intangible assets comprise of capitalized computer software costs which are amortised over the estimated useful lives usually three to eight years according to generally accepted accounting principles and reported in line with international financial reporting standards.

This research problem was best studied through the use of exploratory research design. The study made use of secondary data when investigating and collecting both quantitative and qualitative data. The data collected presented through summarized percentages, proportions and tabulations. Mean scores and standard deviations were evaluated.

The study concludes that the key variable being financial performance in 2006 is causing commercial banks in Kenya to increase investment in more intangible assets (computer software) and computer assets and equipment thus resulting in an increase in ROA and profitability as shown by the descriptive statistics.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Intangible asset as a construction has recently emerged in response to a number of recognitions that are changing the assumptions upon which organizations are built and run (Cohen and Kaimenakis, 2007). First, the world is viewed as becoming less labour intensive, less material intensive, less energy intensive, but more knowledge intensive. It is assumed that "knowledge" has a financial impact as knowledge intensive organisations are considered to feature a higher productivity level and innovation rate. Second, there are increasing criticisms of traditional accounting methods such as balance sheets, which look backwards and at tangible assets only, and a growing demand for effective management of intangibles. The new management mantra of intangible assets as the cure of all organizational crises in tricky markets is, therefore, partly a reaction to a dissatisfaction with the rate of success of conventional financial measures and its financially based instruments (Bontis et al., 2000).

Guthrie et al. (2003) divide the perspectives of intangible assets into three branches: accounting, management control and management. The accounting perspective focuses on specific indicators of intangibles (e.g. research and development expenses, training costs, goodwill, advertising, patents, brands, customer relationships, etc.) for the purpose of their capitalisation. The management control perspective emphasises how these indicators can be used for management control purposes whilst the management perspective calls forth a new managing approach where intangibles are in the limelight. What is common amongst these perspectives is the new belief that intangible assets is the

key driver of sustainable organisational performance and that it better reflects the actual worth of an organisation (Grasenick and Low, 2004). This is shifting the focus of management from the tangibles to the intangibles under the auspices of the old doctrine of "what gets measured gets managed". Such an approach, however, makes intangible assets meaningless and devalues its inherently intangible nature. The key consideration is that it is impossible, and undesirable, to reduce intangible assets to a calculable number that establishes whether an organisation's intangible assets has increased or diminished. This is because measurement schemes are jumbles of subjective evaluations and opinions presented as objective phenomena that can serve to mask what really matters. Measurement thus transforms data into biased organisational conversations about what is valuable. It is simply a soft method of intervention, a less visible tool of organisational re-direction and altered meanings; it is not an explanation (Mouritsen, 2004).

1.1.1 The Concept of Intangible Assets Investment

One of the most significant topics to appear in the reporting of firms in both the national and international arenas is that relating to the treatment of intangible assets or intangible resources (Cater and Cater, 2009). Intangible assets have received increasing recognition as sources of the economic value of individual firms [Lev (2001); Brynjolfsson, Hitt and Yang (2002); Hulten and Hao (2005)] and as sources of countries' economic growth [Buiges, Jacquemin, Marchipont (2000); Corrado, Haltiwanger, Sichel (2005); Corrado, Hulten and Sichel (2009); Marrano, Haskel and Wallis (2009), Fukao et al. (2009)]. Assets identified as intangibles are not homogenous, and their measurement raises controversies. Most often, intangibles refer to immaterial assets, such as those resulting from R&D, advertising and information technology (IT) expenditures. Most intangible

assets are not reflected on the balance sheet under current Generally Accepted Accounting Principles (GAAP). However, during the last three decades knowledge assets have been increasingly recognized as key sources of firm's competitive advantage (Edvinsson and Malone, 1997; Kaplan and Norton 2004). Therefore, investments in human resources, information technology, research and development (R&D), advertising and customer satisfaction have become essential in order to ensure the firm's future viability (Edvinsson and Malone, 1997; Lev, 2001). In addition, many authors have used the value of most intangible assets to explain the difference between the market value and the book value of firm's equity (Booth, 1998; Dzinkowsik, 2000; Roslender, 2000).

Although traditional intangible assets, such as research and development (R&D), goodwill, etc., are recognized in the annual accounts of firms, there are other intangible assets that affect all areas of the firm, such as organization, marketing, finances, etc., and that are not recognized in annual accounts. Nevertheless, these resources create an important and crucial value for the organization. Such intangible assets are not identifiable in explicit form and are therefore highly problematic since they are not generally recognized with a common definition, valuation and management (Marr *et al.,* 2003).

The accountants and rational managers, who are obsessed with numbers and believe in that part of the theocracy of scientific management which claims truth is revealed by measurement, may argue that intangible assets is too important to be left to chance because "knowledge" has a financial impact in the perceived, emerging, post-industrial and knowledge intensive society. This context, it is argued, is driving and creating the

integration of the measurement of intangible assets (Mouritsen *et ai,* 2001). Yet the assumption that measurement of intangible assets has positive organisational effects lacks empirical confirmation (Marr *et al.,* 2003). Whilst the current importance of intangible assets is associated with the competitive advantage of distinctive competence (Prahalad and Hamel, 1990), how this occurs and what conditions can encourage it are less clear. Neither is it clear whether Intangible assets are simply the sum of organisational knowledge or something more esoteric about value (Sanchez *et al.,* 2000). Indeed Chaminade and Johanson (2003) contend that culture alters assumptions about knowledge, its creation and its implementation. Whist those intent on measurement are making attempts to reduce the components of intangible assets to generic factors, others have recognised that global dependency relies on a deep and wide interpretation of intangible assets. This presents opportunities to transcend traditional symbolic order (Allee, 2000), replacing control with conditions for cooperation, and in so doing, improving cooperation (Thorbjornsen and Mouritsen, 2003).

Most of the current research on accounting for intangibles analyses the impact of Statement of Financial Accounting Standards (SFAS) 142. In the US, SFAS 142 eliminated the amortization of goodwill from business combinations and introduced periodic reviews of goodwill based upon the fair value of goodwill. Where goodwill is deemed to have fallen in value, the firm has to recognise a loss from the impairment of goodwill in a similar manner to the approach of IFRS3.

Much of the current research on SFAS 142 is therefore useful for drawing out implications for accounting for intangibles under IFRS3.

1.1.2 Financial Performance of Commercial Banks in Kenya

As at December, 2011, there were forty-three banks in Kenya. The industry is dominated by a few large banks most of which are foreign-owned, though some are partially locally owned. Nine of the major banks are listed on the Nairobi Stock Exchange. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting member institutions. The commercial banks offer corporate and retail banking services but a small number, mainly comprising the larger banks, offer other services including investment banking (Central Bank of Kenya, 2011).

Return on Equity (ROE) and Return on Assets (ROA) have increased over the years. Returns of 23.03% and 2.74% were generated respectively in 2006. Shareholder equity stretched by 16% from Kshs 79.16 billion in 2005 to Kshs 91.82 billion in December 2006. Due to the improved economic environment, total assets expanded by 17.8% in 2006 to stand at Kshs 809.5 billion compared to 6.7% growth recorded in the previous period (CBK, 2009). The asset growth was funded by an increase in deposits, retained profits and fresh capital injection. A couple of examples of capital injections are Diamond Trust Bank, which raised Kshs 776 million of capital through a rights issue. Family Finance Bank raised Kshs 500 million through a private placement from 6,500 new shareholders (The Kenyan Banking Sector Report, 2009). Loans and advances constituted 51% of the total assets, while government securities constituted 19% of total assets in December 2006. Advances to deposit ratio went down to 63.72% in 2006 from 66.06% in 2005. Growth in deposits (20%) was greater than the growth in loans (17%). Investment by banks, in government securities increased by 16% in 2006. Furthermore,

there was a 37% growth in loans to other banking institutions. Both these growths led to the growth in loans being less than the growth in deposits as the balance 3% deposits were lent out to other banks and invested in government securities. As a result of increased lending to other banks, the asset quality measured by the ratio of net non-performing loans to net loans improved from 7.88% to 4.98% (The Kenyan Banking Sector Report, 2009).

1.1.3 Determinants of Financial Performance

Molyneux and Thorton (1996) found a positive association between the return on equity and the level of interest rates, bank concentration and the government ownership. The results of Angbazo (1997) for the period 1989-2003 indicate a positive association between the bank interest spread and the default risk, opportunity cost of non-interest bearing reserves, leverage and management efficiency. In the study of Demirguc-Kunt and Huizingha (1999) considered a comprehensive set of bank characteristics (such as size, leverage, type of business, foreign ownership), macroeconomic conditions, taxation, regulations, financial structure and legal indicators of banks' performance and found that: (i) well-capitalized banks have higher net interest margins and are more profitable, (ii) banking sectors, where banking assets constitute a larger portion of the GDP, have smaller margins and are less profitable and that a larger stock market capitalization to bank assets is related negatively to margins, (iii) bank concentration ratio positively affects profitability, (iv) macroeconomic factors implicit and explicit financial taxation, deposit insurance and the legal and institutional environment also explained variation in interest margins.

Hurwitz *et al.* (2002) studied the linkage between intangibles performance and stock return. It demonstrated that human and organization capital are fundamental to stock returns. The study also highlighted management policies that promote the successful engagement of human and organization capital in executing strategies across all organizations. Business strategy development requires the integration of resources allocation decisions regarding human and organization capitals as well as other intangible and tangible assets to ensure that the capability exists for effective strategy implementation.

1.1.4 Relationship between Intangible Assets and Financial Performance

Although the important influence intangible assets (IA) have on business performance is greatly acknowledged, few studies have been devoted to demonstrating how the various IA components influence performance and what specific performance dimensions are affected. Moreover, no single IA component can create value on its own: Interaction between components is necessary (Cohen and Kaimenakis, 2007; Edvinsson and Malone, 1999). As stated by Bontis (1998. p. 71): Isolated stocks of knowledge found in the employees' minds cannot positively affect performance if they are not codified into organizational knowledge and shared with other members of the organization. It is these efforts to codify organizational knowledge and thereby further develop the firm's structural capital that ultimately yield a sustainable competitive advantage, which then translates into a higher performance.

To better understand this interaction, a few authors have attempted to identify the nature of the relationships that exist between IA components. Human capital may thus have a positive influence on relational capital and both components influence in turn structural capital (Bontis *et al.,* 2000; Chen *et al*., 2004). It is argued that the higher the level of employee competence, the better they can understand customer needs and the better they are at developing sustainable relationships with them to meet their needs and insure loyalty. Structural capital contributes to the firm's ability to transform employee knowledge and their relationship with key stakeholders into routines and processes (Cohen and Kaimenakis, 2007). The influence of human capital on other types of capital was also developed by Wang and Chang (2005) based on various multivariate models attempting to explain business performance. These authors observed that human capital is the most important intellectual asset but that its influence on performance is indirect. Human capital influences innovation capital, process capital and customer capital, which in turn are the main determinants of business performance. These findings lead these authors to conclude that human capital is the most important component of a firm's IA, because of its energizing effect on the rest of the organization.

As for business performance, an initial study identified a positive link between it and both structural capital and relational capital. This influence is expressed by both a reduction in operational cost and the development of new products or services to meet client demand (Bontis, 1998). According to a second study led by Bontis *et al.* (2000) on a different sample, only structural capital has a direct link with business performance. More recent studies reveal the existence of a positive correlation between the scores of certain IA components and business performance. For example, Appuhami (2007)

discovered a positive correlation between the effectiveness of human and structural capital and investors' capital gains on shares. Cohen and Kaimenakis (2007), Tan *et al.* (2007), and Tovstiga and Tulugurova (2009), on the other hand, demonstrated that a firm's financial performance is positively linked to IA and that a positive correlation exists between the IA's growth rate and business performance. Herremans *et al.* (2007) linked various elements of IA to firm cash flow. Also, Kamath (2008) discovered a direct link between human capital and business profitability and productivity.

It is important to note that financial performance of a firm is far from one-dimensional and greatly depends on the type of strategy managers choose, environmental context in which the company evolves, or the competitive advantage on which it depends to break away from its competitors (Cater and Cater, 2009; Wang and Chang, 2005). On this matter. Said *et al.* (2003) discovered that management of immaterial assets that is incompatible with the business' strategic goals may provoke insufficient performance when compared to the efforts deployed. As mentioned by Ittner (2008): "if too much or too little emphasis is placed on intangible asset measures given the firm's characteristics and strategic objectives, economic performance is lower." Grasenick and Low (2004) concur and state that performance evaluation, whether related to tangible or intangible assets, must take into account the objectives set by management and the strategy deployed to meet them

1.2 Statement of the Problem

The Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK), governs the Banking industry in Kenya. The banking sector was liberalised in 1995 and exchange controls

lifted. The CBK, which falls under the Minister for Finance's docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. The CBK publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting its members (Kenya Bankers Association annual Report, 2008).

Commercial Banks in Kenya have invested on tangible and intangible assets to induce better performance. Though the banking industry in Kenya has been operating in a competitive environment, the banks have consistently experienced trajectory growth in terms of number of customer and asset base. It is therefore expected that for these banks to thrive in this competitive environment they must have adopted strategies that involve both tangible and intangible asset investment in order to respond and adapt to the changes and challenges in their operating environment.

The fact that the banking industry environment has been affected adversely by the changing operating environment calling for adoption of intangible assets to enhance a competitive edge in the markets, intangible assets are viewed as potentially capable of bringing in some benefits. The high rate at which banks are investing in this kind of assets is evidence of the increasing awareness of the competitive advantage associated with them in the Kenyan market. The decrease in the financial performance of traditional banking has been attributed to a number of factors, notably increased competition, poorly performing loans and high cost bases. Bad loans are clearly a short to medium term crisis,

which can be overcome if an individual bank has sufficient reserves. Similarly a high cost base can be reduced over time.

However the level of competition is unlikely to diminish. The research on investment of intangible assets in banks has not been exhausted to clarify whether performance is influenced by the investment of intangible assets. Additionally, there is little empirical evidence to provide information about the current status of such intangible assets in Kenya commercial banks. The role of banks in the economy and the need for prudent financial management is widely acknowledged (Randa, 1998 and Wamboi, 2001). Studies in the banking sector in Kenya have focused mainly on financial performance of banks (Bett, 1992; Choto, 2002). For instance, Bett (1992) examined the financial performance of banks and non bank financial institutions over the period 1986 to 1990, and Kathanje examined the performance of commercial banks over the period 1997 to 1999. Other studies by Mutwiri (2003) and Mucheke (2001) have focused on factors explaining bank failure such as liquidity and poor management and may not be expected to fully explain the factors influencing corporate institutions investment in Kenyan banks. The focus of this research is to examine the nature of the new competitive environment for banks, in particular in the investment in intangible assets. The study was guided by the following objectives. This study sought to answer the research question: what is the relationship between intangible assets investment and financial performance of commercial banks?

1.3 Objectives of the Study

i.   To establish the relationship between computer fixed assets and financial performance of commercial banks in Kenya.

ii.   To investigate the relationship between investment in intangible assets and financial performance of commercial banks in Kenya.

1.4 Value of the Study

The study focused on banks because they exhibit a high degree of homogeneity in their operations, which reduces cross-sectional variation in factors that might otherwise affect valuation estimates (Beaver et al. 1989; Beaver et al. 1997). Banking represents a good context to study the role of intangible assets and performance. Due to a high proportion of financial assets and liabilities, banking firms are less subject to conservative accounting with respect to their on-balance-sheet items. In addition, methods for estimating intangible assets are more developed in the banking industry and non-bank firms generally have higher levels of tangible assets, which are subject to conservative accounting practices.

The research will be of use especially to banks to understand the importance of investing in computer assets and intangible assets to improve their financial performance.

It was of use to the Government especially the Ministry of Finance, and Ministry of Information and Communication, in understanding how its policies have affected the banks in Kenya.

To the policymakers, the study will act as guide for establishing the best policies to effect capital investment so as to enable the growth of banks in Kenya.

To the managers of the banks; the approach to the internal operations and the competitive market can both offer two types of strategic opportunity, either by significantly improving the traditional ways of operating or by making significant changes to the ways

of doing business. Intangible assets investments can be used for strategic purpose either in internal operations or in the competitive market arena.

To the academicians; the study will shed some light into the field of capital investment in banks. This document may also be used as a reference material in other related studies.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature on the relationship of investment in intangible assets and financial performance of commercial banks in Kenya. The chapter develops theoretical review, conceptual framework, empirical review that will be used in the study in regard to each variable in the study. The review will identify research gaps and areas that have been recommended for further research.

2.2 Theoretical Review

2.2.1 Human Capital Theory

Economists have always focused on the productive effects of the quality of workers. William Petty (seventeenth century) was the first economist we know who emphasized labor quality differences and who identified what much later was labeled *human capital* when he argued for an inclusion of the "value of workers" in accounting for wealth for actuarial purposes. In the *Wealth of Nations,* Smith (1776) wrote in length on the incidence of workers' and employees' knowledge and skills on the production process and the quality of output. He also argued that wages should be determined (among other things) by the efforts in time, energy and money spent by workers to gain the skills required for their working tasks. When analyzing the determination of wages, he explicitly stated that education and learning were to be considered as "investments" in human beings. He saw that the productivity of skilled workers is higher than that of

unskilled ones and consequently argued for a justification of higher earnings of the former as a result of skilled workers' investments.

As for many other economic phenomena. Smith's view is impressively clear and advanced for his time. His intuition is the basis of the works of human capital theorists. But neither Smith himself, nor Alfred Marshall (1890, p. 469) who more than a century later stated: "The most valuable of all capital is that invested in human beings", ever used the term human capital.

Among its primary research themes are assessments of returns from investment in different types of human capital. Human capital has been pivotal also in explanations of inter-individual earning differences as well as in analyses of causes of growth and development of regions and nations. Human capital theory has also been extensively used by and applied at other theories of economics and social sciences and has demonstrated impressive fecundity as a premise contributing to rendering other research programs more convincing and closer to realities (Bowman, 1980, p. 85). People's preferences and activity in and outside the labor market are found to have strong influence on their mental and physical capacities, and consequently, their productivity and usefulness as economic agents. The behavior of individuals and communities is therefore largely determined by the quantity (and quality) of human capital embodied in them.

2.2.2 Resource Based Theory

The knowledge based literature of the firm fosters and develops the resource based theory in that it considers knowledge to be the most complex of an organization's resources (Alavi and Leidner, 2001). According to resource-based theory, the intangible assets are

the main source to improve enterprise growth. Therefore, intellectual capital has been studied by many past researchers who investigate the influence of intangible assets on business performance. However, most past researchers focused on the impact of individual intangible assets on performance while neglecting the effects of specific elements of the assets.

The currently dominant view of business strategy - resource-based theory or resource-based view (RBV) of firms - is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making. Rauch *et. al.* (2005) used the Resource Based Theory (RBT) to explain the importance of human capital to entrepreneurship. According to RBT, human capital is considered to be a source of competitive advantage for entrepreneurial firms.

Ownership of firm-specific assets enables a company to develop a competitive advantage. This leads to idiosyncratic endowments of proprietary resources (Barney, 1991). According to RBT, sustainable competitive advantage results from resources that are inimitable, not substitutable, tacit in nature, and synergistic (Barney, 1991). Therefore, managers need to be able to identify the key resources and drivers of performance and value in their organizations.

The RBT also states that a company's competitive advantage is derived from the company's ability to assemble and exploit an appropriate combination of resources. Such resources can be tangible or intangible, and represent the inputs into a firm's production process; such as capital, equipment, the skills of individual employees, patents, financing,

and talented managers. As a company's effectiveness and capabilities increase, the set of available resources tends to become larger. Through continued use, these "capabilities", defined as the capacity for a set of resources to interactively perform a stretch task or an activity, become stronger and more difficult for competitors to understand and imitate. (R&D expenditures) and can be used to augment future production possibilities. The above instigated the fifth research question.

2.2.3 Agency Cost Theory

Brigham (1992) described agency theory as the relationship between principal and its agent. The problems arise when they have to deal with two big problems. The first is the difference of goal between principal and agent. The second is the different tolerances between agent and principal toward risks valuation. Fama (1980) stated that agency problem tends to occur when the manager does not have 100% of company stocks. Alves and Martin (2010) stressed that the bulk of corporate governance research aim was to understand the consequences of the separation of ownership from control on firm's performance. Adam Smith quotation related with agency cost is

Negligence and profusion is arising when people run companies, which are rather of

other people's money than of their own.

There are two perspectives in seeing the agency conflict which is caused by investment in intangible asset. The first is the relation between manager and principal. Manager as the executor of intangible investment plan will increase their role by holding strategic position in the project. The benefit for managers is they can improve their bargaining power, namely 'manager specific investment' (Martins & Alves, 2010). Since innovation projects are risky, unpredictable, long term, and labor intensive, it turns out that

contracting manager under this set of circumstances is particularly demanding and as a consequence the agency cost associated with innovation are likely to be high (Holmstrom, 1989).

According to the aforementioned, intangible asset can be considered as the long term commitment between manager and principal. The uncertainties about when the company can take the benefit f_{rom} this investment become such an important issue within their relation. There is allegation that a company will not able to fulfill their liabilities from the profit that they had. $|_n$ financial world this problem was called solvency problem.

Goyal (2002) said

' *Because the assets of high growth firms are largely intangible, debt holders have more*

difficulty observing how stockholders see assets in high growth firms"

Moreover, Martins and Alves (2010) stressed that consequently as the scope for discretionary behavior is higher in more intangible asset intensive sectors than in traditional industries, the asset substitution (risk shifting) and under investment problem increase, exacerbating adverse selection problems. From this perspective debt holder are the party who has highest risk within information asymmetry and high bankruptcy costs, the consequence is debt holders will limit their credit to intangible asset intensive firms (Martins & Alves, 2010).

Petkov (2011) stressed that there were possibilities of intangible asset that company does not intend to use j_n order to deny other parties to access them. According from aforementioned, intangible asset does not always booster the company operation performance. If the definition criteria for control, identify ability and future benefits are

not met, the expenditure is recognized as an expense or as part of purchased goodwill if it involves a business combination (IAS-38, 2007).

2.2.4 Measurement of Intangible Assets

The appropriate intangible asset helps the company to achieve the success 'roots of company value creation' (Garanina & Pavlova, 2011). Moreover, researchers believe that intangibles assets are 'major drivers of company growth and value in most economy sector (Lev, 2001). Petkov (2011) stressed that intangible asset brought many advantages to the company; however, it also triggers the agency cost, which leads to the bankruptcy of the company. The bankruptcy is the result of the large sunk cost (which are beneficial, only when they will be returned in the future), (Martins & Alves, 2010). Align with explanation above; many economists put allegation that the wrong way of manager in valuing and treating intangible asset also led to world economic crisis in 2008 (Petkov, 2011). It is also worth mentioning bubble phenomenon, namely the condition where the price of asset increases, but later on falling down and end up with the lower intrinsic price (White, 2011). Economists believe that bubble phenomenon can happen because of some asset that does not have ability to be identifiable (Petkov, 2011). The effect was that the price of the asset does not reflect the real number of intrinsic value. The increasing gap between market and book value of companies spurred reflections on the importance of intangible asset and the way they are measured (Garanina & Pavlova, 2011).

2.3 Financial Performance

Firm's performance is the appraisal of prescribed indicators or standards of effectiveness, efficiency, and environmental accountability such as productivity, cycle time, regulatory

compliance and waste reduction. Performance also refers to the metrics regarding how a certain request is handled, or the act of doing something effectively; of performing; using knowledge as notable from just possessing it. It is the result of all of the organisation's operations and strategies (Venkatraman and Ramanujam, 2001). It is also the level to which an individual fulfils the expectations concerning how he should behave or function in a certain situation, context, circumstance or job. Oakland (1999) posited that performance is what individuals do relating to institutional roles.

Performance measurement systems offer the foundation to extend strategic plans, remunerate managers and review an institution's completion of objectives (Alderfer, 2003). Although evaluation of performance in the marketing literature is still very vital, it is also complicated (Andersen and Segars, 2001). Whilst consensual dimension of performance promotes scholarly assessments and can elucidate managerial decisions, those in marketing have not been able to find apparent, present and consistent measures of performance on which marketing merit could be established (Manogran, 2001). Two methods have been adopted in the literature to determine financial performance (short term and long term). Longer term performance has been preferred for two reasons: firstly since that is what the customers of "retail" products for instance unit trusts might be likely to be examining particularly considering the charging arrangements which make shorter term investment imprudent. Secondly, one of the reasons of looking at "real" products rather than theoretical studies is how administrative costs give the results. In principle, such costs might appear in either front-end or regular annual management charges. Using five-year offer-to-bid figures should arrest such effects in spite of the choices of individual institutions as to how to split costs among the two types of charges.

The financial performance of companies is usually measured using a blend of financial ratios analysis, measuring performance alongside budget, benchmarking or a combination of these methodologies. The common postulation, which explains most of the financial performance discussion and research is that increasing financial performance will result in improved functions and actions of the firms. The topic of financial performance and investigation into its measurement is well advanced in management and finance fields. It can be argued that there are three principal factors to advance financial performance for financial firms; the institution size, the institution asset management, and the institution operational efficiency (Fitzgerald, Johnston, Brignall, Silvestro and Voss, 2000).

As with any technique of analysis intended to measure performance, there are confines and imperfections connected with the use of financial ratios, mostly the use of very few ratios in separation (Im and Workman, 2004). Hence this research endeavors to bring together several performance measures, financial ratios, and linear programming techniques and investigate the interplay between them rather than focusing on any individual measure in isolation.

2.4 Empirical Literature

The theoretical contributions concerning definitions, classifications, valuation and management of intangible assets have been revised by standards and pronouncements and have been reviewed by different authors. In this section, we focus on reviewing the empirical contributions that have been made concerning such assets.

2.4.1 Computer Assets

It is widely agreed that computer assets, programs and softwares provides banks with a competitive advantage, by improving the quality of customer services and reducing the operational costs. Indeed, during the last decade the number of banks that recognized the benefits of computer softwares application and adopted information technology increased dramatically (Furst *et al.,* 2000). In recent years, a large number of research studies have been conducted investigating the characteristics of banks that adopted computer softwares for instance in information management in banking services. Most of these studies reached the general conclusion that large and new banks which are located in highly populated expensive urban areas are likely to adopt computer software in their operations (Furst *et al*2000a; Daniel, 1999). Although, these arguments are well taken, they failed to explain why small local banks with a very small number of potential markets would be willing to invest in computer software's in banking services. In recent years, we have seen that not only large international banks, but also small local banks with limited customer base have started to adopt computer software in banking services. However, no research studies have paid sufficient attention in examining the motivations and objectives of banks in adopting computer software for better financial performance in considerably commercial banks. This research aims to fill this gap by examining the relationship that exists in investment in computer softwares and profitability and financial performance of the banks.

Data on Spanish commercial and savings banks, from 1984 to 2003, are collected from proprietary information provided by banks to the Banco de Espana (balance sheets, income statements and complementary notes) at the non-consolidated level. The banks in

the sample represent 89.25% of the total banking assets in Spain in 2003 (the remainder are credit cooperatives and branches of foreign banks). The number of banks in the sample changes over time, from 160 in 1984 to 90 in 2003, because of mergers and acquisitions; the average number of observations per bank is 13.23.

2.4.2 Investment in Intangible Assets

In October 2009, the Office for National Statistics surveyed 2,0041 UK private sector firms with ten or more employees, in the production and service sectors of the economy, drawn from the UK business register. Known as the Investment in Intangible Assets (IIA) Survey, it is a voluntary postal survey undertaken as part of the National Endowment for Science Technology and the Arts (NESTA) Innovation Index2 and conducted by the Office for National Statistics (ONS). Responses from 838 firms were obtained, a 42 per cent response rate which is considered high for a voluntary survey. Weights were calculated from the UK business register to generate population estimates to include firms with less than ten employees which were not surveyed. (ONS, 2009).

In Spain, the banking industry has been unregulated for a long period of time. Martin-Oliver and Salas-Fumas (2008), found that Spanish commercial and savings banks operate in a monopolistic competition framework with product differentiation. They also found that as banks can have market power on loan markets, deposit markets, or both, individual bank data of the interest paid to deposits, ID, and of the gross profit margins in loans, GLP (interest on loans minus opportunity cost of loans at the interbank interest rate) for the estimation of the revenues in the investment equation is collected. For loans, the gross margin is used, rather than total interest payments, in order to avoid double-

counting, since interest paid in deposits is one component of the cost of loans (Martin-Oliver & Salas-Fumas (2008).

Mortensen, Eustace and Lannoo (2002) in their study on Intangibles in the European Economy found that to recognize collateral as part of a bank's credit risk mitigation (CRM) techniques, the bank must have "clear and robust procedures for the timely liquidation of collateral to ensure observation of any legal conditions required for declaring the default of the borrower and prompt liquidation of the collateral in the event of default." Terms such as "timely" and "prompt" may be problematic when applied to the liquidation of intangible assets used as collateral (Mortensen et al, 2002).

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As we can see from these case studies, there is a place for intangible asset (IA) investments, even if it is not yet mature. IA-based finance will only develop if its valuations can compete with other asset classes, if it can rely on a variety of liquidation mechanisms and if a number of mainstream financial firms get involved in this exciting market. The maturation of this market will prove to be a valuable innovation in finance. Today's most promising companies are built on intangible assets. This new wave of business growth requires the finance community to develop the robust financial products to fund these companies. A market for IA-focused financial services is vital to foster continued innovation and economic growth.

2.5 Summary

This study attempted to gain insight into the treatment of intangible assets and their relationship with the financial performance of commercial banks in relation to other types

of assets. The literature shows that intangible assets have a direct relationship with the extent of banks' performance. Investment in such assets is therefore deemed to promote high performance of organizations. It has also been argued that these provide the basis of competitive advantage and hence their valuation and management are key to designing strategy in financial performance of an organization. This study explored to establish the relationships by utilizing the research method explained in the following chapter.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used to carry out this study. The chapter presents the research design, the population, sample and sampling technique, data collection method and instruments and data analysis.

3.2 Research Design

Research design refers to the way the study is designed, that is, the method used to carry out a research (Mugenda, 2008). This research problem was best studied through the use of exploratory research design. It is important to highlight the two main methods when investigating and collecting data quantitative and qualitative. A quantitative approach is strongly linked to deductive testing of theories through hypotheses, while a qualitative approach to research generally is concerned with inductive testing (Mugenda and Mugenda, 2003). The main focus of this study is qualitative. This approach was used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the qualitative data.

According to Yin (1989), research can be conducted either in quantitative or qualitative way. Quantitative method is most often used in studies with well-defined research problems and clearly stated hypotheses, on the other hand however it usually discusses the problem from the board perspective. On the contrary, qualitative research goes more in depth with the observations and investigates the phenomena from the inside (Yin, 1989). In general, qualitative approach provides deeper information of complex situation

than quantitative survey, but the generalization is far more difficult. Both qualitative and quantitative studies have all been performed in research on intangible assets and their effect on performance. It is important and necessary to do both qualitative and quantitative studies in this field of research (Petty and Guthrie, 2000).

At the same time, in the vast of literature on social science research, there is consensus that quantitative and qualitative methods are complementary to each other, rather than rivalry. The need of multiple methods has long been recognized in literature (Jick, 1979). The use of triangulation strategy - combination of methodologies in the study of the same phenomenon - allows for improvement in accuracy of research results. The research strategy applied in the thesis, answering to the need of both qualitative and quantitative methods to study of intangible assets, will follow triangulation strategy and combined both quantitative and qualitative methods. According to Yin (1989) the case study method is appropriate for studying "why" and "how" questions and to expand theories. The main purpose was to explain the results obtained in quantitative part and to identify the most important intangible assets for firm performance.

3.3 The Population

The study focused on all the 43 commercial banks according to the Kenya Bankers Association (KBA, 2011). The banking sector was selected largely because it has always taken a lead role in implementing strategic issues management practices and is reported to spend huge amounts on the same. The period of study was for year 2011 focusing on the financial analysis of the banks.

3.4 Data Collection

The study made use of secondary data, which was obtained from the financial statements of commercial banks. Supplementary data was also be obtained from the government publications such as the Central Bank of Kenya publications, Ministry of Finance data, Nairobi Stock Exchange Handbook, Kenya Bankers Association (KBA) publications, Kenya School of Monetary Studies Publications, Market Intelligence Magazine, Fitch Bank Rating reports, African Alliance Investment Bank Reports etc. Data from the Central Bureau of Statistics was also used, such as relevant Economic Surveys.

3.5   Data Analysis

The data collected was edited for accuracy, uniformity, consistency and completeness and arranged to enable coding and tabulation before final analysis (Cooper and Emory, 1998). The data collected from this study was mainly presented through the use of summarized percentages, proportions and tabulation. Mean scores and standard deviations were evaluated.

Correlation analysis was used to determine the nature of the relationship between investment in intangible assets by various banks and their financial performance while the coefficient of determination (r") was used to determine the strength of relationship.

Inferential statistics that measure the reliability or differences between the variable like analysis of variance was also used. Data analysis tools in terms computer application packages (Excel, SPSS) were also used. Qualitative data was summarized and categorized according to common areas. Data was presented by use of tables.

The general regression model was also developed to express financial performance (profitability) (returns) in terms of intangible assets expenses. The control variable such as banks size and profitability was introduced in the model to test the correlation. Thus:

Model 1 $\quad\quad\quad\quad Y = a + b, Xi + b_2 X_2 + \mathbf{Sr}$

Where

Y is financial performance of the banks as measured by Return on Assets (ROA) (Ratio of Net Income after Tax to Total Assets)

a, b and E are constants

$X\backslash$ - Computer Assets as reported in the audited financial statements/balance sheet.

- Intangible Assets as reported in the audited financial statements/balance sheet and notes to the audited financial statements. Intangible assets comprise of capitalized computer software costs which are amortised over the estimated useful lives usually three to eight years according to generally accepted accounting principles and reported in line with international financial reporting standards.

& - Error Term

To test the significance of the model, this equation was solved using SPSS. Both qualitative and quantitative analysis was combined to compile a report for this study.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the information processed from the data collected during the study on the relationship between investment in intangible assets and financial performance and the relationship between investment in computer assets and financial performance of commercial banks in Kenya.

4.2 Relationship between Investment in Intangible Assets and Financial Performance Variable

In addition to descriptive analysis, the study conducted a linear regression on several banks from the year 2006 to 2011. The following were the study findings.

Table 4.2.2: Summary of Intangible Assets, Computer Assets and Financial Performance

Year	Profitability (measured by Net Income after Tax for the industry)	Intangible Assets (as reported in audited financial statements)	Computer Assets (measured by equipment for the industry)
2006	15,950,706	1,401,692	53,435,872
2007	23,562,628	1,476,965	76.823,053
2008	28,578.427	3,228,345	101,418,316
2009	33,373,947	5,378,302	135,019,655
2010	57,209,655	14,152,684	161,222,506
2011	63,246,522	15,683,610	178,039,878

Relationship Between Profitability and Intangible Assets (2006-2011)
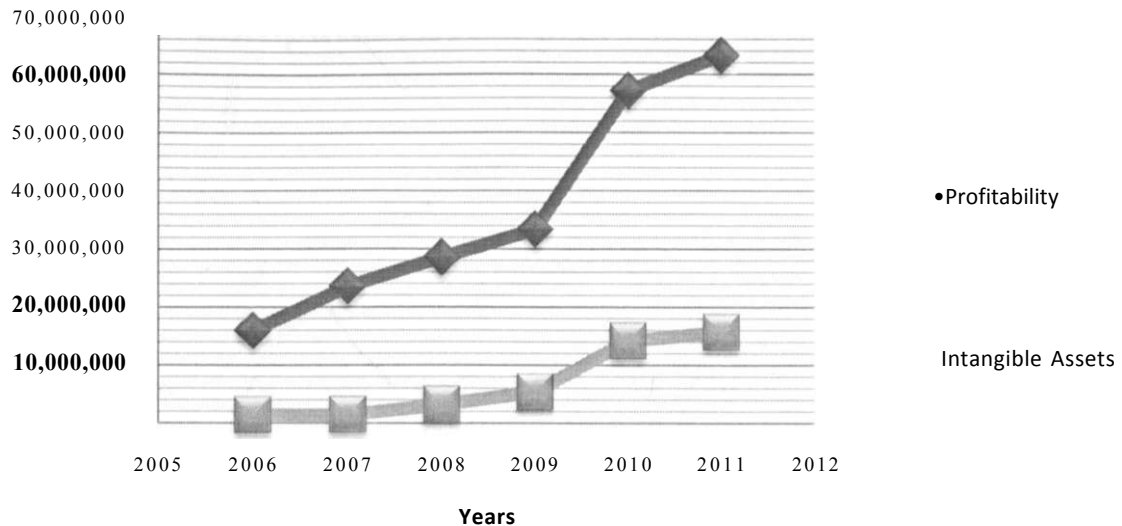
Figure 4. 1: Relationship between Investment in Intangible Assets and Financial Performance Variable

According to the findings, the general trend was established that as banks increase investment in intangible assets, overall profitability as measured by return on assets and net income after tax increased over the period of study.

It was also established that early investment in intangible assets in 2006 resulted in a greater increase in profitability by the year 2011. This could be explained by the fact that the expenses associated with initial investment in assets are reduced in subsequent years and the full value of the investment in intangible assets is realized in subsequent years as these intangible assets start contributing positively to the bottom line resulting in profitability increasing.

Relationship Between Profitability and Computer Assets (2006-2011)
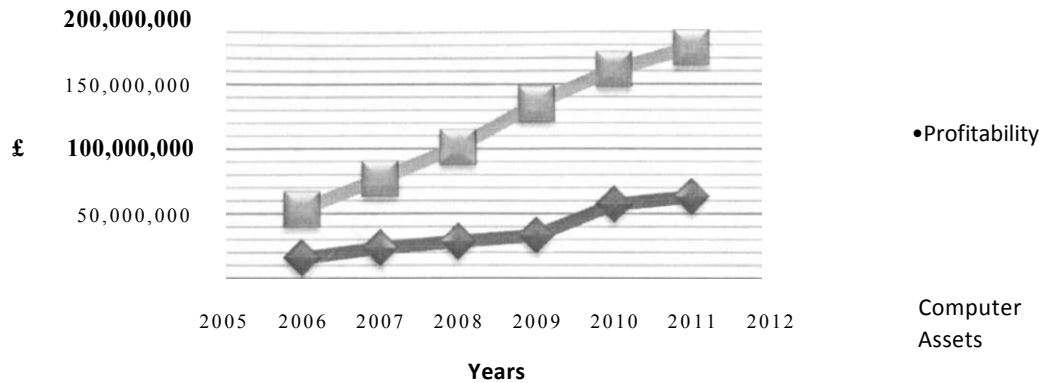
Figure 4.3: Relationship between Investment in Computer Assets and Financial Performance Variable

As shown in figure 4.3 above, the general trend was established that as banks increased investment in computer assets, as measured by investment in equipment, overall profitability measured by return on assets and net income after tax also increased during the period of study.

It was also established that the investment in computer assets and equipment in 2006 resulted in a greater increase in profitability recorded by the year 2011. This could be explained by the fact that the capital expenditure associated with purchase and installation of computer asses and equipment in the initial years of operation subsequently resulted in the full value of the investment being realized in later years as these computer assets started and continued contributing positively to the bottom line, resulting in greater efficiencies and consequently profitability increasing.
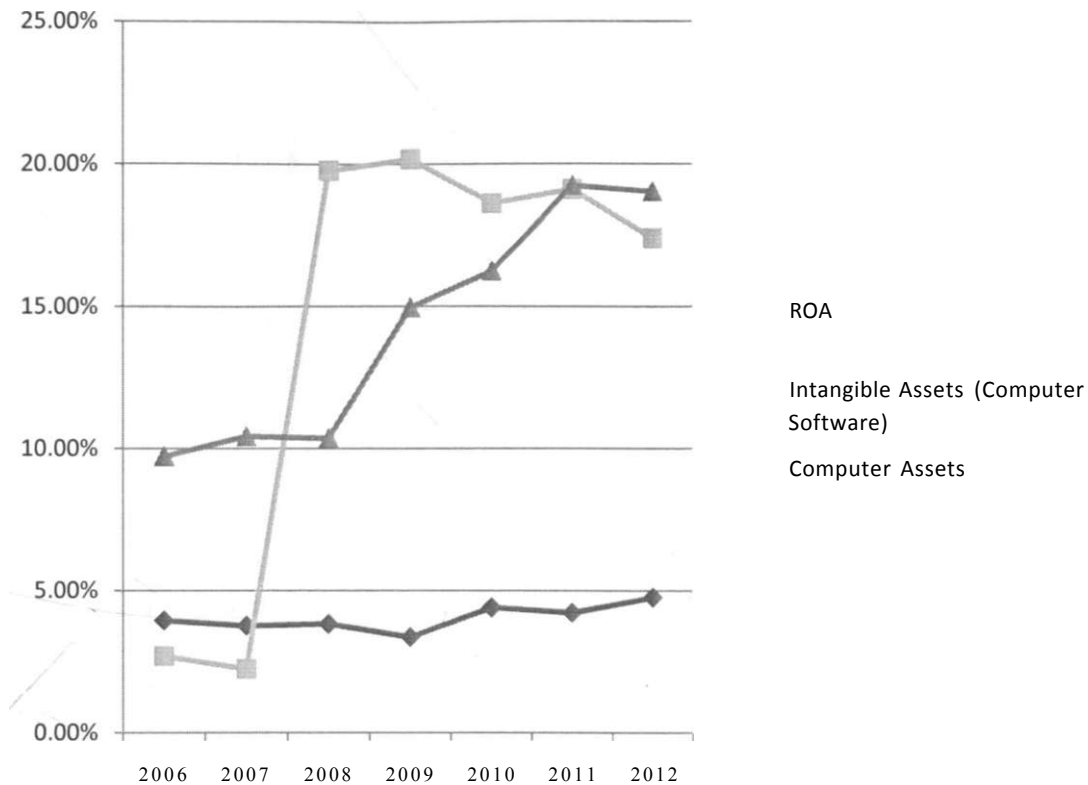
Figure 4.4: Relationship between Investment in Computer Assets, Intangible Assets (Computer Software) and Return on Assets Variable

As shown in figure 4.4 above, the three key variables were plotted against each other. The general trend was established that at the beginning, the growth in return on assets was generally flat.

As banks increased investment in computer assets, as measured by investment in equipment, and incurred a greater than average increase in intangible assets (computer software), overall profitability measured by return on assets and net income after tax also increased during the later period of study. Over time as the investment in these assets slowed down, the return on assets continued increasing gradually.

It was thus established that from a strong financial performance base, additional investment in computer assets, equipment and software in 2006, 2007 and 2008 resulted in a greater increase in profitability recorded by the year 2011.

Thus the key variable being financial performance in 2006 is causing the commercial banks to invest in more intangible assets (computer software) and computer assets in 2007 and 2008 and thus resulting in a gradual increase in ROA by 2011.

4.2.2 Analysis and Interpretations

Table 4.2.2: Analysis of Intangible Assets and Financial Performance

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	6.04	2.22	2.72	0.03	1.37	10.71	1.37	10.71
X Variable 1	1.51	13.47	0.11	0.01	30.00	26.79	29.79	26.79

Source: Researcher (2012)

The established regression equation between leverage and financial performance in the years 2006 to 2011 and for the half year to June 2012 is

Y = 6.04 + 1.51X

From the findings, the study found that holding intangible assets constant, financial performance would be 6.04, while a factor increase in intangible assets cause increase financial performance by 1.51. The p-value is a percentage. It tells you how likely it is

that the coefficient for that independent variable emerged by chance and does not describe a real relationship. A p-value of 0.05 means that there is a 5% chance that the relationship emerged randomly and a 95% chance that the relationship is real. It is generally accepted practice to consider variables with a p-value of less than .1 as significant, though the only basis for this cutoff is convention. The test statistic (t in this case) and p supplement each other. As per the data the P value is 0.01 thus there is a real relationship between intangible assets and financial performance. There is about a 1% chance that the results were obtained purely by chance.

4.3 Relationship Between Investment in Computer Assets and Financial Performance Variable

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Table 4.3.1: Analysis of Computer Assets and Financial Performance

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	3.10	0.64	4.86	0.00	1.76	4.44	1.76	4.44
X Variable 1	2.72	4.05	0.67	0.05	11.22	5.79	11.22	5.79

Source: Researcher (2012)

From the findings the study establishes the regression equation of Computer Assets and financial performance as:

Y = 3.10 + 2.72X

This show that financial performance will be 3.10 when Computer Assets is zero, while a factor increase in retained earnings will cause increase financial performance by 2.72. P value is 0.05 thus there is a real relationship between Computer Assets and financial performance. There is about a 5% chance that the results were obtained purely by chance.

4.4 Discussion of the Findings

The study found that the p values were less than 0.05 thus a real relationship existed between investment in intangible assets and financial performance variable. From the regression equations the study found that there was a general increase in the intercept in the year 2010. The factor of financial performance also showed a considerable increase, while intangible assets and computer assets showed a considerable increase.

The study further found that increase in intangible assets of the bank lead to increase in the financial performance of the commercial bank.

It also found that increase in computer assets of the bank lead to increase in the financial performance of the commercial bank.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusions and recommendations were made. The responses were based on the objectives of the study.

5.2 Summary

The main objective of the study was to find the relationship between investment in intangible assets and financial performance of commercial banks. The study was conducted in three stages namely: Collection of the data required, calculation and tabulation of the variables under the study, analysis and interpretation.

The study focused on finding the relationship existing between the dependent variable, financial performance measured by profitability and the independent variables, intangible assets and computer assets measured by equipment. The data was collected through collation and verification of the financial statements on the individual commercial bank, collating the industry data, and verifying the data on financial performance available in CBK reports.

The data was then interpreted using multiple regression analysis.

5.3 Conclusions

The study concludes that there was a positive correlation between increase in investment in intangible assets and increase in computer assets and the increase in financial performances of commercial banks in Kenya in the year 2006 to 2011.

An increase in intangible assets evidently lead to an increase in commercial banks financial performances during the 5 year period of study. In this paper, we explored the impact of intangible assets and increase in computer assets on commercial banks' financial performance.

The significant relationship between investment in assets and operating performance remains strong after controlling for other firm characteristics. We find that banks with higher intangible assets and higher computer assets tend to earn higher net income returns that gradually increases during the period.

We also find that risk-adjusted alphas of high intangible asset commercial banks significantly outperform those of low intangible asset commercial banks.

5.4 Recommendation (Policy)

There is a significant relationship between intangible assets and the value of the firm being return on assets and profitability of commercial banks in Kenya.

The financial performance of these commercial banks measured using a blend of financial profitability and net income ratio analysis, measuring performance alongside the key balance sheet investments in intangible assets and computer assets, benchmarking against the industry participants results in greater returns.

The recommendation from this discussion and research is that increasing investment in these assets will result in improved profitability of commercial banks in the long run.

5.5 Limitations of the Study

The data used was banking industry data for 43 licensed commercial banks for a 5 year period from 2006 to 2011. Some banks for example, UBA, First Community and Gulf African bank were not in existence in 2006 while some banks like Stanbic Bank had merged with CfC Bank. Hence sensitization for the impact of this changes could have resulted in better results being obtained.

Data for a large bank (Kenya Commercial Bank) was not immediately available for 2006, hence the study relied on the data for 2007 to 2011. It would be prudent to in future obtain the data for 2006 was the period of study.

Computer assets alone were also not separately identifiable as banks are not required to report computer assets as a separate item on the full balance sheet although computer assets tend to be in the notes under property and equipment. Hence the study relied on the investment in fixed assets equipment. This introduced extra components of equipment into the study that cannot be classified as computer assets.

5.6 Recommendations for Further Studies

To improve on this study, it is suggested that a similar study should be carried out over a longer period of time for a period of 10 years so as to obtain more reliable findings. If

possible more data should be included in the sample so as to increase reliability on the results.

A study should also be carried out to test the relationship between other factors which are assumed to be having impact on profitability for example number of branch network, efficiency of operations.

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APPENDICES

Appendix 1: List of Licensed Commercial Banks in Kenya

1. African Banking Corporation Limited

2. Bank of Africa Kenya Ltd

3. Bank of Baroda (K) Ltd.

4. Bank of India

5. Barclays Bank of Kenya Ltd

6. CFC Stanbic Bank Ltd

7. Charterhouse Bank Ltd (Under Statutory Management)

8. Chase Bank (K) Ltd

9. Citibank N.A. Kenya

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10. Commercial Bank of Africa Ltd

11. Consolidated Bank of Kenya

12. Co-operative Bank of Kenya Ltd

13. Credit Bank Limited

14. Development Bank of Kenya Ltd

15. Diamond Trust Bank Ltd

16. Dubai Bank Kenya Ltd

17. Ecobank Kenya Ltd

18. Equatorial Commercial Bank Ltd

19. Equity Bank Ltd

20. Family Bank Ltd

21. Fidelity Commercial Bank Ltd

22. Fina Bank Ltd

23. First Community Bank Ltd

24. Giro Commercial Bank Ltd

25. Guardian Bank Ltd

26. Gulf African Bank Ltd

27. Habib Bank A.G. Zurich

28. Habib Bank Ltd

29. Imperial Bank Ltd

30. I & M Bank Ltd

31. Jamii Bora Bank Ltd

32. Kenya Commercial Bank Limited

33. K-Rep Bank Ltd

34. Middle East Bank (K) Ltd

35. National Bank of Kenya Ltd

36. NIC Bank Ltd

37. Oriental Commercial Bank Limited

38. Paramount Universal Bank Ltd

39. Prime Bank Ltd

40. Standard Chartered Bank Kenya Ltd

41. Transnational Bank Ltd

42. UBA Kenya Bank Ltd

43. Victoria Commercial Bank Ltd

Source: CBK, 2011, http://www.centralbank.go.ke

Appendix 2: List of Commercial Banks in Kenya Data Summary 2006-2011 (Audited Financial Statements)

Sum of Actuals/Ratios	Column Labels					Q4 Total	Grand Total
Kshs '000	0 4						
	Assets		Assets Total	Profit/1 x>ss	Profit/Loss Total		
Row Labels	Intangible Assets	Total Assets		Profit after income Tax			
2006	1,401,692	616,267,594	617,669,286	15,950,706	15,950,706	633,619,992	633,619,992
1. ABC	39,691	5,357,374	5,397,065	96,397	96,397	5,493,462	5,493.462
2. Bank of Africa	44,676	6,488,089	6,532,765	52,625	52,625	6,585,390	6,585,390
3. BankofBaroda	.	11,773,175	11,773,175	260,593	260.593	12,033,768	12,033,768
4 Bank of India	3,654	8,702,477	8,706,131	164.636	164,636	8,870,767	8,870,767
5. Barclays	128,000	118,021,000	118,149,000	4,642,000	4,642,000	122,791,000	122,791,000
6 CBA	57,655	37,507,009	37,564,664	903,043	903,043	38,467,707	38,467,707
7. CFC Stanbic Bank	.	.	.	.	.	.	.
8 Chase	4,061	4,122,536	4,126,597	78,079	78,079	4,204,676	4.204,676
9 Citibank N.A	40,658	37,794,280	37,834,938	899,877	899,877	38,734.815	38,734,815
10 Consolidated Bank	110,778	3,437,096	3,547,874	16,263	16,263	3.564,137	3,564,137
11. Co-op Bank	141,534	58,067,733	58,209,267	851,625	851,625	59,060,892	59,060,892
12 Credit Bank	5,134	2,609,711	2,614,845	63,380	63,380	2,678,225	2,678,225
13 Development Bank	.	3,050,090	3,050,090	45,851	45,851	3,095,941	3,095,941
14 DTB	46,235	21,563,773	21,610,008	488,056	488,056	22,098.064	22,098,064
15 Dubai	5,599	1,247,760	1,253,359	11,236	11,236	1,264,595	1,264,595
16 Ecobank	251,222	8,909,787	9,161,009	27,473	27,473	9,188,482	9,188.482
17. Equatorial Commercial	6,432	3,962,390	3.968,822	63,307	63,307	4,032,129	4,032,129
18 Equity	161,153	20,024,484	20,185,637	753,366	753,366	20,939,003	20,939,003
19. Family Bank	30,553	5,468,511	5,499,064	183,527	183,527	5,682,591	5,682,591
20. Fidelity Commercial	9,335	2,316,368	2,325,703	18,217	18,217	2.343,920	2,343,920
21. FIN A	5,214	6,501,853	6,507,067	101,729	101,729	6,608.796	6,608,796
22. First Community	.	.	.	.	.	.	.
23. Giro Comm'l Bank	1,483	5,098,323	5,099,806	42,646	42,646	5,142,452	5,142,452
24. Guardian Bank	2.443	4.916,914	4,919,357	34,018	34.018	4,953,375	4,953,375
25. Gulf African Bank	.	.	.	.	.	.	.
26. Habib AG	.	5,322,970	5,322,970	106,671	106,671	5,429,641	5,429,641
27. Habib Bank	.	2.963,256	2,963,256	18,396	18,396	2,981,652	2,981,652
28 I & M	10,747	22,348,245	22,358,992	648,898	648,898	23,007.890	23,007,890
29. Imperial Bank	65,382	9,405,838	9,471,220	272,505	272,505	9,743,725	9,743,725
30. Jamii Bora	2,741	527,432	530,173	(17,596)	(17,5%)	512,577	512,577
31. KCB	.	.	.	.	.	.	.
32 K-REP	69,195	5,220,244	5,289,439	100,913	100,913	5,390,352	5,390,352
33. Middle East Bank	1,710	3,401,481	3,403,191	394.135	394,135	3,797,326	3,797,326
34. NBK	47,824	36,122,843	36,170,667	624,496	624,496	36,795,163	36,795,163
35. NIC-BANK	59,520	26,107,693	26,167,213	456.591	456,591	26,623,804	26,623,804
36. Oriental	4,824	1,449,373	1,454,197	(49,577)	(49,577)	1,404,620	1,404,620
37. Paramount Bank	1,736	2,196,892	2,198,628	21,520	21,520	2,220,148	2,220,148
38 Prime Bank	24,857	10,452,332	10,477,189	138,052	138,052	10,615,241	10,615,241
39. Stanbic Bank	6,085	25,822,791	25,828,876	660,995	660,995	26,489,871	26,489,871
40. Stanchart	11,334	81,135.235	81,146,569	2,625,513	2,625,513	83,772,082	83,772,082
41 Trans-Nat'l Bank	227	2,566,223	2,566,450	62,395	62,395	2,628,845	2,628,845
42. UBA	.	.	.	.	.	.	.

43.	Victoria Commercial	-	4,284,013	4,284,013	88,855	88,855	4,372,868	4,372,868
2007		1,476,965	870,735,680	872,212,645	23,562,628	23,562,628	895,775,273	895,775373
1.	ABC	36,391	6,142,940	6,179,331	134,402	134,402	6,313,733	6,313,733
2.	Bank of Africa	32,973	7,657,010	7,689,983	115,869	115,869	7,805,852	7,805,852
3.	BankofBaroda	-	14,709,444	14,709,444	346,369	346,369	15,055,813	15,055,813
4	Bank of India	1,961	10,344,262	10,346,223	289,291	289,291	10,635,514	10,635,514
5.	Barclays	128,418	157,927,853	158,056,271	4,910,494	4,910,494	162,966,765	162,966,765
6	CBA	47,942	39,508,636	39,556,578	991,512	991,512	40,548,090	40,548,090
7	CFC Stanbic Bank	-	-	-	-	-	-	-
8	Chase	3,318	5,754,119	5,757,437	1*26222*	126,222	5.883,659	5,883,659
9.	Citibank N.A	11,145	47,300,670	47,311,815	1,044,195	1,044,195	48,356,010	48,356,010
10	Consolidated Bank	95,072	4,108,814	4,203.886	25,821	25,821	4,229,707	4329,707
11.	Co-op Bank	156,335	65,696,853	65,853,188	1,526,088	1,526,088	67,379,276	67,379376
12.	Credit Bank	8,122	3,357,535	3,365,657	91,106	91,106	3,456,763	3,456,763
13.	Development Bank	-	4,707,518	4,707,518	111,172	111,172	4,818,690	4,818,690
14	DTB	28.281	30,313,363	30,341,644	598,305	598,305	30,939,949	30,939,949
15.	Dubai	2,195	1,543,883	1,546,078	5,915	5,915	1,551,993	1,551,993
16.	Ecobank	237,259	9,451,972	9,689,231	123,360	123,360	9,812,591	9,812,591
17.	Equatorial Commercial	11,372	4,878,587	4,889,959	53,219	53,219	4,943,178	4,943,178
18.	Equity	224,342	53,129,246	53,353,588	1,890,283	1,890,283	55,243,871	55,243,871
19.	Family Bank	25,300	8,569,462	8,594,762	166,640	166,640	8,761,402	8,761,402
20.	Fidelity Commercial	9,014	3,192,348	3,201,362	32,270	32,270	3,233,632	3333,632
21.	F1NA	3,861	8,089,535	8,093,396	81,419	81,419	8,174,815	8,174,815
22.	First Community	-	-	-	-	-	-	-
23	Giro Comm'l Bank	171	5,611,124	5,611,295	32,589	32,589	5,643,884	5,643,884
24	Guardian Bank	1,463	5,539,643	5,541,106	17,018	17,018	5,558,124	5,558,124
25.	Gulf African Bank	-	-	-	-	-	-	-
26	Habib AG	-	6,205,576	6,205,576	134,574	134,574	6,340,150	6,340,150
27.	Habib Bank	-	3,845,212	3,845,212	75,286	75,286	3,920,498	3,920,498
28.	I & M	19,433	29,420,098	29,439,531	882,850	882,850	30,322,381	30,322,381
29.	Imperial Bank	58,347	11,723,137	11,781,484	376,009	376,009	12,157,493	12,157,493
30.	Jamii Bora	1,848	743,676	745,524	(27,795)	(27,795)	717,729	717,729
31.	KCB	109,472	87,326,070	87,435,542	2,354,679	2,354,679	89,790,221	89,790321
32.	K-REP	75,662	7,038,807	7,114,469	130,815	130,815	7,245,284	7,245,284
33	Middle East Bank	2,072	3,097,412	3,099,484	59,359	59,359	3,158,843	3,158,843
34	NBK	38,036	41,414,272	41,452,308	1,119,396	1,119,396	42,571,704	42,571,704
35.	NIC-BANK	45,203	31,396,342	31,441,545	744,438	744,438	32,185,983	32,185,983
36.	Oriental	4,689	1,695,300	1,699,989	146,167	146,167	1,846.156	1,846,156
37	Paramount Bank	11,462	2,366,526	2,377,988	30,204	30,204	2,408.192	2,408,192
38	Prime Bank	20,489	13,861,817	13,882,306	238.865	238,865	14,121,171	14,121,171
39	Stanbic Bank	1,922	34,463,677	34,465,599	828.005	828,005	35,293,604	35393,604
40.	Stanchart	3,778	91,251,517	91,255,295	3,460,329	3.460.329	94,715,624	94,715,624
41.	Trans-Nat'l Bank	19,617	3,220,661	3,240,278	190,492	190,492	3,430,770	3,430,770
42.	UBA	-	-	-	-	-	-	-
43	Victoria Commercial	-	4,130,763	4,130,763	105,396	105,396	4,236,159	4336,159
2008		3,228,345	1,090,143,619	1,093371,964	28,578,427	28,578,427	1,121,950391	1,121,950391
1	ABC	31,485	6,583,687	6,615,172	156,626	156,626	6,771,798	6,771,798
2	Bank of Africa	51,098	12,304,476	12,355,574	70,961	70,961	12,426,535	12,426,535
3.	BankofBaroda	-	18,360,677	18,360,677	433,657	433,657	18,794,334	18,794,334
4	Bank of India	68	12,049,149	12,049,217	377,593	377,593	12,426,810	12,426,810
5.	Barclays	546.812	168,785,819	169,332,631	5,524,782	5,524,782	174,857,413	174,857,413
6	CBA	423,329	50,110,481	50,533,810	1,280,973	1,280,973	51,814,783	51,814,783

7	CFC Stanbic Bank	302,921	83,166,251	83.469,172	892,288	892,288	84,361,460	84,361,460
8.	Chase	5,796	10,300,395	10,306,191	169,185	169,185	10,475,376	10,475,376
9.	Citibank N.A.	.	47,534,569	47,534,569	1,874,900	1,874.900	49,409,469	49,409,469
10.	Consolidated Bank	74,789	4,656,792	4,731,581	96,223	96,223	4,827,804	4,827,804
11	Co-op Bank	245,868	83,917,604	84,163,472	2,358,008	2,358,008	86,521,480	86,521,480
12.	Credit Bank	6,022	3,636,674	3,642,6%	54,049	54.049	3,696,745	3,696,745
13	Development Bank	.	6,520,212	6,520,212	119,688	119,688	6,639,900	6,639,900
14	DTB	48,222	41,592,049	41,640,271	905,119	905,119	42,545,390	42,545,390
15	Dubai	4,195	1,639,146	1,643,341	3,239	3,239	1,646,580	1,646,580
16	Ecobank	231,037	10,498,916	10,729,953	65,024	65,024	10,794,977	10,794,977
17.	Equatorial Commercial	11,244	4,410,435	4,421,679	5,707	5,707	4.427,386	4,427,386
18	Equity	347,797	77,135,526	77,483,323	3,752,643	3,752,643	81,235,966	81,235,966
19.	Family Bank	54,788	10,410,389	10,465,177	366,740	366,740	10,831,917	10,831,917
20.	Fidelity Commercial	11,302	4,329,209	4,340,511	42,191	42,191	4,382,702	4,382,702
21.	F1NA	2,969	9.865,411	9.868,380	34,419	34,419	9,902,799	9,902,799
22.	First Community	112,911	3,179,953	3,292,864	(224,813)	(224,813)	3.068.051	3,068,051
23	Giro Comm'l Bank	52	5,937,715	5,937,767	80,157	80,157	6,017,924	6,017,924
24	Guardian Bank	1,174	5,558,014	5,559,188	29,493	29,493	5,588,681	5,588.681
25.	Gulf African Bank	121,453	4,999,897	5,121,350	(281,381)	(281,381)	4,839,969	4,839,969
26	Habib AG	538	6,557,380	6,557,918	157.487	157,487	6,715,405	6,715,405
27	Habib Bank	.	4.490.763	4,490,763	98,216	98,216	4,588,979	4,588,979
28	1 & M	77,968	36,655,878	36,733,846	1,119,093	1,119,093	37,852,939	37,852,939
29.	Imperial Bank	60,097	13,431,704	13.491.801	465,687	465,687	13,957,488	13,957,488
30.	Jamii Bora	2,032	538,246	540,278	(3,215)	(3,215)	537,063	537,063
31	KCB	228,451	112,210,660	112,439,111	2,706,576	2,706,576	115,145,687	115,145,687
32	K-REP	81,658	8,184,063	8,265,721	(348,569)	(348.569)	7,917,152	7,917,152
33	Middle East Bank	976	3,297,200	3,298.176	17,994	17,994	3,316,170	3,316,170
34.	NBK.	30,586	42,695,700	42,726.286	1,240,610	1,240,610	43,966,896	43.966.896
35.	NIC-BANK	53,910	42,704,171	42,758,081	1,030,047	1,030,047	43,788,128	43,788,128
36.	Oriental	3,065	2,289,129	2,292,194	48,526	48.526	2,340,720	2,340,720
37	Paramount Bank	10,356	2,645,836	2,656,192	36,725	36.725	2,692,917	2,692,917
38	Prime Bank	24,040	19,944,574	19,968,614	330,347	330,347	20,298,961	20,298,961
39.	Stanbic Bank	.	.	.	.	.	.	.
40.	Stanchart	6,604	99,140,207	99,146,811	3,242,204	3,242,204	102,389,015	102,389,015
41.	Trans-Nat'l Bank	12,732	3,414,488	3,427,220	132,413	132,413	3,559,633	3,559,633
42.	UBA	.	.	.	.	.	.	.
43.	Victoria Commercial	.	4,460,174	4,460,174	116,815	116.815	4,576,989	4,576,989
2009		5378302	1313,723,166	1319,101,468	33373,947	33373,947	1352,475,415	1352,475,415
1	ABC	26,495	8.841,243	8,867,738	176,634	176,634	9,044,372	9,044.372
2.	Bank of Africa	34,456	16,919,962	16,954,418	192,439	192,439	17,146,857	17,146,857
3.	BankofBaroda	.	21,939,617	21,939,617	521,756	521,756	22,461,373	22,461,373
4	Bank of India	68	15,394,571	15,394,639	400,199	400,199	15,794,838	15,794,838
5.	Barclays	685,666	165,151,050	165,836,716	6,091.040	6,091,040	171,927,756	171,927,756
6	CBA	431,884	57,593,299	58,025,183	1,226,200	1,226,200	59,251,383	59,251,383
7	CFC Stanbic Bank	931,176	97,337,054	98,268,230	794,694	794,694	99.062,924	99,062,924
8	Chase	12,839	12,919,712	12,932,551	210,514	210,514	13.143,065	13,143,065
9.	Citibank N.A.	.	51,371,890	51,371,890	1,857,870	1,857,870	53,229,760	53,229,760
10.	Consolidated Bank	56,597	6,898,919	6,955,516	80,938	80,938	7,036.454	7,036,454
11.	Co-op Bank	286,454	110,531,373	110,817,827	2,958,856	2,958.856	113,776,683	113,776,683
12.	Credit Bank	4,437	3,664,947	3,669,384	57,803	57,803	3,727,187	3,727,187
13	Development Bank	.	8,135,934	8,135,934	134,894	134,894	8,270,828	8,270,828
14	DTB	53,152	47,146,767	47,199,919	1,139,594	1,139,594	48,339,513	48,339,513
15.	Dubai	8,184	1,596,398	1,604,582	(43,414)	(43,414)	1,561,168	1,561,168

16.	Ecobank	240,787	13,949,400	14,190,187	(796.261)	(796261)	13,393,926	13,393,926
17	Equatorial Commercial	10,195	4,465,528	4,475,723	53,699	53,699	4,529,422	4,529,422
18	Equity	569,795	96,511,725	97,081,520	4,563,130	4,563,130	101,644,650	101,644,650
19.	Family Bank	146,878	13,305,770	13,452,648	220,895	220.895	13,673,543	13,673,543
20.	Fidelity Commercial	56,125	5,498,595	5,554,720	48,148	48,148	5,602,868	5,602,868
21.	FIN A	3,542	12,278,679	12,282,221	16,542	16,542	12,298,763	12298,763
22.	First Community	126,831	4,451,627	4,578.458	(112,429)	(112,429)	4,466,029	4.466.029
23.	Giro Comm'l Bank	69	6,914,485	6,914,554	148.887	148,887	7,063,441	7,063,441
24	Guardian Bank	2,335	6,777,889	6,780,224	38.351	38,351	6,818,575	6,818,575
25	Gulf African Bank	101,314	7,748,940	7,850,254	(123,357)	(123,357)	7,726,897	7,726,897
26	Habib AG	.	7,339,320	7,339,320	184,068	184,068	7,523,388	7,523,388
27	Habib Bank	.	4,658,793	4,658,793	126.965	126.965	4,785,758	4,785,758
28	l & M	63,150	44,009,222	44,072,372	1,208.659	1,208,659	45,281,031	45281,031
29	Imperial Bank	52,202	15,358,108	15,410,310	555,878	555.878	15,966,188	15.966,188
30.	Jamii Bora	1,024	490,890	491,914	(7,661)	(7,661)	484,253	484.253
31.	KCB	1,237,733	174,711,564	175,949,297	3,811,485	3,811.485	179,760,782	179,760,782
32.	K-REP	53,622	7,136,326	7,189,948	(208,540)	(208.540)	6,981.408	6,981,408
33	Middle East Bank	337	3,141,381	3,141,718	28,928	28,928	3,170,646	3,170,646
34	NBK	57,078	51,404.408	51,461,486	1,462,955	1,462,955	52,924,441	52,924.441
35.	NIC-BANK.	57,893	44,655,313	44,713,206	1,060,583	1,060,583	45,773,789	45,773,789
36	Oriental	4,034	3,052,314	3,056,348	38,210	38,210	3.094,558	3,094,558
37	Paramount Bank	8,251	3,100,351	3,108,602	34,367	34,367	3,142,969	3,142,969
38	Prime Bank	16.858	23,699,952	23,716,810	404,078	404,078	24,120,888	24,120,888
39	Stanbic Bank	.	.	.	.	.	.	.
40.	Stanchart	3,302	123,909,119	123,912,421	4,731,110	4,731,110	128,643,531	128,643,531
41.	Trans-Nat'l Bank	16,029	3,364,458	3,380,487	90,156	90,156	3,470,643	3,470,643
42.	UBA	2,348	1,216,170	1,218,518	(155,385)	(155,385)	1,063,133	1,063,133
43.	Victoria Commercial	15,162	5,130,103	5,145,265	150,469	150,469	5,295,734	5,295,734
2010		14,152,684	1,648,785,932	1,662,938,616	57,209,655	57,209,655	1,720,148,271	1,720,148,271
1.	ABC	23,901	10,296,561	10,320,462	342,228	342228	10,662,690	10,662,690
2.	Bank of Africa	64,774	26,699,124	26,763,898	355,258	355,258	27,119.156	27,119,156
3	BankofBaroda	.	32,331,505	32,331,505	1,393,402	1,393,402	33,724,907	33,724,907
4	Bank of India	68	19,671,456	19,671,524	687,108	687,108	20,358,632	20,358,632
5	Barclays	3,449,293	172,690,915	176.140.208	10,598,982	10,598.982	186.739,190	186,739,190
6	CBA	398,696	63,591,642	63,990,338	1.870,873	1,870,873	65,861,211	65,861211
7.	CFC Stanbic Bank	910,401	107,138,602	108,049,003	1,477,454	1,477,454	109,526,457	109,526,457
8	Chase	19,635	21,858,603	21.878.238	381,392	381,392	22,259,630	22259,630
9	Citibank N.A.	.	62,069,592	62,069,592	1,731,114	1,731,114	63,800,706	63,800,706
10.	Consolidated Bank	53,025	10,478,682	10,531,707	172,478	172,478	10,704,185	10.704,185
11.	Co-op Bank	333,422	153,983,533	154,316,955	4,379,231	4,379,231	158,6%, 186	158,696,186
12	Credit Bank	2,578	4,530,093	4,532,671	33,790	33,790	4,566,461	4,566,461
13	Development Bank	.	10,649,758	10,649,758	160222	160,222	10,809,980	10.809,980
14	DTB	180,156	58,605,823	58,785,979	2,058,146	2,058,146	60,844,125	60.844,125
15	Dubai	11,579	1,874,268	1,885,847	1,849	1,849	1,887,696	1,887,696
16.	Ecobank	242,385	26,892,185	27,134,570	125,121	125,121	27,259,691	27259,691
17	Equatorial Commercial	14,894	10,398,806	10,413,700	(106,784)	(106,784)	10,306,916	10,306,916
18	Equity	754,491	133,889,997	134,644,488	7,554,377	7,554,377	142,198,865	142,198,865
19	Family Bank	171,168	20,188,379	20,359,547	390,997	390,997	20,750,544	20,750,544
20.	Fidelity Commercial	63,728	8,208,538	8,272,266	271,778	271,778	8,544,044	8,544,044
21.	FIN A	11,170	14,112,365	14,123,535	133,519	133,519	14,257,054	14257,054
22.	First Community	117,351	6,380,099	6,497,450	(97,508)	(97,508)	6,399,942	6,399,942
23.	Giro Comm'l Bank	366	10,233,964	10,234,330	513,763	513,763	10,748,093	10,748,093

24	Guardian Bank	2,274	8,031,214	8,033,488	75,233	75,233	8,108,721	8,108,721
25.	Gulf African Bank	80,986	9,594,061	9,675,047	73,894	73,894	9,748,941	9,748,941
26	Habib AG	.	8,127,135	8,127,135	159,415	159,415	8,286,550	8,286,550
27	Habib Bank	.	5,425,541	5,425,541	149,357	149,357	5,574.898	5,574,898
28	1 & M	27,645	62,552,113	62,579,758	2,117,401	2,117,401	64,697,159	64,697,159
29.	Imperial Bank	87,456	19,399,089	19,486,545	896,056	896,056	20,382,601	20,382,601
30.	Jamii Bora	792,025	1,723,233	2,515,258	(84,119)	(84,119)	2,431,139	2,431,139
31.	KCB	1,319,367	223,024,556	224,343,923	8.818,860	8,818,860	233,162,783	233,162,783
32.	K-REP	42,287	7,670,049	7,712,336	50,640	50,640	7,762,976	7,762,976
33.	Middle East Bank	1,056	4,018,428	4,019,484	140,709	140,709	4,160,193	4,160,193
34.	NBK	52,787	60,026,694	60,079,481	2,021,919	2,021,919	62,101,400	62,101,400
35.	NIC-BANK	129,357	54,776,432	54,905,789	1,730,397	1,730,397	56,636,186	56,636,186
36	Oriental	3,069	4,558,349	4,561,418	155,769	155,769	4,717,187	4,717,187
37.	Paramount Bank	6,045	4,419,806	4,425,851	252,245	252,245	4,678,096	4,678,096
38.	Prime Bank	11,877	32,444,424	32,456,301	606,413	606,413	33,062,714	33,062,714
39.	Stanbic Bank	.	.	.	.	.	.	.
40.	Stanchart	4,739,681	142,880,029	147,619,710	5,366,188	5,366,188	152,985,898	152,985,898
41.	Trans-Nat'l Bank	10,712	4,761,852	4,772,564	142,344	142,344	4,914,908	4,914,908
42.	UBA	10,715	2,363,053	2,373,768	(106,630)	(106,630)	2,267,138	2,267,138
43.	Victoria Commercial	12,264	6,215,384	6,227,648	214,774	214,774	6,442,422	6,442,422
2011		15,683,610	1,988,845,910	2,004,529,520	63,246,522	63,246,522	2,067,776,042	2,067,776,042
1	ABC	24,911	12,506,895	12,531,806	373,392	373,392	12,905,198	12,905,198
2.	Bank of Africa	- 72,876	38,734,220	38,807,096	432,725	432,725	39,239,821	39,239,821
3.	BankofBaroda	4,898	36,700,797	36,705,695	1,363,881	1,363,881	38,069,576	38,069.576
4.	Bank of India	1,663	23,352,157	23,353,820	765,862	765,862	24,119,682	24,119,682
5	Barclays	3,364,431	167,304,940	170,669,371	8.072,637	8,072,637	178,742,008	178.742.008
6	CBA	408,970	83,283,368	83,692,338	1,640,008	1,640,008	85,332,346	85,332,346
7.	CFC Stanbic Bank	713,889	140,086,550	140,800,439	1,922,884	1,922,884	142,723,323	142,723,323
8	Chase	277,100	36,513,015	36,790,115	602,246	602,246	37,392,361	37,392,361
9.	Citibank N.A.	.	74,646,417	74,646,417	2,942,221	2,942,221	77,588,638	77.588.638
10	Consolidated Bank	54.097	15,318,148	15,372,245	149,824	149,824	15,522,069	15,522,069
11.	Co-op Bank	359,197	167,772,389	168,131,586	5,186,343	5,186,343	173,317,929	173,317,929
12.	Credit Bank	126,432	5,394,064	5,520,496	47,075	47,075	5,567,571	5,567,571
13.	Development Bank	.	11,523,037	11,523,037	108,073	108,073	11,631,110	11,631,110
14	DTB	235,356	77,453,024	77,688,380	2,246,892	2,246,892	79,935,272	79,935,272
15.	Dubai	113,615	2,316,000	2,429,615	14,166	14,166	2.443,781	2.443.781
16.	Ecobank	528,678	27,210,496	27,739,174	202,106	202,106	27,941,280	27,941,280
17	Equatorial Commercial	13,712	12,926,902	12,940,614	72,340	72,340	13,012,954	13,012,954
18.	Equity	1,075,697	176,910,996	177,986,693	9,773,857	9,773,857	187,760,550	187,760,550
19	Family Bank	354,897	26,001,754	26,356,651	354,605	354,605	26,711,256	26,711,256
20.	Fidelity Commercial	76,107	10,789,498	10,865,605	197,196	197,196	11,062,801	11,062,801
21.	FIN A	14,780	14.630,459	14,645,239	224,895	224,895	14,870,134	14,870,134
22.	First Community	81,591	8,740,329	8,821,920	71,323	71,323	8.893,243	8.893,243
23	Giro Comm'l Bank	4,476	11,846,372	11.850.848	301,096	301,096	12,151.944	12,151.944
24	Guardian Bank	3,540	8,836,279	8,839,819	116,606	116,606	8,956,425	8,956,425
25	Gulf African Bank	61,580	12,915,174	12,976,754	95,335	95,335	13,072,089	13,072,089
26.	Habib AG	.	8,721,781	8,721,781	162,152	162,152	8.883,933	8,883,933
27	Habib Bank	.	5,860,509	5,860,509	166,013	166,013	6,026,522	6,026,522
28.	I & M	52,513	76,903,272	76,955,785	3,094,619	3,094,619	80,050,404	80,050,404
29.	Imperial Bank	83,979	25,617,616	25,701,595	1,197,383	1,197.383	26.898.978	26,898,978
30.	Jamii Bora	774,357	2,070,009	2,844,366	(37,876)	(37,876)	2,806,490	2,806,490
31	KCB	1.476,594	282,493,553	283,970,147	9,838,337	9,838,337	293,808.484	293,808.484
32.	K-REP	81,071	9,318,715	9,399,786	173,364	173,364	9,573,150	9,573,150

33.	Middle East Bank	1,473	4.639,160	4,640,633	94,196	94,196	4,734,829	4,734,829
34	NBK	402,400	68,664,516	69,066,916	1,546,113	1,546,113	70,613,029	70,613,029
35.	NIC-BANK	400,544	73,581,321	73,981,865	2,533,048	2,533,048	76,514,913	76,514,913
36.	Oriental	7,132	5,030,090	5,037,222	152,005	152,005	5,189,227	5,189,227
37	Paramount Bank	4.891	4,727,237	4,732,128	100,470	100,470	4,832,598	4,832,598
38	Prime Bank	25,388	35,184.677	35,210,065	834,424	834,424	36,044,489	36,044,489
39.	Stanbic Bank	-	-	-	-	-	-	-
40.	Stanchart	4,373.307	164,181,638	168.554,945	5,834,006	5,834,006	174,388,951	174,388,951
41	Trans-Nat'l Bank	5,787	7,286,906	7,292,693	202,580	202,580	7,495,273	7,495,273
42	UBA	10,894	3,206,395	3,217,289	(152,150)	(152,150)	3,065,139	3,065,139
43	Victoria Commercial	10,787	7,645,235	7,656,022	230,250	230,250	7,886,272	7,886,272
	Grand Total	41321,598	7,528,501,901	7,569,823,499	221,921,885	221,921,885	7,791,745384	7,791,745384

Appendix 3: List of Commercial Banks in Kenya Data Summary 2006-2011 Equipment (Audited Financial Statements)

Sum of Actuals/Ratios	Kes'000					
	2006 Total	2007 Total	2008 Total	2009 Total	2010 Total	2011 Total
Row Labels						
Equipment	53,435,872	76,823,053	101,418316	135,019,655	161,222,506	178,039,878
ABC	469,828	458,531	517,185	1,002,915	1,223,693	1,626,487
Bank of Africa	283,393	365,357	565,265	742,444	1,150,885	1,662,268
Bank of Baroda	380,443	325.060	392,135	332,677	365,605	522,134
Bank of India	441,287	404,563	393,330	422,867	404,950	404,387
Barclays	5,811,000	9,209,986	13,952,123	16,060,538	22.486,989	12,226,051
CBA	3,397,888	4,234,145	4,218,748	4,539,218	6,233,156	7,108,162
CFC Stanbic Bank		—	3,052,262	6,292,500	7,294,346	8,230,068
Chase	146,177	261,737	817,059	1,143,035	1,538.877	2,100,243
Citibank N.A.	2,118,850	2,198,082	2,163,263	2,114,578	2,237,198	2,190,754
Consolidated Bank	2,363,794	2,372,736	2,467,098	2,474,586	3,090,781	4,718,548
Co-op Bank	10,631,174	11,763,750	14,355,659	19,651,831	24,228,946	29,427,967
Credit Bank	179,715	136,221	98,268	92,140	219,769	287.453
Development Bank	425,689	411,904	462,874	491,846	537.579	610,300
DTB	1,018,592	1,121,476	1,643,344	2,384,564	2,129,827	3,185,459
Dubai	198,801	157,521	144,558	142,084	123,196	101,687
Ecobank	1,255,111	1,240,586	1,211,330	2.415,923	3,782,579	3,961,346
Equatorial Commercial	126,755	97,427	148,795	154,061	783,710	886,999
Equity	5,121,622	8,308,488	13.646,635	20,296,142	21,746,568	23,394,694

Family Bank	1,297,702	2,001,625	3,257.990	3,947,593	4.098.646	5,585.120
Fidelity Commercial	123,466	118,537	202,531	241,829	334,332	355,016
FINA	532,219	581,747	641,512	823,080	906,393	839,180
First Community		—	424,030	1,152,689	1,733,250	1,715,463
Giro Comm'l Bank	212,048	201,577	200,943	224,701	344,187	691,490
Guardian Bank	187,285	227,539	269.042	276,784	324,095	289,373
Gulf African Bank		—	1,287,682	1,481,653	1,324,495	1,223,078
Habib AG	107,096	97,988	111,924	265,933	676,482	640,279
Habib Bank	96,321	162,717	124.204	95,649	91,715	82,451
l & M	1,471.544	4,167,361	4,148,639	4,606,506	4.850.461	5,057,836
Imperial Bank	1.122,986	1,479.380	1,382,158	1,134,454	908,870	1,018,561
Jamii Bora	261,679	245,173	240,854	239,965	313,260	343,517
K.CB		10,417,932	11,860.777	16,063,551	16,439,848	23,737,189
K-REP	866,679	1,145,658	1,639,473	1,945,878	1,732,696	1,599,606
Middle East Bank	905,230	880,843	845,011	813,505	799,712	798,072
NBK.	4,399,723	4,257,366	5,372,036	7,450,195	8,895,134	10,184.780
NIC - BANK.	1,989,372	1,937,652	2,197.436	2,927,206	2,879,615	2,946,159
Oriental	194.409	128,435	123,050	143,290	176,185	190,192
Paramount Bank	79.475	87,248	118,087	242,227	273,723	265,756
Prime Bank	1,027,714	1,303.275	1,360,713	1,345,159	1,257,295	1,192,108
Stanchart	3,700,648	3,780,304	4,838,796	8,006.037	11,641,315	15,006,206
Trans-Nat'l Bank	136,707	179,656	167,159	264,574	323,758	322,921
UBA				237.892	915,159	734,154
Victoria Commercial	353,450	353,470	354,338	335,356	403,226	576,364
Grand Total	53,435,872	76,823,053	101,418,316	135,019,655	161,222,506	178,039.878

Appendix 4: List of Commercial Banks in Kenya Data Summary 2006-2011 Return on Assets - ROA Percentages (Audited Financial Statements)

Sum of Actuals/Ratios	Column Labels					
Row Labels	2006	2007	2008	2009	2010	2011
ABC	2.78%	3.39%	3.61%	3.36%	5.08%	4.35%
Bank of Africa	1.04%	2.22%	0.98%	1.84%	2.21%	1.68%
Bank of Baroda	3.52%	3.77%	3.90%	3.71%	6.68%	4.68%
Bank of India	3.54%	4.92%	5.51%	4.40%	5.74%	4.50%
Barclays	5.90%	5.15%	4.84%	5.37%	7.91%	6.85%
CBA	3.95%	3.76%	3.82%	3.36%	4.41%	4.22%
CFC Stanbic Bank	0.00%	0.00%	2.69%	1.59%	2.06%	2.52%
Chase	3.59%	3.59%	3.11%	2.81%	2.98%	3.05%
Citibank N.A.	4.54%	4.62%	7.14%	6.05%	4.85%	6.95%
Consolidated Bank	0.50%	0.66%	1.95%	2.10%	3.09%	1.87%
Co-op Bank	2.23%	3.76%	4.53%	3.92%	4.21%	3.75%
Credit Bank	3.29%	4.37%	2.22%	2.22%	0.80%	1.27%
Development Bank	2.26%	4.01%	3.37%	2.60%	2.47%	1.38%
DTB	3.74%	3.68%	3.69%	3.60%	5.33%	4.77%
Dubai	1.70%	0.96%	0.43%	-2.30%	0.19%	0.98%
Ecobank	0.54%	1.28%	0.69%	-9.00%	1.02%	0.46%
Equatorial Commercial	2.55%	1.72%	-0.16%	1.81%	-2.21%	0.67%
Equity	7.47%	7.33%	7.21%	6.58%	8.06%	7.74%
Family Bank	5.79%	3.81%	5.65%	2.94%	3.10%	2.30%
Fidelity Commercial	1.32%	1.77%	1.97%	1.11%	5.62%	3.26%
FrNA	2.39%	1.57%	0.93%	0.21%	1.12%	2.11%
First Community	0.00%	0.00%	-29.61%	-4.27%	-3.00%	1.52%
Giro Comm'l Bank	1.17%	0.77%	2.23%	2.92%	7.35%	2.92%
Guardian Bank	1.02%	0.49%	0.79%	0.98%	1.48%	2.50%
Gulf African Bank	0.00%	0.00%	-14.33%	-2.60%	0.55%	1.42%
Habib AG	3.26%	3.65%	3.89%	4.16%	3.23%	2.92%
Habib Bank	0.19%	3.09%	3.77%	4.31%	4.51%	4.47%
I & M	4.60%	5.07%	4.89%	4.30%	5.55%	6.20%
Imperial Bank	4.58%	5.27%	5.34%	6.06%	6.80%	6.86%
Jamii Bora	-3.29%	-4.88%	-0.53%	-1.32%	-8.77%	-2.16%
KCB	0.00%	3.72%	3.92%	3.64%	5.64%	5.57%
K-REP	3.43%	3.06%	-6.08%	-3.71%	1.51%	3.06%
Middle East Bank	11.69%	2.90%	0.95%	1.42%	5.54%	2.03%
NBK	2.63%	4.04%	4.23%	4.46%	4.58%	3.67%
NIC - BANK	2.94%	3.68%	3.91%	3.49%	4.71%	5.25%

Oriental	-4.68%	13.29%	3.65%	1.82%	5.45%	3.98%
Paramount Bank	1.69%	1.89%	2.03%	1.49%	7.42%	2.39%
Prime Bank	2.22%	2.73%	2.62%	2.61%	2.64%	3.06%
Stanchart	4.75%	5.55%	4.99%	5.87%	5.83%	5.35%
Trans-Nat'l Bank	2.04%	8.38%	3.69%	2.55%	3.84%	4.71%
UBA	0.00%	0.00%	0.00%	-87.37%	-7.33%	-6.00%
Victoria Commercial	3.06%	3.62%	4.02%	4.42%	5.50%	4.85%