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FINANCE AND ACCOUNTING

MICRO-FINANCE

MANAGEMENT OF OPERATIONAL RISKS AND LOAN PORTFOLIO QUALITY: A SURVEY OF MICROFINANCE INSTITUTIONS IN KISII MUNICIPALITY

FINANCE AND ACCOUNTING

SOCIAL ACCOUNTING PRACTICES AMONG KENYAN FIRMS: AN EMPIRICAL STUDY OF COMPANIES QUOTED AT NAIROBI SECURITIES EXCHANGE. (April 2012)

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Abstract

Profit and shareholders wealth maximization have for long dictated accounting and reporting practices, the concern for the social costs and the benefits of the business practices have given rise to the need for environmental and social accounting. The Significance of the study was to determine how companies are reporting positive and negative externalities to the society. The main objectives of the study was to establish the most popular themes of social accounting in Kenya, determine how and location for disclosure of social accounting information. The population of the study was fifty seven companies quoted in NSE and longitudinal study was carried from 2008-2010. Census method was used to collect data. Secondary data was collected from published annual financial statement of all listed companies. The population of companies is categorized into four market segment, Content analysis and descriptive analysis was used in analyzing data. It was established in the year 2008, companies practicing social accounting were 72%, while 2009 were 75% and in 2010 were 81%. It was also established that community involvement and environment themes was leading in practice of social accounting. Finally, it was established that companies prefer non-monetary form over monetary form of presentation and also they prefer using separate location to using chairman's report in annual reports.

Keywords: Social Accounting; Environmental Accounting; Nairobi Security Exchange

Introduction

Kenya has observed a spectacular evolution in community and investors stance towards the environment in the past few decades. Ever-increasing sensitivity of environmental pollution, global warming and diminishing supply of natural resources has attracted direct societal awareness towards the environmental activities of business organizations. This concern about the impact of enterprises on society is a global one. The expectations of consumers, employees, investors, business partners and local communities as to the responsibility of businesses in society are increasing. Social accounting (also known as social and environmental accounting, corporate social reporting, corporate social responsibility reporting, non-financial reporting, or sustainability accounting) is the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large (Gray et al 1987).

Social accounting (SA) emphasizes the notion of corporate accountability. According Adams (2008) defines social accounting in this sense as an approach to reporting a firm's activities which stresses the need for the identification of socially relevant behaviour, the determination of those to whom the company is accountable for its social performance and the development of appropriate measures and reporting techniques.

National Environmental Management Authority (NEMA) was established under the environmental management and coordination Act.1999, as the principal instrument of the government in management of Kenyan environment. It's under the Ministry of Environment and Natural Resources (MENR). NEMA act as the watchdog of Kenyan environment and requires companies to be environmental responsible especially in areas of waste management and exploitation of natural resources. NEMA provides no regulations that obligate the public companies prepare environmental reports in their annual reports. The registrar of companies regulates companies to operate under Companies Act Cap 470, although there is no regulatory framework that obligates public companies to report social and environmental costs to stakeholders, but only stipulates that companies have to report on their economic issue.

Problem Statement

Iyoha (2010), state that society needs social accounting reports in much the same way that capital markets require financial information supplied by financial accounting system. Users of social accounting information need the data that allow them to assess whether the entity is being socially, financially and environmentally responsible. According to Davies and Okorite (2007), where the social activities of organizations are fairly reported in the financial statements, duly audited and attested to and published by the organization for all to see, some of the problems would be minimized, if not eliminated. There exist no studies that focus on social corporate responsibility reporting, in published annual financial statement of companies quoted in Nairobi stock exchange, in recent years.

General Objective

Assess social accounting practice in listed companies in Kenya.

Specific Objectives

(i)   To determine the most popular themes of social accounting disclosed in the annual reports of companies in Kenya.
(ii)   To determine how social accounting is disclosed in the annual reports of companies in Kenya.
(iii)   Determine the location of presentation of social accounting in the annual reports of companies in Kenya.

Justification of the Study

The increase of interest in social and environmental issues has been followed by an increase in academic writing and publications (Mathews, 1995). Gray et al. (1996) argue that social and environmental accounting and reporting play a relevant role in this context as tools for analyzing the sustainability performance of the organizations and note that these have been relevant subject in the academic literature.

In the study of Ponnu and Okoth (2009), investigating corporate social responsibility (CSR) disclosure practices in Kenya, it focused on the disclosure practices of companies listed on the Nairobi Stock Exchange (NSE). It looks at CSR disclosure practices in annual reports and web sites of the companies across different industry groups to determine the relationship between company size and CSR disclosure. The study fails to clearly point out social accounting practice in published annual reports, but gives mixed results of both sources of disclosure. Also the

study focuses on single year 2006, thus fail to give insight on the reporting pattern of companies.

This study establishes social accounting practices in published annual reports that are more authentic than any other sources of disclosure (eg websites, speeches, press releases, flyers, promotional leaflets and other documents). Also this study is a longitudinal study, focusing on three years hence able to give more insight on reporting pattern.

Scope of the Study

This study was carried on public limited companies registered and trading in Kenya. More specifically companies listed in Nairobi Securities Exchanges (NSE). Companies quoted in NSE publish their annual financial statements, thus providing data that is required for carrying this research.

Theoretical Review

The theories within the positivist group offer potential in-depth insights to explain the underlying motivations for corporate social and environmental disclosures. Legitimacy theory explains how an organisation wishing to maintain its license must comply with the expectations of the community in which it operates (Deegan, 2002). Stakeholder theory suggests that an organisation will respond to the concerns and expectations of powerful stakeholders. Institutional theory explains how organizations embrace operating policies that are similar in form to those embraced by powerful stakeholders (DiMaggio & Powell, 1983). Agency theory explains that organisations will take actions to maximise management and shareholder interests (Watts & Zimmerman, 1978). Political cost theory explains that organisations will take actions to reduce their political costs such as those relating to increased taxes and regulation(Watts & Zimmerman, 1978).

Hence, all of these theories seek to identify and predict the driving factors behind the organisational disclosure decisions. While there are some similarities, agency and political cost theory rely upon the economics-based assumptions that all action is driven by individual self-interest (tied to wealth maximization) (Deegan, 2006). Unlike agency and political cost theory, stakeholder, institutional and legitimacy theory do not rely on the central assumption that all action must be driven by individual self-interest. For example, legitimacy theory relies upon the central notion of an organisation's social contract with society and predicts that management will adopt particular strategies (including reporting strategies) in a bid to assure the society that the organisation is complying with the society's values and norms (which are predicted to change over time) (Deegan, 2006).

Research Design and Methodology

Sample and source of data: The unit of analysis is fifty seven companies from four segment listed at NSE for the year of study 2008-2010. These segments are Agricultural segment, Commercial and service segment, Finance and investment segment and Industrial and Allied segment. The study examined the social accounting practice within the financial statement of companies using census method.

Data Analysis and Presentation: Content analysis is defined as a research technique for the objective, systematic and qualitative description of the manifest content of communication (O'Dwyer, 2005). It is clearly defined by Weber (1988) as a method of coding the text or the

content of a piece of writing into various groups or categories based on selected criteria (Jamil et al., 2003). This study used content analysis to measure social accounting disclosure. This method was chosen due to its ability to analyse different types of communication tools including those in written code. Content analysis was used to examine written materials contained in the annual reports. This type of analysis was used due to the fact that this study only focuses on one document, which is the annual report. Content analysis was used in numerous studies on social accounting disclosures (Gray et al., 1995; Jamil et al., 2003; Kuasirikun and Sheen, 2004).

Descriptive analysis: By using content analysis, the researcher has codified the written material in the annual reports into four (4) themes namely; human resources, environment, consumer and product and community involvement. The data was analyzed using descriptive analysis with aid of Statistical package for social sciences (SPSS-Ver18)

Results and Discussion

Adoption of Social Accounting

Table1 Frequency distribution table of companies that have adopted SA

	2008		2009		2010	
	Frequency	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Yes	41	72	43	75	46	81
No	16	28	14	25	11	19

From table 1 it was found that 72% of the companies trading in NSE in 2008 were practicing social accounting, 75% in 2009 and 81% in 2010. The trend of adoption of social accounting is above 50% and was improving from 2008 to 2010. This indicates most Kenyan firms are embracing social accounting practice.

Social Accounting Themes

Tables 2 trend of social accounting practice

Themes	2008 (%)	2009 (%)	2010 (%)
Human resource	32	49	61
Environment	47	56	61
Consumer and product	32	49	53
Community involvement	56	61	70

Table 2 shows the trend of social accounting disclosures of themes. Across the period 2008-2010 the disclosure for all themes as steadily grew every year with community involvement leading. The analysis therefore reveals that disclosure of social and environmental activities is specifically on the discretion of the companies.

Format of Presentation

Table 3 format social accounting disclosure in annual reports

	2008(%)	2009(%)	2010(%)
Monetary form	43	43	47
Non- monetary form	57	57	53

From Table 3 shows that in 2008 43% of the companies disclose social accounting information using monetary form and 57% disclose with Non-monetary formats. The year 2009 43% used monetary form and 57 used non monetary format while in 2010 47% used monetary format and 53% in non-monetary form.

Table 4 Non-Monetary Form Presentation

	2008(%)	2009 (%)	2010(%)
Narrative	68	65	62
Picture	29	32	36
Tables and Graphs	3	3	3

Companies prefer narrative form disclosure to pictures and tables and graph. Many companies were also found to have used the non monetary format to disclose human resource information and environmental contribution primarily related to retirement benefit, training and development and some community based projects such as adopting school, scholarships and donations

Location of Disclosure of Social Accounting in Annual Reports

Table 5 location for social accounting disclosure in the annual reports

	2008(%)	2009(%)	2010(%)
Chairman statement	25	22	27
Separate location	75	78	73

Table 5 shows that of the 25% companies disclose social accounting information in the chairman's statement in 2008, while 22% in 2009 and 27% in 2010; 75% disclose social accounting information in the separate location in 2008 while 78% in 2009 and 73% in 2010.His result is also consistent with Mamman (2004) and Ebimobowei (2011) study that Directors report is the most preferred location of social accounting information

Table 6 category of separate location in the annual report

	2008(%)	2009(%)	2010(%)
Corporate governance report	21	25	28
Managing director	21	23	32
Sustainability report	19	19	19
Value added statement	4	4	4
End note	46	51	52

The paper discovers that end note is the most popular location where social accounting information is disclosed by companies in Kenya while value added statement is least used although it's most explanatory.

Conclusion

It was also established that companies engage in long term project such as building school and support of public school, scholarship programs, medical health center for employees and community, sponsorship of sports, waste management program and continuous product improvement.

Finally, the study found that monetary form of presentation clearly communicates information, and more suitable for making decision that are reliable and relevant, this because non monetary especially narrative provide qualitative data that is difficult to do analysis.

Recommendation

Firms should adopt added value statement, to report on social corporate responsibility. These statements provide clear breakdown of costs and benefits accrued in practice of social accounting.

The government should encourage social corporate responsibility and reporting through use of tax incentives for companies. This would promote companies that have not adopted social accounting adopt and practice.

Companies should adopt reporting of social and environmental accounting in separate section particularly they should use sustainability report to give more details of company's practice in social corporate responsibility.

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DETERMINANTS OF FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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Abstract

Kenya has experienced slowed economic growth between 2006 and 2012. The Central Bank Rate and Repo rate, for instance, rose significantly to 18 per cent and 17.75 per cent respectively during 2011. Under such economic conditions, most industries are expected to register a decline in profitability. The banking industry, however, registered improved performance raising queries on what actually determines the performance of banks in Kenya. The objective of the study, therefore, was to investigate the impact of bank specific characteristics on the financial performance of commercial banks in Kenya. To achieve this objective, the study examines the financial performance of thirty-eight commercial banks in Kenya over a seven-year period from 2006 to 2012 and tests for the factors influencing performance. This study used secondary data from annual published financial statements and bank supervision records at the Central Bank of Kenya (CBK). The data was analyzed using random effects panel data analysis. Regression equations were run for both foreign and local banks together and then each category was regressed separately to check whether both categories had similar effects. Empirical results show that Operational efficiency and financial structure significantly determine performance for commercial banks in Kenya when both local and foreign banks are taken together. The same applies when the regression is run for locally owned banks. However, for foreign banks only operational efficiency is significant. Liquidity was not found to be a significant determinant of financial performance for commercial banks.

Keywords: Financial Performance, operational efficiency, financial structure, liquidity, ownership structure

Introduction

The determinants of the performance of commercial banks can be broadly categorized into two: internal factors and external factors. Internal factors, which are firm specific, are those that are within the control of management. They are either financial (directly involve balance sheet and income statement items) or non financial (no direct relation to financial statements). External factors that affect bank performance are those that are considered beyond the control of the management of a bank (Kharwish, 2011). These external factors could include inflation, gross domestic product, competition, regulation and political stability among others. When evaluating the financial performance of a firm, the first step is evaluating whether it has been able to achieve the objectives its management and stockholders have chosen. In the case of banks, there are three key objectives that need to be achieved. The first is maximizing the value of the bank that is mainly achieved through an increase in the value of a company's stocks (commonly referred to as capital gains). The second objective would be to increase the bank's profitability that may translate to higher dividend payment to stockholders. This is evaluated using the profitability measures/ratios. The third and critical objective of banks would be to ensure there is a proper risk management framework to enable the bank deal with the various risk exposures (Rose and Hudgins, 2013).Commercial banks in Kenya are licensed and regulated pursuant to the provisions of the Banking Act and the regulations and prudential guidelines issued by the

Central Bank of Kenya (CBK). The deliberate move by the Central Bank of Kenya to encourage the participation of small and medium banks has led to the growth of most the banking industry over the last seven years. This implies that more Kenyans today have access to banking and other financial services than it was the case seven years ago. In addition, there have been several developments in the Kenyan banking industry in the recent past. First, the rollout of the agency-banking model in May 2010 has increased accessibility to financial services. Secondly, the introduction of Mobile financial services has made it convenient for Kenyans to transact without having to go to banking halls. Thirdly, in a bid to reduce credit risk for financial institutions the CBK introduced a system of Credit information sharing. Finally, the introduction of Core banking systems has gone a long way in enhancing service delivery within the banking industry. The core banking systems currently being usedby banks are Bankers realm, Flexcube, T24 and Finacle (CBK, 2011).

Macroeconomic variables like inflation rose significantly from 7.6% in January 2006 to 18.3% in January 2012 whereas the CBR also rose significantly from 9.5% to 18% during the same period. Such a rise would have been expected to raise the cost of funds and thereby reduce the demand for loans, which would consequently reduce the profitability of commercial banks. On the contrary the profit before tax for the banking industry for the same period rose from Ksh. 26.38 billion in 2006 to Ksh. 106.99 billion in 2012. This raises the question as to why this happened contrary to the expectations. To answer this question, one needs to know what determines the financial performance of commercial banks in Kenya. Various studies have been undertaken to investigate this but most of these studies have emphasized on the developed markets. Researchers who have investigated this issue in Kenya, for instance Ongore and Kusa (2013) focused on the macroeconomic variables and moderating effects of ownership structure but ignored other critical bank specific variables. This study therefore, studies the bank specific determinants of bank performance in Kenya between 2006 and 2012 during which there were significant developments in the banking industry.

Objectives

The general objective of this study is to investigate the determinants of financial performance of commercial banks in Kenya. The specific objectives of the study are:

1. To determine how the financial structure of Kenyan banks impacts on their financial performance
2. To investigate the impact of a banks liquidity on its financial performance.
3. To investigate the impact of operational efficiency on financial performance of commercial banks in Kenya.
4. To determine how the moderating effect of ownership structure of Kenyan banks impact on their financial performance

Literature review

The behavior of a stock's price is the best indicator of a bank's financial performance because it reflects the markets evaluation of a firm. This indicator, however, is not available for smaller banks and other relatively small financial institutions. This is because these small firms are either not listed or they are not actively traded in the stock exchange market. Financial analysts therefore fall back on surrogates for market value indicators by using profitability ratios (Rose and Hudgins, 2013). Return on assets (ROA) is an indicator of managerial efficiency and it indicates how capable management has been converting assets into net earnings. Return on equity (ROE) shows the rate of return that has been flowing to shareholders i.e. the benefits that

the stockholders have received from investing their capital into the firm. Both the net interest margin (NIM) and the net operating margin are efficiency measures as well as profitability measures indicating how well management has been able to keep the growth of revenues ahead of rising costs. The net interest margin (NIM) measures how large a spread between interest revenues and interest cost management has been able to achieve by close control over earning assets and pursuit of cheaper source of funding. Many authorities prefer to use total earning assets in the denominator of the net interest margin since the net interest income should not be compared to all assets but to those assets that account for the majority of the income (Rose and Hudgins, 2013).

The ownership structure can either be represented by the shares of stock owned by the various groups of shareholders or the proportion (concentration) of each. The financial manager is expected to act in the best interest of the stockholders by taking actions that increase the value of the stock. However, it is not always the case that financial managers act in the interest of stockholders. Firms will therefore incur agency costs to deal with the agency problem that may arise. Ownership structure and board changes determine how the assets are allocated to different uses and different management teams in response to changes in business conditions (Sarin and David, 1998). Consequently, financial performance of the firms will be affected by the ownership strucure. Ntaw and Laryea (2012) compared the financial performance of foreign and local banks in Ghana for a six-year period from 2005 to 2010. Their findings showed that local banks in Ghana were performing better than their foreign counterparts. Foreign banks in Poland between 1997 and 2001 exhibited higher productivity of their inputs (technical efficiency) and the choice in the right mix of inputs in light of given prices (allocative efficiency) is superior (Havrylchyk, 2005). Berger et al (2007) showed that the "big four" state owned banks in China are by far the least efficient; foreign owned banks are most efficient and minority foreign ownership is associated with significantly improved efficiency. This shows that there is a relationship between ownership structure and efficiency.

Liquidity management is a continuous process of raising new funds in the case of a deficit or investing new excess resources when there are excess of funds. Ultimately, in liquidity management, the benchmark remains the cash matching case, where both assets and liabilities amortize in parallel (Bessis, 2002). Liquidity risk is the risk that a bank is unable to meet its liabilities when they fall due. It is normally associated with the liability side of the balance sheet when the depositors unexpectedly withdraw their financial claims. Banks can also experience liquidity problems on the asset side of the balance sheet caused by a large number of unexpected loan defaults. Liquidity of a bank is therefore a critical aspect of bank management and ought to be managed carefully (Heffernan, 2005).Ongore and Kusa (2013) showed that liquidity management had no significant effect on the performance of commercial banks in Kenya. Performance is not about keeping high liquid assets. Liquidity therefore has lesser effects on performance of commercial banks. The second Basel accord was designed to create an international standard for banking regulators to control the amount of capital banks need to put aside to guard against the risks that the banks are faced with. It was developed with a view of strengthening global capital and liquidity regulations for the banking sector. The liquidity coverage ratio, for instance, was designed to promote short term resilience of the liquidity risk profile of banks by ensuring that they have sufficient high quality liquid assets to survive a significant stress scenario lasting thirty calendar days. The net stable funding ratio was designed to promote resilience over a longer time horizon by creating additional incentives for banks to fund their activities with more stable sources of funding on an ongoing basis. The third Basel accord was then developed to address the weaknesses of Basel II in relation to the capital adequacy requirements, leverage ratio and liquidity requirements. Basel III supersedes Basel II.

One of the key internal factors that determine the banks' profitability is operational efficiency.In an effort to maximize profitability and the value of shareholders investment in a financial institution, many financial firms recognize the need for greater efficiency in their operations. This entails the reduction in the operating expenses and increasing employee productivity. During the 2007 – 2009 global financial crises, most financial firms were under pressure to enhance efficiency by lowering costs. Job cuts therefore became a key management target (Rose and Hudgins, 2013). Operational efficiency shows how effectively management utilizes a bank`s assets to generate revenue. Banks with higher non performing loan ratios have lower operating efficiency and those with higher capital adequacy ratios have got higher operating efficiency (Hsiao et al, 2010). Sufian (2009) investigated the determinants of bank efficiency during unstable macroeconomic environment with empirical evidence from Malaysia. Their findings suggest that technical efficiency is positively and significantly associated with loans intensity suggesting that banks with higher loan to asset ratio exhibit higher efficiency scores. He also suggested that efficient cost management is a prerequisite for improved efficiency of the Malaysian banking system. Efficiency in cost management can be assessed using the cost to income ratio.

Myers (1984) contrasted two ways of thinking about capital structure. The first is the static trade-off framework, in which the firm is viewed as setting a target debt to value ratio and gradually moving towards it, just the same way a firm adjusts dividends to move towards a target payout ratio. Under this framework, optimal capital structure is reached when tax advantage to borrowing (tax shield) is balanced, at the margin, by cost of financial distress. This is contrasted against the old-fashioned pecking order framework in which the firm prefers internal to external financing and debt to equity if it issues securities. In the pure pecking order theory, the firm has no well-defined target to value ratio. Modigliani and Miller (1958) argued that the firm's overall weighted average cost of capital is not influenced by changes in capital structure i.e. capital structure is irrelevant. Their proposition was that in the absence of tax, a company's capital structure would have no impact upon its weighted average cost of capital (WACC). The ownership structure can either be represented by the shares of stock owned by the various groups of shareholders or the proportion (concentration) of each. Euysung (2004) show that there is a significant relationship between equity ratio and productivity performance thereby suggesting that the use of equity financing allows greater flexibility and discretion leading to greater innovative activities than the use of debt. Corporate ownership and capital structure decisions may reflect the attempts to mitigate agency problems between various stakeholders, especially shareholders and management. Corporate ownership is sometimes organized so as to maximize firm's value, accounting for potential conflict of interest between controlling shareholders and minority investors. Managerial (insider) ownership has the effect of addressing the agency problem thereby reducing the agency costs (Coles, et al, 2011).

Conceptual framework

The conceptual framework below shows the relationship between the dependent and independent variables. The dependent variable in this study is financial performance, which is represented by the ROA. The independent variables are financial structure (represented by debt to equity ratio); bank liquidity; and operational efficiency (represented by the cost to income ratio). The moderating variable in this study is ownership structure represented by the percentage of foreign and local shareholding. The conceptual framework was developed from the review of literature discussed above and assumes a linear relationship between the variables. Below is a diagrammatic representation of the conceptual framework.
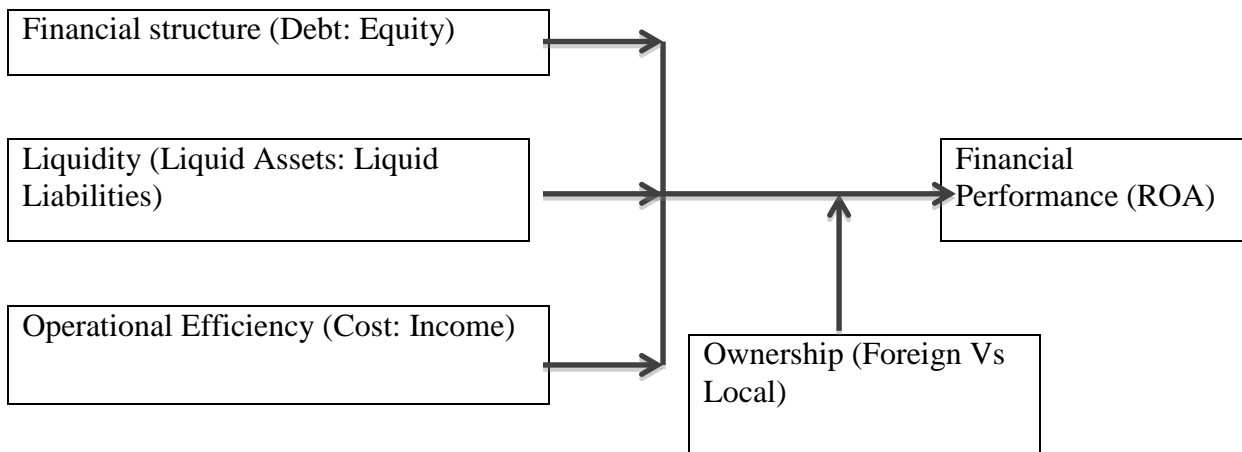
Figure 1.1: Diagrammatic presentation of conceptual framework

Research methodology, findings and discussions

This study adopted an explanatory research design. The researcher incorporates 38 out of the 43 commercial banks operating in Kenya and focuses on the period between 2006 and 2012. This choice of 38 banks was guided by econometric theory for panel data analysis, which advocates for balanced panels for better regression results (Baltagi, 2005). This study relied primarily on secondary data i.e. annual published financial statements for the banks under study as well as bank supervision records at the Central Bank of Kenya (CBK). The researcher first analyzed both foreign and local banks together. The data was then divided into two sets, foreign and local, and regression analysis done on each set to eliminate the effects of the dummy variable representing ownership structure. Ratio analysis was employed to calculate the liquidity, efficiency and profitability measures by running the data through excel. The data was then analyzed using normal regression analysis and random effects panel data analysis.

Model Specification

The dependent variable in this study is financial performance as recommended and used in most studies in the commercial banking sector. Naceur (2003) used NIM and ROA as the dependant variables to analyze the determinants of profitability of commercial banks in Tunisia. Qin and Pastory (2012) and Munyambonera (2007) both used ROA as the dependent variables in assessing the determinants of financial performance of commercial banks in Tunisia and Sub-Saharan Africa respectively. The linear equation showing the relationship between the bank`s performance and the bank specific factors is as follows:

$$Perf_{i,t} = f\ (FS_{i,t} + \varepsilon_i)$$

$$i = 1 \ldots\ldots N;\ t = 1 \ldots\ldots N$$

Whereby $Perf_{i,t}$ represents the performance measure for bank *i* at time *t* (in this case ROA); $FS_{i,t}$ are the bank specific factors for bank *i* at time *t* (in this case operational efficiency, liquidity, financial structure and ownership); and ε_i represents the error term.

In this study, the researcher uses the random effects regression model due to the utilization of a dummy variable as defined below:

Model 1 (combined): $ROA_{it} = \alpha_{it} + \beta1 LEV1_{it} + \beta2 OS2_{it} + \beta3 LALL3_{it} + \beta4 CIR4_{it} + \varepsilon_{it}$….. (1)

Model 2 (foreign): $ROA_{it} = \alpha_{it} + \beta1 LEV1_{it} + \beta2 LALL2_{it} + \beta3 CIR3_{it} + \varepsilon_{it}$……………….... (2)

Model 3 (local): $ROA_{it} = \alpha_{it} + \beta1 LEV1_{it} + \beta2 LALL2_{it} + \beta3 CIR3_{it} + \varepsilon_{it}$……………………. (3)

Where;

ROA_{it} = Return on Assets for bank *i* at time *t*

α_{it} = Intercept/constant

$LEV1_{it}$ = Debt to equity ratio for bank *i* at time *t*

$OS2_{it}$ = Ownership structure for bank *i* at time *t*

$LALL3_{it}$= Liquidity ratio for bank *i* at time *t*

$CIR4_{it}$ = Cost to income ratio for bank *i* at time *t*

ε_{it} = Error term where *i* is cross sectional and *t* is time identifier

β1- β4 = Coefficients of parameters

Diagnostic tests

The researcher first tested the suitability of the model so as to determine the reliability of the results. The im-pesara-shin unit-root test showed that all variables are stationary at integration level one and have a long run relationship. The variables are normally distributed and white's test shows no problem of heteroskedasticity and autocorrelation in the data set as shown below:

Table 2.1: Summary of Heteroskedasticity and auto-correlation test

Chi2 (9)   = 84.46

Prob > Chi2   = 0.000

Source	Chi2	df	P
Heteroskedasticity	84.46	9	0.0000
Skewness	4.93	3	1.1771
Kurtosis	7.47	1	0.0063
Total	96.85	13	0.0000

Descriptive statistics

The mean leverage ratio was 45.16% with a standard deviation of 0.9084 whereas the mean liquidity of the commercial banks was 0.4593 with a standard deviation of 0.1876. This implies that the banking industry maintained an average liquidity ratio of 45.93%. The banking industry had a mean cost to income ratio of 79.41% and a standard deviation of 1.2922. This implies that 79.41% of the income generated by the banking sector was spent on operating costs. Ownership structure had a mean and a standard deviation of 0.2894 and 0.4543 respectively.

Table 2.2: Summary of descriptive statistics

VARIABLE	OBSERVATIONS	MEAN	STANDARD	MINIMUM	MAXIMUM
LEV	266	0.4516	0.9084236	0	10.42427
LALL	266	0.4593	0.1876691	0.188	1.69
CIR	266	0.7941	1.292274	0.1530106	18.28962
OS	266	0.2894	0.454373	0	1
ROA	266	0.0207	0.0184363	-0.0706039	0.0862196

Normal regression

As shown below, the F-Value is 13.71 and the P-Value is 0.00. This means that at 5% significant level, this model is suitable. Due to the utilization of a dummy variable, the researcher used the random effects regression model in his study.

Table 2.3: Normal regression results

VARIABLE	COEFFICIENT	STD. ERROR	t-VALUE	P VALUE
LEV	-.0043298	.0012514	-3.46	0.001
LALL	-.0053833	.0058253	-0.92	0.356
CIR	-.0039838	.0008655	-4.60	0.000
OS	.0048141	.0024087	2.00	0.047
CONSTANT	.0262712	.0028681	9.16	0.000

$F_{(4, 261)} = 13.71$

$P > F = 0.000$

Regression results

The researcher used multiple regression analysis to investigate the relationship between ROA and leverage, liquidity, ownership structure and the cost to income ratio for the banking industry in KenyaThe decision whether to accept or reject the hypothesis being tested was made based on the students t statistic (or Z value) or the P-Values. The t statistic was used for small sample sizes whereas the Z value was used for large sample sizes.

Table 2.4: Summary of regression results for both foreign and local banks

VARIABLE	COEFFICIENT	STANDARD	Z VALUE	P VALUES AT 95%
LEV	-0.0029674	0.0011159	-2.66	0.008
OS	0.0036197	0.0041937	0.86	0.388
LALL	0.0043303	0.0060388	0.72	0.473
CIR	-0.0025709	0.0006956	-3.30	0.000
CONSTANT	0.020418	0.0034229	6.16	0.000

Table 2.5: Summary of regression results for foreign banks

VARIABLE	COEFFICIENT	STANDARD	t - VALUE	P VALUES AT 95%
LEV	-0.0000367	0.0024058	-0.02	0.988
LALL	0.0167125	0.0096129	1.74	0.086
CIR	-0.0100497	0.0026339	-3.82	0.000
CONSTANT	0.0209069	0.0057201	3.65	0.000

Table 2.6: Summary of regression results for local banks

VARIABLE	COEFFICIENT	STANDARD	t - VALUE	P VALUES AT 95%
LEV	-0.0188768	0.0070703	-2.67	0.008
LALL	-0.0034047	0.0019994	-1.70	0.090
CIR	-0.0026113	0.0009391	-2.78	0.006
CONSTANT	0.0305735	0.0034366	8.90	0.000

From the regression results above, the regression models will be written as follows:

Model 1 ROA = 0.02041–0.002967LEV+0.003619OS+0.004330LALL–0.002570CIR …… (1)

Model 2 (foreign): ROA = 0.0209069–0.0000367LEV+0.016712LALL–0.010049CIR …… (2)

Model 3 (local): ROA = 0.0305735–0.0188768LEV-0.0034047LALL–0.0026113CIR …… (3)

Discussion of regression results

There is a negative relationship between ROA and leverage. This means that increasing the debt to equity ratio in the Kenyan banking industry beyond the optimum level will negatively impact on the ROA. This optimal level, however, is fluid and varies from one bank to another. This is consistent with the static trade off framework, which postulates that optimal capital structure is reached when the tax advantage to borrowing (tax shield) is balanced, at the margin, by the cost of financial distress (Myers, 1984). This shows that high leverage significantly affects ROA of the local banks but is not significant to foreign banks in Kenya. From the $\beta 1$ coefficient in the regression model above, a 0.296% change in leverage changes ROA by 1%. Therefore, increasing debt for local banks beyond the optimal level by 0.3% reduces the ROA by 1%.

Although there is a positive relationship between ownership structure and ROA, it is insignificant at a 5% confidence level. This is consistent with Ongore and Kusa (2013) findings. This lack of significance can be explained by the recent emergence of local banks from loss making periods in the earlier years. Local banks like Equity Bank, Kenya Commercial Bank and Cooperative bank have in the recent past dominated the banking industry in terms of profitability, growth as well as market share.

Liquidity is also insignificant at 5% level thus has lesser effect on the financial performance of commercial banks in Kenya for the period under study. It is worth noting that although there is a positive relationship between ROA and liquidity, this relationship holds only up to a certain level beyond which it is detrimental to commercial banks. Excess liquidity is a sign that bank lending is low and banks are holding more money for precautionary purposes (Munyambonera, 2007).

There is a negative relationship between CIR and ROA meaning that as the CIR increases, the ROA decreases. The results are similar for the two groups of banks i.e. foreign and local. A 0.26% increase in the operating costs results to a 1% decrease in ROA. These findings are significant at 5% confidence level in both cases. This is consistent with theory that high operational costs negatively affect bank profitability and consequently ROA (Munyambonera, 2007). Ongore and Kusa (2013) showed that management efficiency significantly affects financial performance of commercial banks in Kenya.

Conclusion and recommendations

The findings of this empirical study show that despite the fact that both ownership structure and liquidity have a positive relationship with ROA, they are not significant determinants of financial performance for commercial banks in Kenya for the time period under study. Although liquidity management is critical in the management of banks, holding high liquid assets does not translate to improved financial performance. This is because holding high liquid assets means that the opportunity cost is also relatively high. There is a negative relationship between operational efficiency and financial structure and both are significant determinants of financial performance for commercial banks in Kenya. However, financial structure is only significant for local banks. Banks with high operational efficiency, therefore, are more profitable than the less efficient banks. Banks with very high debt levels are less profitable than those with low debt levels. This however does not mean that banks should not obtain debt financing. Reasonable levels of debt should be maintained such that they take advantage of the tax shield.

From the analysis done, the researcher recommends thatthe banks with an ROA of less than 1% should improve on their operational efficiency by maintaining a CIR that is lower than the mean CIR of 79.41. These banks can manage their costs by implementing a budgetary process such as the zero based budgeting whereby all expenses are justified at the beginning of the budgeting process. This will assist in eliminating some of the redundancies. In addition, variance analysis should be undertaken continuously to ensure that the costs are monitored adequately. These banks should also embrace the use of alternate banking channels such as mobile banking services. This approach should be based on the Kaizen principal of continuous improvement. Unlike foreign banks, financial performance for local banks is significantly affected by leverage. The local commercial banks should therefore design strategies to ensure that they reduce the reliance on debt. Customer deposits are cheap sources of funds thus it will enable banks to maximize on interest spread, which will mean higher profitability. The local banks can also explore the possibility of borrowing from the foreign debt market which usually provides cheaper financing than the local debt market. However, the effects of the interest rate parity should be considered before going to the global debt market.

Future Research

This study only focuses on one measure of financial structure, liquidity management and operational efficiency as determinants of financial performance for commercial banks in Kenya. Future research could focus on operational efficiency alone and incorporate several measures of operational efficiency to determine what aspect of efficiency is most significant in determining financial performance. Further research can also be done to assess the role of liquidity management as a risk management tool in bank management.

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THE EFFECT OF DIVIDEND POLICY ON FINANCIAL PERFORMANCE OF FIRMS LISTED IN THE NAIROBI SECURITIES EXCHANGE (NSE).

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Abstract

Several theories have been documented on the relevance and irrelevance of dividend policy. Many authors continue to come up with different findings from their studies on the relevance of dividend policy. This study was set out to establish the effect of dividend policy on financial performance of firms listed in the Nairobi Securities Exchange (NSE) of Kenya. Multiple linear regression analysis was carried out to establish the relationship between dividend payout and financial performance. This analysis unveils a strong positive relationship between a dividend increase and an increase in the earnings. The findings of this study also reveal that these firms are highly flexible in setting their dividend policy, changing it frequently. Further, with univariate analysis the study also find support for the Lintner view, where the management only increases the dividends when earnings are expected to increase permanently. It can be concluded, based on the findings of this study that dividend policy is relevant and that managers should devote adequate time in designing a dividend policy that will enhance firm performance and therefore shareholder value.

Keywords: Dividend policy, dividend payout, financial performance.

Introduction

The patterns of corporate dividend policies not only vary over time but also across countries, especially between developed, developing and emerging capital markets. Glen et al., (1995) found that dividend policies in emerging markets differed from those in developed markets. They reported that dividend payout ratios in developing countries were only about two thirds of that of developed countries. Ramcharran (2001) observed that there are low dividend yields for emerging markets. There has been emerging consensus that there is no single explanation of dividends. According to Easterbrook (1984) there is no reason to believe that corporate dividend policy is driven by a single goal. In addition, not much research has been done on the effect of dividend policy on financial performance.

According to Black (1976), the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that do not fit together. The subject matter of dividend policy remains one of the most controversial issues in corporate finance. Indeed the dividend policy of a company determines what proportion of earnings is distributed to the shareholders by way of dividends, and what proportion is ploughed back for reinvestment purposes. Since the main objective of financial management is to maximize the market value of equity shares, one key area of study is the effect of dividend policy on financial performance.

Although companies can change their dividend policies it is advisable that each company establishes its own dividend policy and stick to it because frequent changes can inconvenience existing stockholders, send unintended signals, and convey the impression of dividend instability, all of which can have negative implications for stock prices particularly when lower or no dividends are paid. At the same time companies must meet their debt obligations before

declaring dividends because interest on borrowed funds must be paid whether the company makes profits or not. However, shareholders are entitled to a share as the reward for the risk they have taken in investing in the company. The Board of Directors may balance up these two demands on the profit, and will then recommend the size of the dividend they think is appropriate (Chebii et al., 2011).

In light of the above, it is important to note that dividend policy has an effect on financial performance. This study unfolds the various effects that payment or non payment of dividend has on financial performance of firms listed in the Nairobi Securities Exchange.

Literature review

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues and expand its operations (Copisarow, 2000). Financial performance can be measured in many different ways, but all these ways should be aggregated. Revenue from operations, operating income or cash flow from operations can be used as well as total unit sales. According to Demsetz and Lehn (1985), financial ratios from financial statements are a good source of data to measure financial performance. Liquidity is one of the most outstanding financial ratios used a measure of the firm's ability to meet financial obligations as and when they fall due without disrupting the normal business operations. Liquidity can be analysed both structurally and operationally.

Financial performance can also be measured in terms of net earnings which are divided into two parts, that is, retained earnings and dividends. The retained earnings of the business may be reinvested and treated as a source of long-term funds. The dividend should be distributed to the shareholders in order to maximize their wealth as they have invested their money in the expectation of being made better off financially. Nairobi Securities Exchange publication (2010) shows that CMC Holdings limited increased their payout ratio from 27.49% in 2009 to 28.28% in 2010 thus impacting positively on the stock prices from Ksh 15.35 in 2008 to Ksh 18.85 in 2009. It also shows that CFC Stanbic Bank limited changed their payout ratio from 32.05% in 2009 to 16.16% in 2010 thus impacting negatively on the stock prices from Ksh 129.00 in 2007 to Ksh 60.00 in 2008. Therefore, dividend policy has an effect on the share prices of NSE which in turn translates to financial performance based on shares turn over.

According to Maina (2000), there exists a relationship between dividend and investment decisions since both compete for internally sourced funds and given that funds obtained by debt are very expensive and not available to all firms. There are other theories that have been proposed to explain the relevance of dividend policy and it is effect on firm performance, but no universal agreement has been reached (Stulz, 2000; Pandey, 2003; DeAngelo et al., 2006). A group of researchers: Amidu (2007), Lie (2005), Zhou and Ruland (2006), Howatt et al., (2009), have come up with different findings about the relationship between dividend payout and financial performance.

Profitability is a type of performance measure which focuses on the relationship between revenues and expenses and on the level of profits with relative to the size of investment in the business (Zhou and Ruland, 2006). Four most commonly noted measures of firm profitability are: the rate of return on firm's total assets (ROA), the rate of return on firm's equity (ROE), operating profit margin and net firm income. Different measures of firm performance have also been employed to test agency cost hypothesis. It is argued that profit efficiency computed using a profit function is a more appropriate measure to test agency cost theory because it controls for the effects of local market prices and other exogenous factors. It also provides a reasonable

benchmark for each individual firm's performance if agency costs were minimized. Profit efficiency is superior to cost efficiency for evaluating the performance of managers, since it accounts for how well managers raise revenues as well as control costs and is closer to the concept of value maximization. Profit efficiency is measured in two different ways, that is, standard profit efficiency and alternative profit efficiency.

According to Arnott and Asness (2003) the positive relationship between current dividend payout and future earnings growth is based on the free cash flow theory. Low dividend resulting in low growth may be as a result of suboptimal investment and less than ideal projects by managers with excess free cash flows at their disposal. This is prominent for firms with limited growth opportunities or a tendency towards over-investment. Paying substantial dividends which in turn would require managers to raise funds from issuance of shares, may subject management to more scrutiny, reduce conflicts of interest and thus curtail suboptimal investment. This is based on the assumption that suboptimal investments lays the foundation for poor earnings growth in the future whereas discipline and a minimization of conflicts will enhance growth of future earnings through carefully chosen projects. Therefore, paying dividends to reduce the free cash flows enhances the performance of a company since managers will have less cash flow thus avoiding suboptimal investments.

Statement of the Problem

Managements are in a dilemma about whether to pay a large, small or zero percentage of their earnings as dividends or to retain them for future investments. This is as a result of the need for management to satisfy the various needs of shareholders. For instance, shareholders who need money now for profitable investment opportunities would like to receive high dividends now. On the other hand, shareholders who would like to invest in the future will prefer dividends to be retained by the company and be reinvested in order to generate more returns in future (Amidu, 2007). Due to these competing interests of shareholders, the kind of dividend policy adopted by management may have either a positive or negative effect on financial performance of the firm as measured by market price per share (MPS). Firms may have low dividend payout because management is optimistic about the firm's future and therefore wishes to retain their earnings for further expansion. This raises the issue as to whether a high payout ratio is better than a low payout ratio and how this is connected to investor's perspective of the firm in its future operations.   There exist a number of studies (Arnott and Asness 2003, Farsio et al., 2004 and Nissim and Ziv 2001) that have researched on the relationship between dividend policy and financial performance but it still remains an unresolved issue in corporate finance. These studies established that there exist a strong positive relationship between dividend policy and financial performance in developed economies. A problem arises as to whether the findings of those studies can be replicated in emerging economies or infant capital markets like Kenya. In Kenya, a few empirical studies have been done to establish the relationship between dividend policy and financial performance. This study sets in to fill the gap by establishing whether the dividend policy adopted by management has an effect on financial performance in the Kenyan scenario.

Objectives of the study

The main focus of the study was on the effect of dividend policy on financial performance of firms listed in the Nairobi Securities Exchange.

Specific objectives

To establish the relationship between dividend payout ratio and financial performance among firms listed in the Nairobi Securities Exchange.

To determine the effect of change of dividend policy on financial performance of firms listed in the Nairobi Securities Exchange.

Research Questions

What relationship exists between dividend payout practices and financial performance of firms listed in the Nairobi Securities Exchange?.

What is the relationship between change of dividend policy and financial performance of firms listed in the Nairobi Securities Exchange?

Justification of the Study

During the past eleven years, business trends have been moving towards globalization and the number of multinational corporations continues to grow. Newly developed information technology allows investors around the world to trade stocks in other countries without physically crossing borders through electronic commerce. The impact of electronic commerce is normally described by the words "the world has become a small village" while referring to the World Wide Web. This in turn has fostered intense competition among firms. Dividend policy decisions are, therefore, one of the key factors that influence the financial performance for public limited companies. Management should not ignore the effect brought about by dividend policy on financial performance when setting policies to the investors who invest in shares, and to the financial economists who endeavour to understand and appraise the functions of the capital markets.

The findings of this research project report is instrumental and can help establish a dividend policy that can be acceptable to the various stakeholders in public limited companies in Kenya. Companies listed at the NSE also stand to benefit out of the findings of this research project report in the same manner. A number of other beneficiaries include: the CMA who can use the findings to assess the dividend trends in the recent past, KRA who will use the information in assessing limitations of dividend policy on amount of revenue realized and public limited companies in Kenya. Lastly, this study is meant to trigger aspiring researchers to explore more dimensions in issues attached to this research project report.

Research methodology

This chapter gives a description of the research methodology employed in achieving the objectives of this study. The chapter presents the research design, target population and sampling procedure, data collection procedures, and data analysis and presentation.

Research Design

The research design is multiple linear regressions since it sought to establish the relationship between dividend payout and firm performance. The data used in this research was obtained from the annual reports of companies listed in the Nairobi Securities Exchange for a ten year period that is, from 2002-2011. Dividend payout was measured by the actual dividends paid out

and firm performance was measured by the net profit after tax. Regression analysis was carried out to establish the relationship between dividend policy and financial performance.

Target Population and Sampling Procedure

The population for this study consisted of the firms listed on the Nairobi Securities Exchange. The NSE classified these companies into ten sectors. These are; agricultural, commercial and services, telecommunication and technology, automobiles and accessories, banking, insurance, investment, manufacturing and allied, construction and allied, energy and petroleum (NSE, 2012). The secondary data for regression analysis was gathered from twenty nine companies listed in the Nairobi Securities Exchange. The companies were selected based on the availability of information. Companies suspended from the Nairobi Securities Exchange were also studied since they had the relevant data.

Data Collection

This study made use of secondary data that was obtained from the firm's annual reports most of which are publicly available. This was for a ten year period, that is, from the year 2002 -2011. The data mainly comprised the financial statements, that is, income statement and statements of financial statements. Common ratios as reported were also employed in this study.

Data Analysis and Presentation

Data analysis is the process of bringing order, structure and meaning of the mass of data collected (Mugenda and Mugenda, 2003). The collected data was edited for completeness, consistency and accuracy. The results of the study are presented in tables. Dividend payout ratio was measured by dividing the actual dividends paid out by profit for the year. The independent variables include: Dividend payout ratio (DPR) and dividend policy (DP). The study uses accounting measures of performance such as Return on Assets (ROA) and Return on Equity (ROE) as the dependent variables. However, as a robustness check, the study also uses Tobin's Q as a proxy for market based measures ratio. The "Q" is defined as the ratio of the market value of assets (defined as the book value of assets, plus the market value of common stock, minus the book value of common stock, minus deferred tax expense) to book value of assets. The explanatory variables include dividend policy (POLICY) and the payout ratio (PAY) which is given as dividend per share divided by earnings per share.

The companies selected ranged from old to newly established ones, and some companies had erratic distribution of dividends during the study period. Therefore the number of observations for each company is different. The general form of the regression data model can be specified more compactly as:

$$Y_{it} = \alpha + \beta X_{it} + e_{it}$$

The subscript i represent the cross-sectional dimension and t denote the time-series dimension. The left-hand variable Y_{it}, represents the dependent variable in the model, which is the firm's financial performance. X_{it}, contains the set of independent variables in the estimation model, is taken to be constant over time t and specific to the individual cross-sectional unit i. If α is taken to be the same across all units, Ordinary Least Squares (OLS) provides a consistent and efficient estimate of α and β. The model takes the following form:

$$ROA_{i,t} = \beta_o + \beta_1 POLICY_{i,t} + \beta_2 PAY_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 LEV_{i,t} + \beta_5 GROWTH_{i,t} + e$$

$$ROE_{i,t} = \beta_o + \beta_1 POLICY_{i,t} + \beta_2 PAY_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 LEV_{i,t} + \beta_5 GROWTH_{i,t} + e$$

Where:

$ROA_{i,t}$ = ratio of pre-tax profits to total assets for firm i in period t;

$ROE_{i,t}$ = ratio of post-tax profits to equity for firm i in period t;

$TOBIN'Sq_{i,t}$ = ratio of market value of assets to book value of assets for firm i in period t;

$POLICY_{i,t}$ = dummy variable for dividend policy for firm i in period t;

$PAY_{i,t}$ = dividend per share divided by earning per share for firm i in period t;

$SIZE_{i,t}$ = log of total assets for firm i in period t;

$LEV_{i,t}$ = ratio of total debt to total capital for firm i in period t;

$GROWTH_{i,t}$ = growth in sales for firm i in period t;

e = the error term.

Results

The study was done for the 29 companies listed in Nairobi Securities Exchange. The data for regression analysis was drawn mainly from the financial statements for a ten year period, that is, 2002-2011.

Descriptive Statistics

Table 3.1 provides a summary of the descriptive statistics of the dependent and explanatory variables. The mean and median of Return on Assets (ROA) measured by firm pre-tax profit divided by total assets of sampled firms was 0.1009 and 0.0993 respectively.

Table 3.1 Descriptive statistics of companies listed in the NSE

	Mean	Standard Deviation	Maximum	Median	Minimum
ROA	0.1009	0.2577	0.5876	0.0993	-2.9220
ROE	0.2744	0.3160	1.2800	0.2204	-0.6479
Tobin's Q	1.0197	0.7401	3.9009	0.9810	-1.6450
POLICY	0.7283	0.4461	1.0000	1.0800	0.0000
PAY	0.3721	0.3920	3.6261	0.3388	0.0000
SIZE	3,800,000	12,480,000	94,200,000	106,400	951
LEVERAGE	0.6229	0.6123	7.8496	0.5443	0.0004
GROWTH	0.3221	0.3025	1.3597	0.2806	-0.7500

However, the average and median of Return on Equity (ROE) is 27.44% and 22.04% respectively and the average and median of market to book value for the firms is 1.0197 and 0.9810 respectively. The mean of dividend policy is 72.83% and it has a median of 100.00%.

This means that on average more than 70% of the firms listed on NSE have a policy to pay dividend with the average dividend payout ratio (measured as dividend per share/earnings per share) being 37.21% and a median of 33.88%. Firms listed on the NSE on average pay about 37% of their profits as dividends with the 64% of the earnings retained for future growth needs of the firms. The firm size, determined as the natural logarithm of total assets has a mean of Ksh. 3,800,000. Debt to equity ratio on average is 62.29. The average growth rate in sales is 32.21%.

Regression Results

Table 3.2 comprises of regression results between the dependent variable, dividend policy, and explanatory variables. The R2 indicates that 74 percent of the firms' return on assets is explained by the variables in the model. The results show a positive and significant relationship between return on assets and dividend policy. The significance and the positive coefficient of the regressor, dividend policy, indicate that when a firm has a policy to pay dividend it influences its profitability. This is in line with the information content of dividend or signaling theory (Bhattacharya, 1979; John and William, 1985 and Miller and Rock, 1985). This finding is also consistent with empirical evidence that dividend policy affects a firm share price (Allen and Michaely, 2002; Gordon, 1961, 1962; Ross, et al., 2002; Shefrin and Statman, 1984; Easterbrook, 1984).

The dividend payout ratio was included in the model to assess whether if a firm policy to pay dividend affects its return on assets. The results indicate a statistically significant and negative relationship between profitability and dividend payout ratio. The negative coefficient could mean that if a firm pays dividend it reduces its retained earnings which affect its internally generated finance. The dividend payout ratio is measured as dividend per share divided by earnings per share.

Table 3.2: Regression Model Results (Dependent variable: ROA)

Variable	Coefficient	Std. Error	t-Statistic	Probability
CONSTANT	0.0449	0.01026	4.377015	0.0000
POLICY	0.1044	0.01370	7.620510	0.0000
PAY	-0.0670	0.01946	-3.447654	0.0007
SIZE	-4.32E-16	8.75E-16	-0.494354	06218
LEV	-0.0030	0.00764	-0.392337	0.6954
GROWTH	0.0174	0.00713	2.445936	0.0156
R-squared	0.7419	Mean dependent var.		0.4588
Adjusted R-squared	0.6907	S.D. dependent var.		0.3657
S.E. of regression	0.2034			

Table 3.2 also shows how some of the other firm level characteristics affect firm's profitability on the NSE. The study selected firm size, leverage and future growth opportunity. The results show that the coefficient of firm size and leverage are negative and statistically insignificant for the regression data estimations. The results reveal that, for listed firms on NSE, size and leverage do not necessarily influence their return on assets. Surprisingly, the negative association of firm's size and return on assets indicates that, increasing size is associated with decrease in profitability. However, this position is a contradiction of existing literature. Growth in sales is used as proxy for the firm's future prospects and investment opportunities. The variable has a statistically significant positive relationship with financial performance of firms

listed on the NSE. Thus it indicates that growing firms have a prospect of generating more returns for it owners.

To check the robustness of the results and to avoid the problem of multicollinearity, the correlation between return of asset, return on equity and Tobin's Q, were constructed. The return on equity is regressed against the five explanatory variables. These variables include dividend policy, dividend payout ratio, size, leverage and growth as presented in table 3.3.

The results indicate that dividend policy is positive, and statistically significant in explaining their return on equity. The results also show that there is negative relationship between return on equity on one hand and dividend payout ratio and leverage on the other hand. Apart from the size, the variables included in the model produced similar results.

The results with Tobin's q produced contra results. Table 3.4 shows that market value of firms has a negative relationship with dividend policy and the firm's size but is positively related to dividend payout ratio, leverage and growth. Surprisingly, the coefficients of all the variables are statistically insignificant. This means that the share value of a firm listed on NSE is determined by variables other than the payout ratio, size, leverage and growth.

Table 3.3: Regression model results (Dependent variable: ROE)

Variable	Coefficient	Std. Error	t-Statistic	Probability
CONSTANT	0.082966	0.049111	1.689333	0.0932
POLICY	0.374129	0.063084	5.930664	0.0000
PAY	-0.230462	0.059746	-3.857360	0.0002
SIZE	4.79E-15	3.68E-15	1.301732	0.1950
LEV	-0.016899	0.029647	-0.569992	0.5695
GROWTH	0.015629	0.036929	0.423223	0.6727
R-squared	0.842403	Mean dependent var.		0.273715
Adjusted R-squared	0.569683	S.D. dependent var.		0.310017
S.E. of regression	0.203367			

Table 3.4: Regression model results (Dependent variable: Tobin's Q)

Variable	Coefficient	Std. Error	t-Statistic	Probability
CONSTANT	0.888754	0.149329	5.951669	0.0000
POLICY	-0.013534	0.187314	-0.072251	0.9425
PAY	0.231873	0.174130	1.331613	0.1852
SIZE	-1.53E-14	1.08E-14	-1.421181	0.1576
LEV	0.062072	0.087158	0.712176	0.4776
GROWTH	0.105399	0.174208	0.605016	0.5462
R-squared	0.729553	Mean dependent var.		1.019656
Adjusted R-squared	0.400616	S.D. dependent var.		0.740139
S.E. of regression	0.573015			

Conclusions

According to Black (1976), the harder we look at the dividend picture, the more it seems like a puzzle, with pieces that do not fit together. The subject matter of dividend policy remains one of the most controversial issues in corporate finance. Indeed the dividend policy of a company

determines what proportion of earnings is distributed to the shareholders by way of dividends, and what proportion is ploughed back for reinvestment purposes. Since the main objective of financial management is to maximize the market value of equity shares, one key area of study is the effect of dividend policy on financial performance.

Dividend policy decision is an important aspect for any kind of management across the globe. If well set and implemented then the business is well set to improve tremendously in the periods to follow. This also goes hand in hand with the environment full of competitors such as the securities exchange of any country worldwide. From the study it has been observed that Kenyan public limited companies especially those listed at the NSE are not an exception as far as the dividend policy is concerned. It has been revealed that these companies set their dividend payout ratio bearing in mind the information signaling effect it will send to its owners.

However, important dividend policy is not the only factor that affects firm's financial performance especially for public limited companies in Kenya listed in the NSE. The size of the firm is also an important factor affecting a firm's financial performance. One important factor that was not featured on this study is the tax reform of 1998 and the permanent reform of 2006. In the year for which these reforms increase the tax on dividends, we would expect to see a reduction in dividends.

Dividend payout affects a firm's financial performance and that this relationship is strong and positive. It therefore shows that dividend policy is relevant and therefore affects the performance of a firm hence its value contrary to theories that view dividend policy as irrelevant. Total assets and revenue are also factors that affect the performance of a firm as shown by the research findings.

Recommendations

The measures of performance used in this study are return on assets, return on equity and changes in results as measured by Tobin's Q. From the results we find some evidence for the Lintner hypothesis, in which firms increase their dividends only when earnings are expected to increase permanently. The study concludes that firms should increase their dividend payout ratio if they expect their earnings to increase in future. This will send a signal to the investors that their operating income is to stabilize in future and hence foster investor confidence in the process.

The variables that have been captured here are not the only ones that affect financial performance firms listed on the NSE. There are a number of factors that affect financial performance and they range from interest rates, inflation rates, government regulation and the investor's behaviours that could have been considered. The study recommends further research on these factors to reveal how each factor affect the financial performance of public limited firms listed on the NSE in Kenya and as well as other emerging capital markets in the globe. The study also recommends an inclusion of other public limited companies in Kenya not listed in the NSE and those that were omitted from the sample though have been listed in the NSE. Further, research also should be done to establish how non-numerical variables should be integrated in financial performance behaviours of firms listed on the NSE in Kenya.

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DETERMINANTS OF FINANCIAL SECTOR GROWTH RATE IN KENYA; 1982-2011

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Abstract

Financial intermediation has been emphasized in developing economies to allow for stimulation,mobilization and efficient allocation of resources.The broad objective of this study is to investigate the factors that determine growth trends in the financial sector. This is key for Kenya since the financial sector is expected to contribute immensely towards economic prosperity.The study derived its results by using the Ordinary Least Squares(OLS) method inanalyzing the time seriesannual data(1982-2011) for six variables; capital flows, interest rate, exchange rate, GDP growth rate ,inflation and the financial sector growth rate.Results showed that inflation and GDP growth rate are not significant in determining the financial sector growth rate.Interest rates,Capital flows and Exchange rate were statistically significant in determining the growth rate in the financial sector growth.Since controlling interest rate and exchange rate could lead to adverse macroeconomic imbalances ,it's worth noting that sound policies ought to be adopted by the central bank in ensuring that both variables are maintained at an optimum. Increases in exchange rates will affect the financial sector growth rate negatively.When local currency is too strong capital inflows will increase and cause the financial sector to grow, however this will make our exports very expensive and worsen our trade balance.

Key Words: Financial Sector growth rate, Capital flows, GDP Growth rate, Interest rates, Exchange rates.

Introduction

The financial sector is an essential element of economic growth in an economy Mishkin and Eakins (2012).This sector comprises of financial institutions which exercises the responsibility of creating a vibrant and steady financial sector. The Kenya Vision 2030 aspires to make Kenya one of the financial centers in emerging markets by 2030.This could be achieved through deepening of financial services and enhancing stability in the financial sector. This goal will be achieved if there is a continued growth in the financial intermediation sector of our economy.

The financial sector is responsible for channeling funds between surplus and deficit agents Brainard (2012). As such, a financial intermediary is a financial institution that connects surplus and deficit agents. The classic example of a financial intermediary amongst others is a bank that transforms its deposits into bank loans and advances. Financial intermediaries not only channel funds from agents which have extra money to those which do not have enough money but also handle capital flows in and out of a country.

Effective transmission of monetary policies by a Central Bank will entirely depend on a well-developed and functioning financial sector Michael (1995); this will go a long way in harnessing the potential of the economy from a financial perspective which is also a key frontier in development. OoiSang (2005) points out that the effectiveness of monetary transmission mechanism hinges on changing forms and character of financial diversity and depth of financial markets.

Kenya's financial sector just like the rest of Africa is relatively underdeveloped, Brinkman (1998) and receives only a fraction of the international capital flows. Nevertheless, total external private finance might be small compared to other regions, but it is increasingly important and certainly large enough to trigger financial crisis in some countries Brinkman (1998).

The banking sector, which is the main source of credit to the private sector, is an important channel of financial intermediation through which financial resources can be mobilized for productive investment and realization of the high economic growth Were et al, (2012). Notwithstanding the role availability of credit plays in the economy and given that of the total banked population, only 14.84% (Fin Access Survey, 2009) acquired loans from formal financial institutions a lot needs to be done in this sector so as to increase availability of credit.

Statement of the problem

Several studies have been conducted on the impact of various macro-economic variables on the financial sector. Fitzgerald (1998) discovered that short-term capital flows will have a direct impact on credit availability in developing countries; he concludes that transmission effect on the real economy will come about through financial institutions. Furman and Stiglitz (1998) identify capital flows as one variable that if well understood can be reliable in predicting financial crises, but Afari et al (2004) singles out the exchange rate management as one of the challenging problems in the developing countries like Ghana. Afari further links continued capital inflows as the cause of appreciation in the exchange rate. This is a contradiction with the findings of Turner (2008) who linked the increased inflows to be as a result of development in the financial sector. In Korea,Ahn (2008) noted that when the exchange rate was floated in 1997, the current account started witnessing surpluses immediately but the capital account witnessed a record surplus later in 2002 which is a signal that individual countries could react differently upon liberalization of the financial sector. According to Forbes and Warmock (2011) 1990-2000 was a decade that experienced increased capital flow volatility but in late 2001 capital dried up and surged throughout mid-2000s.This was not in line with what the other authors have found. For instance Obiechina has shown how globalization has triggered capital mobility whereby the final impact is felt in the financial sector. In Kenya Ngugi and Mariara (1998), concur that even though major achievements have been made in transforming the financial sector, there is still high levels of inefficiencies and general underdevelopment in the sector. This observation compliments what was observed in Nigeria by Obiechina (2010) that adoption of vigorous, appropriate and coherent policies can address the volatilities observed in the financial sector. This paper seeks to look at how various macro-economic factors affect the growth of the financial sector in Kenya which has been portrayed as unstable and underdeveloped amidst increasing capital flows and liberalization of the sector. By keenly looking at the factors at hand, the findings from this study will inform sound decision making which will lead to a more stable and vibrant financial sector and the ultimate achievement of the countries long term economic targets. The study investigated the factors that determine growth trends in the financial sector by obtaining annual data for the period 1982-2011. The specific objectives of the study were to determine the relationship between the financial sector growth rate and:capital flows, interest rates, exchange rates, GDP growth rate and Inflation.

The financial sector in context

Krugman (1979) argued that financial crisis occurs when the continuous weakening in the economic fundamental becomes inconsistence with an attempt to fix the exchange rate -

characteristically the persistency of money financed budget deficit and an attempt to maintain a fixed exchange rate – this has become known as the first-generation models of balance-of-payment crises. Krugman stated that the inconsistency can be temporarily covered if the central bank has sufficiently large reserves, but when these reserves become inadequate, speculators force the issue with a wave of selling. In disaggregating short-term capital by purpose and type, Kahler(1998) advanced that pension funds and insurance company inflows tend to be relatively stable, while private flows from mutual funds respond to interest rate differentials among countries and are anxiously and quickly withdrawn. It is the increase in the inflow of money that has made emerging countries more vulnerable to financial crises than in the past. Siegel (1998) maintained that short-term investments that are easily liquidated and speculative capital movements threaten the stability of real economies, especially in the developing world, and force fiscal policy to be on keeping financial markets happy rather than on raising standards of living.

Financial crisis may still occur without changes in macroeconomic fundamentals. Such are the so called second-generation models of balance-of-payment crises. Initially there are situations where crises occur as a consequence of pure speculation against the currency. Calvo and Mendoza (1997) developed the model of herding behaviour which stresses that information costs may lead foreign investors to take decisions based on limited information and, therefore, to be more sensitive to rumours. Crises could also occur owing to the possibility of contagion effects. That is, a situation in which the devaluation by one country leads its trading partners to devalue in order to avoid a loss of competitiveness Gerlach and Smets (1995), and also where crisis in one country may raise the odds of a crisis elsewhere by signalling that devaluation is more likely as a result of the initial crisis. The signal may then lead to a self-fulfilling speculative attack Masson, (1998).

Rationale of the study

Financial intermediation has been one of the sectors which have recorded high growth rates in the Country. Kenya long term plan has identified this sector as a major driver and contributor in making the country a middle income economy. Despite the much expected impact from this sector little is known of its dynamics. Studies done so far are more focused on the macroeconomic interactions in the financial arena. From the studies, the financial sector responds and relates differently depending on the environment. Kenya, which is classified as one of the countries with an underdeveloped financial sectorNgugi and Mariara, (1998), has no study undertaken to show how the financial sector growth rate is determined by other macro-economic factors. Were et al, (2012) acknowledges that the banking(financial) sector has a key role in shaping the credit to private sector which could as well affect investment levels in the country. This study therefore intends to fill the knowledge gap by determining how some macro-economic variables determine the growth of this key sector in the Kenyan economy. Though key but underdeveloped it will be crucial to inform policy on which variables drives this sector.

Methodology

The study used secondary data from the Kenya National Bureau of Statistics for the following variables; GDP growth rate, capital flows, interest rate, exchange rate and inflation rates for the period 1982-2011. This period includes the changes brought about by liberalizing the financial sector in an effort to make it more efficient. Financial crisis has been linked to both first and second generation models Krugman, (1979). Given the two different positions adopted by the two models, financial experts and economists are in tandem that it's not easy to model

qualitative features like speculation or rumour as implied by second generation models. With the inherent problem of the Second Generation Model at hand, equation 2.1 summarises the relationship between Financial Sector Growth rate and its probable explanatory variables:

$$FSGr = f(CF, GDPr, IR, ER, INFLN) \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 2.1$$

Where;

$FSGr$ Is Financial sector Growth

CF Is Capital flows

$GDPr$ Is GDP Growth Rate

IR Is Interest rate

ER Is Exchange rate

$INFLN$ Is the Inflation rate

In order to study the determinants of the financial sector growth rate, this research will estimate equation 2.2 using Ordinary Least Squares (OLS).

$$FSGr = \alpha_0 + \beta_1 CF + \beta_2 GDPr + \beta_3 IR + \beta_4 ER + \beta_5 INFL \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 2.2$$

Whereby; α_0 is a constant while β_n are the respective parameters.

Analysis of results

Descriptive statistics: From table 1 it can be shown that there is a positive relationship between financial sector growth rate and all the other variables except exchange rates.

Table 1: Correlation analysis

	Financial Sector Growth	Capital Flows	Exchange Rates	GDP Growth	Inflation	Interest Rate
Financial Sector		0.057875	-0.317627		0.168111	
Capital Flows	1.000000	1.000000	0.562525	0.079676	0.191449	0.133086
Exchange Rates		0.562525	1.000000		0.228203	-
GDP Growth	0.057875	0.206674	-0.126935	0.206674	0.310942	0.222840
Inflation	-	-	-0.228203	-	1.000000	
Interest Rate	0.317627	0.191449	0.214202	0.126935	0.292005	0.214202
	0.079676	- 0.222840		1.000000		- 0.427851
	0.168111			- 0.310942		0.292005
	0.133086			- 0.427851		1.000000

Exchange rate has a negative correlation with GDP growth rate and Inflation. Capital flows and exchange rate gives the highest level of correlation at 0.562525.The low level of correlation between the independent variables is an indicator of the absence of multicollineality.

Table 2: Park test for autocorrelation and heteroscedasticity

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Exchange Rate	0.342570	0.526178	0.651054	0.5215
GDP Growth	0.666656	4.700783	0.141818	0.8885
Inflation	0.397332	0.930139	0.427175	0.6732
Interest Rate	-0.550982	1.262842	-0.436303	0.6667
Ln Capital	-9.255821	10.02286	-0.923471	0.3653
Flows	91.57759	83.84519	1.092222	0.2860

Table 2 shows the result after testing for heteroscedasticity. All the test statistics are less than 2 implying that there is no heteroscedasticity and autocorrelation.

Unit root test: It is important to first test the data for presence of unit roots. In this regard, the study employed the use of two tests; Philips Perron (PP) and Augmented Dickey Fuller (ADF). The results are as shown in table 3.

Table 3: Unit root test results in levels

Variable	Lags	Intercept	Trend	ADF*	Philips Perron	Decision
FSW	1	2.091594	0.010470	-2.380562 (-3.5670)	-4.598264 (-3.5614)	Stationary
	2	3.563198	-0.080739	-2.347863 (-3.5731)	-4.695829 (-3.5614)	Stationary
ER	1	2.803826	0.610253	-1.849034 (-3.5670)	-1.763198 (-3.5614)	Non Stationary
	1	3.338303	-0.039605	-3.745504 (-3.5731)	-4.769257 (-3.5670)	Stationary 1ˢᵗ Difference
GDPR	1	2.205968	0.019250	-3.784535 (-3.5670)	-3.718926 (-3.5614)	Stationary
LCF	1	5.441175	0.118983	-2.932499 (-3.6330)	-3.048108 (-3.6027)	Non-Stationary
	1	-0.092853	0.012383	-2.411297 (-3.6746)	-6.827543 (-3.6330)	Stationary 1ˢᵗ Difference
IR	1	3.632252	-0.073311	-1.367659 (-3.5670)	-1.440383 (-3.5614)	Non Stationary
	1	0.964135	-0.057643	-3.095838 (-3.5731)	-5.366412 (-3.5670)	Stationary
INFR	1	11.51882	-0.191026	-3.528601 (-3.5670)	-3.164933 (-3.5614)	Non Stationary
		-1.585019	0.074065	-6.367160 (-3.5731)	-5.102778 (-3.5670)	Stationary

NB; the figure in brackets is the critical value at 5%

Financial sector growth rate and GDP growth rate were found to be stationary at the level stage. Inflation and exchange rate, log capital flows and interest rate became stationary after the first difference. Having established stationary, it is important to establish cointegration. Cointegration implies that the study variables move in a divergent manner in the short term and

converge in the long-run through an error correction mechanism. If the variables are cointegrated, then it can be said that a long-run relationship exists between them.

Co-integration test: Tests for cointergration are performed by obtaining the residual series and testing for its significance and establish if there is stationary. Below are the results showing the unit root test result.

Table 4: Testing cointergration

ADF Statistic	1%	5%	10%
-4.050846	-3.6661	-2.9627	-2.6200

From the ADF test illustrated in table 4,it can be concluded that there is existence of stationarity thus presence of cointergration.

Discussion of results

Based on the results presented in table 5 the long run equation is as shown below;
FS=-10.32443-0.129300**EX**+0.337993**GDPR**+1.692296**LCF**+0.171007**IR**+ 0.075656**INFL.……...2.3**

Table 5: Long run equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDPR	0.337993	0.277643	1.217368	0.2370
INFL	0.075656	0.055699	1.358310	0.1888
IR	0.171007	0.073991	2.311195	0.0311
EX	-0.129300	0.032937	-3.925643	0.0008
LCF	1.692296	0.615176	2.750914	0.0120
1982	-13.98531	2.206210	-6.339063	0.0000
2001	-7.941675	2.256033	-3.520195	0.0020
C	-10.32443	5.042047	-2.047667	0.0533

As depicted in equation 2.3, the trend of the equation is -10.32443.A percentage-point growth in GDP leads to an increase of 0.337993 points in financial sector growth; however this factor is not significant since the t value is 1.217368 which is less than 2. Inflation whose t value is 1.358310 is also insignificant but had a positive coefficient of 0.075656. An increase in interest rate by a percentage point increases financial sector growth by 0.171007.Interest rate is statistically significant in determining the growth rate in the financial sector. Increasing interest is a major source of income for some of the financial institutions. This is similar to an observation made by Connell et al which showed there is a consistent causality between interest rates and exchange market pressures in impacting the financial sector. Kremmer et al (2004) also discovered that finance corporations in Australia were found to be highly sensitive to new shocks. The relationship between interest rates and large bank stocks was positive without deregulation. A unit increase in exchange rate leads to the decreases in financial sector growth by 0.129300percentage points and is statistically significant since the t value is more than 2. This finding is similar to what was observed by Mudida et al (2012), that exchange rate was an important tool for attempting to address persistent balance of payments and therefore contribute to achieving an external balance.

Local capital flows affects the financial sector growth rate positively with a coefficient of 1.692296 and is also statistically significant. Similarly from a study by Forbes and Warnock(2011) capital flows can have wide spread economic consequences such as amplifying economic cycles, increasing financial systems vulnerabilities and aggravating overall macro-economic instability. Kohli (2003) identified that foreign capital inflow had significant impact on domestic money supply and stock market growth, liquidity and volatility.

The long run model is 80 percent explained by the five variables. Growth in the financial sector cannot therefore be attributed to capital flows, GDP growth rate, exchange rate, interest rate and inflation only. Kenya (1982) highlights how the decade started with sharp increase in oil prices, renewed decline in coffee prices, rise in food prices and the onset of recession in some developed countries. In order to accommodate this shock a dummy was introduced in 1982. As for the 2000 period, the previous decade had closed having witnessed increased imports which negatively affected the domestic industrial market as well as tight fiscal policies. The period 2000 onwards was characterised by political realignments and it was also the same time when the donors pulled out of Kenya citing economic mismanagement thus necessitating the dummy.

Conclusion and recommendations

The study concludes by identifying capital flows, exchange rate and interest rates as the factors affecting growth in the financial sector. GDP growth rate and inflation were found not significant in determining the growth of financial sector growth rate.

It is recommended that the government should embark on strengthening the financial sector which in turn will support transactions in the other sectors of the economy. The other sectors may not be directly related to the financial sector but have a major role to play in its stability. This is evident on how the GDP growth is impacting the financial sector. GDP growth rate incorporates changes in all the sectors of the economy. For instance Kenya is depended on food import which could be substituted by a vigorous Agricultural Sector. Such imports only worsen the exchange rate and inflation situation besides introducing unbalanced competition in the domestic economy. Lending interest rates should be controlled through monetary policy to remain at an optimal level, high lending interest rates will attract capital and both will cause the financial sector to grow but will make export more expensive. Very high interest rates will trigger inflation while very low interest rates will discourage investment. Even though the exchange rate impacts financial sector growth rate negatively, it should remain uncontrolled, during its peak the government can redeem its foreign debt. With a broad based economy high exchange rates will positively affect the balance of trade unlike when the country is too depended on imports.

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CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE IN KENYA: EVIDENCE FROM FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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Abstract

Capital structure is a mix of debt and equity the firm uses to finance its operations. It is considered important corporate financial management context and is mainly related to the establishment of an ideal debt policy. Recently equity levels of firms listed at the NSE have substantially risen. A random observation shows that debt equity ratios had dropped substantially while over the same period, the returns on equity have improved substantially. Given these observations, the main objective was to establish, the effect of capital structure on financial performance of firms listed at the Nairobi Securities exchange. The population of interest of this study was the firms quoted at the Nairobi securities exchange, and a census of all firms listed at the Nairobi Security Exchange from year 2002-2011 was the sample. Secondary data was collected from the financial statements of the firms listed at the NSE. The study used Causal research design and Gretl statistical software to perform the panel Regression analysis. Its output will be significant to the management of quoted companies and government.The study concluded that debt and equity are major determinants of financial performance of firms listed at the Nairobi Securities exchange. The study provided evidence of a negative and significant relationship between capital structure (DE) and all measures of performance. This implies that the more debt the firms used as a source of finance they experienced low performance. The study also concluded that firms listed at NSE used more short-term debts than long term.

Introduction

The theory of capital structure and its relationship with financial performance of firms has been a controversial issue in corporate finance since the seminal work of Modigliani and Miller (1958). The question firms are faced with is making a decision on the capital structure choice to use. The decision is crucial given that it has an effect on the financial performance of firms. The capital structure of a firm is generally the specific mix of debt and equity the firm uses to finance its operations (Abor, 2005). A firm can issue a large amount of debt or a large amount of equity; hence it's important for a firm to deploy the appropriate mix of debt and equity that can maximize its overall market value. Utilization of different levels of equity and debt by managers is one strategy used by firms to improve their financial performance (Gleason et al., 2000).

Statement of the problem

Financial Managers have a responsibility of determining the optimal mix of debt and equity that will ensure maximization of shareholders wealth. This has led to the desire to establish whether there is an optimal capital structure that maximizes firm's value. Studies on the impact of capital structure on firm performance have mostly been carried out in developed economies on large and listed firms. In the developing economies, Chiang Yat Hung et al., (2002) concluded that while high gearing is positively related to asset, it's negatively related to profit margins in Hong Kong. In Kenya, Kiogora (2000), the only study in the literature, found a positive relationship between capital structure and value of the firm.

Since Kiogora's (2000) study, equity levels of firms listed at the NSE have substantially risen. A random observation shows that debt equity ratios have dropped substantially from 5.03, 1.53 and 1.89 in 2002 to 1.07, 0.64 and 1.51 in 2012 respectively for Kenya Power, BAT Kenya and Kenya Airways. Over the same period, the returns on equity have improved substantially for the three firms from −1.18, 0.20 and 0.17 in 2002 to 0.94, 0.31 and 0.72 in 2012 respectively for the three companies. A similar pattern is observed for many firms listed at the NSE.

Given these observations, it would be interesting to establish, whether there is a clear linkage between capital structure and the performance of firms listed at the Nairobi Securities Exchange. The study proposes to investigate these issues with performance measured both in terms of profitability and firm value.

Objectives of the study

The general objective of this study was to focus on examining the link between capital structure and financial performance of firms listed at the NSE.

The specific objectives of this study were to:

Determine effect of equity financing on financial performance of firms listed at the Nairobi Securities Exchange.

Determine the effect of debt financing on the financial performance of firms quoted at the Nairobi Securities Exchange.

Literature review

This section reviews on previous studies that have been conducted related to the present study. This research reviewed literature on the various theories related to capital structure and firm financial performance.

Theories of capital structure

The capital structure of a firm could be explained, in general terms, by two dominant theories; the trade-off and pecking order theories. Based on an arbitrage argument, Modigliani &Miller (1958) ascertained that with the existence of perfect capital market, the capital structure decisions would have no impact on the value of the firm. Arbitrage, they argued would ensure that an individual's exposure to risk would not change because home-made leverage was as good as corporate leverage. However, there was a reaction from Duraud (1959) to Modigliani and miler's irrelevant theory. He questioned the applicability of arbitrage process and the assumptions they made of a risk-less world that are somehow unrealistic. In response to this and other criticisms, Modigliani and Miller (1963) modified their original hypothesis. Relaxing the assumption of zero taxation, they argued that levered firms will be more value than unlevered firms due to the fact that debt is a tax deductible expense.

Since Modigliani & Miller (1963) made an oversight of the impact of personal taxes, Miller (1977) made an important contribution by correcting the 1963 contention. Relying on several assumptions, Miller (1977) introduced a model designed to show how leverage affects a firm's value. When both personal and corporate taxes are taken into account, this model suggests that in that market equilibrium, corporate tax advantage are cancelled out by the effects of personal taxes hence capital structure irrelevance. Taggart (1980) extended Miller's analysis to

conditions of incomplete capital markets and special costs associated with corporate debt. He concluded that Miller's findings could be upheld and all equity capital structures are seen as perfectly rational for at least some firms.

Simple trade-off theory assumes that capital structure is influenced by agency costs which stems from conflict of interest. Agency theory was Initiated by Jensen and Meckling (1976), and they noted that Agency relationship has a problem that the interest of managers and shareholders is not always the same and in this case, the manager who is responsible of running the firm tends to achieve his personal goals rather than maximizing returns to the shareholders i.e. if both parties to the relationship are utility maximizers, there is good reason to believe that the agent will not always act in the best interests of the principal. This means that managers will use the excess free cash flow available to fulfill his personal interests instead of increasing returns to the shareholders (Jensen and Ruback, 1983).

Hence, the main problem that shareholders face is to make sure that managers do not use up the free cash flow by investing it in unprofitable or negative net present value (NPV) projects. Instead these cash flows should be returned to the shareholders, for example through dividend payouts (Jensen, 1986). The costs of monitoring the managers so that they act in the interests of the shareholders are referred as Agency Costs.

The pecking order theory can be explained from the perspective of asymmetric information and the existence of transaction costs. Myers (1984) suggests that asymmetric information and transaction costs overwhelm the forces that determine optimal leverage in the trade-off models. To minimize these financing costs, firms prefer to finance their investment first with internal cash flows. Only if there's residual financing need will they use external capital in the following order; first safe debt, then risky debt and finally equity issues. So, contrary to the trade-off theory, the pecking order theory predicts no long run target capital structure. There is no optimal debt-equity mix because there are two kinds of equity, retained earnings at the top of the pecking order and the issue of new shares at the bottom (Myers, 1984).

In summary, there is no universal theory of the debt-equity choice. Different views have been put forward regarding the financing choice. This study will use one of the theories that best fits this research which aims at finding the effect capital structure has on firm's financial performance.Most of the papers underline the advantages of short term debt in reducing agency problems under asymmetric information and imperfect or costly contract enforcement. One important advantage of shorter term debt has been described by Myers (1977).In his seminal paper he posits that short term debt might be a better tool for improving performance since it acts as control device which is checks on the management to make the right decisions towards maximizing shareholders value.

Conversely, some studies have shown that debt has a negative effect on firm performance. Fama and French (2000), for instance are of the view that the use of excessive debt creates agency problems among shareholders and creditors and that could result in negative relationship between leverage and firm performance. Majumdar and Chhibber (1999) found in their Indian study that leverage has a negative effect on performance, while Krishnan and Moyer (1997) connect capital and performance to the country of origin. Gleason et al., (2000) support a negative impact of leverage on the profitability of the firm.

Research methodology

The population of interest of this study was the firms quoted at the Nairobi securities exchange, and a census of all firms listed at the Nairobi Security Exchange from year 2002-2011 was the sample. Secondary data was collected from the financial statements of the firms listed at the NSE. The study used Causal research design and Gretl statistical software to perform the panel Regression analysis.The panel character of the data allowed the use of panel data methodology which involved pooling of observations on a cross-section of units over several time periods

Results of the study

Descriptive statistics

Table 4.1: Descriptive statistic data

Variable	Mean	Median	Minimum	Maximum	Std. Dev.	C.V.	Skewness
ROE	0.1651	0.0960	-0.7917	8.70	0.6225	3.770	10.5756
ROA	51.8010	0.1046	-0.6381	24701.3	1129.80	21.8105	21.7945
Tobin's Q	1828.11	1029.22	0.0	90121.6	4801.10	2.6263	15.3601
LDE	0.3185	0.0587	-4.5436	18.3750	1.2047	3.7824	9.7898
D_E	1.9284	0.6688	0.0	29.6634	2.8430	1.4743	2.9066
TA	2.1942	1.2198	0.0	119.285	8.2290	3.7504	13.0011
AT	0.5138	0.5694	0.0	2.50615	0.4525	0.8808	0.3567
Grow	4.7954	4.50	-4.50	12.70	3.6124	0.7533	-0.6485
SG	1.1842	1.1123	-0.0804	10.6083	0.7355	0.6211	7.3976
Size	12.4842	14.8286	-0.0804	29.9699	9.7308	0.7794	-0.1498

Note: ROA= the return on assets; ROE= return on equity; Tobin's Q= Market value of equity+ book value of debt/ book value of assets; TA= total debt to total assets; LDE= long-term debt to Total equity; DE= total debt to total equity; SG = growth opportunities measured by growth of sales; log (sales), AT = asset tangibility. Grow is the growth in GDP per sector

The summary statistics from table 4.1 shows that the mean value for Return on Equity was 16.51%. Return on Asset invested in the company was 51.80%. This two accounting measures of performance shows relatively good accounting performance of firms listed at Nairobi securities Exchange. The standard deviation, of 0.622 with respect to ROA suggests that while a few firms are doing well, most of them are not. This is given more credence with -79.17 % and 870% representing minimum and maximum ROA respectively. Indeed, this story is not substantially different in the case of ROE.

Tobin's Q which is a measure of market performance shows a high percentage of 1828.11%. This could be due to increase in firms share price and equity without increase in real activities of performance for the firms.

The capital structure ratios shows that firms listed at the Nse 31.85% of Long-term Debt to equity and 192.837% of total debt to equity. This shows that the firms use more of short-term debt may be due to the high cost of long-term debt,or difficulty in accessing long-term credit from financial institutions. Another reason could be due to the under-developed nature of the Kenyan long-term debt market.

Total debt to Asset ratio was 219.416%, this shows that most of the assets of the firm listed at the NSE are financed through debt and are tangible to an extent of 51.38 %

Correlation matrix

Table 4.2: Correlation Matrix of the Explanatory Variables, during 2002-2011

ROE	ROA	Tobin Q	LDE	D_E	TA	AT	Size	Grow	SG	
1.0000	-0.0044	0.0429	-0.0687	0.0489	-0.0079	0.0431	0.1529	0.0455	-0.0048	ROE
	1.0000	-0.0068	-0.0026	-0.0282	0.0046	0.0307	-0.0031	-0.1407	0.0128	ROA
		1.0000	-0.0496	0.0564	-0.0109	-0.0455	0.0785	-0.0278	0.0221	Tobin Q
			1.0000	-0.0689	-0.0403	0.2965	0.0899	0.0245	-0.2643	LDE
				1.0000	-0.1571	-0.5307	0.4822	0.2568	0.1664	D_E
					1.0000	0.1334	-0.1498	-0.0757	0.0187	TA
						1.0000	0.2939	-0.2572	-0.1176	AT
							1.0000	0.0857	-0.0673	Size
								1.0000	0.1160	Grow
									1.0000	SG

The correlation matrix for the variables reported in Table 4. 2 examine the correlation between the explanatory variables. To address this problem the study tested for multi-co linearity by running a correlation of one independent variable against the other(s).The results shows a negative correlation coefficient between ROE, ROA, Tobin's Q with LDE at -0.0687, -0.0026 and -0.0496. ROE, Tobin's Q also have a negative correlation coefficient with DE and TA respectively. The correlation coefficient between the independent variables are relatively low hence no problem of multi-collinearity in the model. The correlation coefficient lies between zero and one, thereby measuring the linear association between the observed values.

Results for panel data model

The panel results from the models showed the following coefficients.

Model 1

$$ROE_{it} = \alpha_0 - 0.01DE_{it} + 0.02SZE_{it} + 0.02SG_{it} - 0.40Tang + 0.01GROW + e_{it}$$

$$ROE_{it} = \alpha_0 - 0.03LDE_{it} + 0.02SZE_{it} + 0.03SG_{it} - 0.40Tang + 0.01GROW + e_{it}$$

$$ROE_{it} = \alpha_0 - 0.001TA_{it} + 0.02SZE_{it} + 0.02SG_{it} - 0.42Tang + 0.01GROW + e_{it}$$

Model 2

$$ROA_{it} = \alpha_0 - 0.02DE_{it} - 0.0003SZE_{it} + 0.03SG_{it} - 0.30Tang + 0.004GROW + e_{it}$$

$$ROA_{it} = \alpha_0 - 0.02LDE_{it} - 0.006SZE_{it} + 0.02SG_{it} - 0.3Tang - 0.30GROW + e_{it}$$

$$ROA_{it} = \alpha_0 + 0.0004TA_{it} - 0.006SZE_{it} + 0.02SG_{it} - 0.30Tang + 0.003GROW + e_{it}$$

Model 3

$$Tobin\,Q_{it} = \alpha_0 - 18.12DE_{it} - 15.8SZE_{it} + 69.45SG_{it} - 1724.0Tang + 19.31GROW + e_{it}$$

$$Tobin\,Q_{it} = \alpha_0 - 500.5LDE_{it} - 19.1SZE_{it} + \alpha_3SG_{it} - 1558.16Tang + 18.4GROW + e_{it}$$

$$Tobin\,Q_{it} = \alpha_0 + 1.59TA_{it} - 17.9SZE_{it} + 87.63SG_{it} - 1782.6Tang + 24.27GROW + e_{it}$$

Conclusion

In summary, the results shown in model 2 indicate that capital structure choice measured by (LDE, DE and TA), in general terms, has no significant impact on Kenyan listed firms' performance measured by (ROE, ROA and Tobin's Q).These results contradict with findings of previous literature either in developed or transition economies which documents a significant impact of capital structure on firm's performance either positively (Gosh et al., 2000; Abor, 2005;Kyereboah-Coleman, 2007) or negatively (Balakrishnan and Fox, 1993; Majumdar and Chibber, 1999; Gleason et al., 2000; Zeitun and Tian, 2007; Abor, 2007). This rejects the H1 and accepts H0 because the result shows that capital structure doesn't affect performance of firms listed at the NSE.

Model 1 is the only model showing a negative and significant relationship between capital structure measured by DE and performance (ROA) hence rejecting the H0 and rejecting H1. This may be due to agency conflicts hence companies over-leveraged themselves thus affecting performance negatively This results are consistent with the findings of previous studies such as Gleason, Mathur and Mathur (2000), Tzelepis and Skuras (2004), Krishnan and Moyer (1997).

Model 3 however shows a situation where capital structure measured by TA affects performance measured by Tobin's Q positively at 5% level of significance. This result though is consistent with Nirajini and Priya (2013) in their study at Sri Lanka. Therefore it rejects H0 and accepts H1

Recommendation

In line with our finding, the study recommend that firms (both highly and lowly geared) should take into cognizance the amount of leverage incurred because it is a major determinant of firms performance, this is obvious in both the highly geared and lowly geared firms.

The study provides evidence of a negative and significant relationship between asset tangibility and ROA as a measure of performance in the model. The implication of this is that the firms were not able to utilize the fixed asset composition of their total assets judiciously to impact positively on their firms' performance. Hence, this study recommends that asset tangibility should be a driven factor to capital structure because firms with more tangible assets are less likely to be financially constrained.

In addition, the government should create an enabling business friendly environment so that businesses can thrive and thus increase firm's performance level. This is evident in the fact that macroeconomic variables positively affect the performances.

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FACTORS AFFECTING INVESTMENT AMONGST KENYAN FOOTBALLERS: A STUDY OF SELECTED FOOTBALLERS IN KENYA

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Abstract

The main objective of the paper is to examine the factors that influence investment initiatives amongst Kenyan footballers who are locally based. Descriptive research design was used for the research. The population of the study comprised of the players in the Kenyan premier league teams with players on contract. Stratification was done a simple random sample was used to select the sample of 94 respondents. The research instrument for collection of data was a questionnaire. The significance test was carried out using F statistics to compare the means in various variables that yielded to no difference in the different variables tested. Coefficient of correlation was used to test the degrees of correlation on the variables which generally resulted to all positive correlations but with different degree. Generally, the findings were that there is low financial literacy among the Kenyan footballers and peer and parental has a great influence to the investment attitude of the footballers. There is need to provide extra knowledge on financial matters to the Kenyan football players, the Kenyan football clubs and the stakeholders. Efforts should be done to increase football players' participation in the management on personal finances. Immediate measure to incorporate all stakeholders and professionals to use all available means to initiate education and training to football players in Kenya on personal financial matters to help them invest in long term steady income generating projects.

Key Words: Financial Literacy, Investment, Financial Management.

Introduction

Economists have been concerned for decades about the crucial role of domestic investment mobilization in the sustenance and reinforcement of the saving-investment-growth chain in developing economies and especially in the upcoming sectors like sports. Aghevli et al (1990) found that the saving rate and investment in human capital are indeed closely linked to economic growth. People have increasingly been taking individual responsibility for their financial affairs this calls for skills that can be obtained through financial education. Over the last several years, a great deal of attention and concern has been placed on the financial behaviors of emerging sportsmen. The concern is stemmed from the fact that young adults often begin their sports careers without ever having been solely responsible for their own personal finances (Cunningham, 2000).

There is general consensus from several previous studies that young people lack basic financial knowledge (Danes & Hira, 1987; Volpe et al, 1996). Many young adults lack the basic knowledge and skills needed to make important personal financial decisions (Chen & Volpe, 1998). The financial decisions made early in life create habits difficult to break and affect young adults ability to become financially secure in adulthood (Martin & Oliva, 2001). If young people need these 'real life' skills to better survive in our economy today the question could be asked, "Where do they learn these financial skills?" The home might be an ideal place yet

studies have found that most adults do not have these skills to be able to teach their children (Moschis, 1985; Varcoe et al., 2001). Many young people learn the basic knowledge through trial and error, yet this does not allow them to get ahead or become smart consumers in today's society (Lachance & Choquette, 2004).

Sportsmen sometimes neglect to take into consideration the likelihood that their career is relatively short. A sports team is a business, and the people who run the business can decide to replace a player at the end of a contract, injuries are also inevitable. The global problem associated with sportsmen and their finances as many of them are dying in bankruptcy while they made a lot of money in their hey days in sporting careers (Red Ink Inc, 2010). Football has become an upcoming sport in terms of earnings in the world. Some of the highest earners are indeed footballers. In Kenya sport has slowly become bread and butter for people fully engaged in it professionally. Fondly referred to by its peers as a 'sporting nation', the fact of the matter though is that much of the earnings are lop-sided with the one sport (athletics) accounting for almost 70% of total earnings.

The paper focuses on Kenyan football players who are currently engaged or attached to the Kenyan premier league teams. Most of the players playing for the teams in the Kenyan premier league have period contracts, which mean they have a steady income for some time while still attached to the clubs. Players have not invested their investment in long term income generation investments that they can depend on after their sporting careers are over. Players invest most on current prestigious assets for show off to their peers or to compete on social ground rather than looking at the future.

Kenya's economic system and society's well being is depended on the young, energetic people who are still working and engaging in sporting activities like football. But the rate at which our sports men especially footballers are using their hard earned finances raises questions on their financial investment capabilities. Challenges may be that many sportsmen do not have the knowledge or skills to handle basic, let alone complex financial decisions. Many of them have learned how to make money but have not been taught to manage the money they earned. Learning how to manage money is as important as earning it. Most Kenyan footballers do not display financial management skills in use of finances for future after they are out of active sporting career. The paper tries to look at the factors that influence the Kenyan footballers' investment ability on their earnings. The factors of the study were education level, income, environmental factors and savings culture.

The significance of the study is to football managers in Kenya for decision making and advocacy on factors to the investment initiatives. Secondly, to the government to mobilize, train and educate the sportsmen on investment decisions as significant contributors to the (GDP). Thirdly, to government agencies involved in the management and coordination of the youth and sporting, for management strategy purposes. Lastly, to sponsors to gauge their contribution and sponsorship and future.

Resource management practice systems theory

The theoretical construct predominantly used when studying financial decisions (investment) is the resource management practice systems theory (Goldsmith, 2005). Bubolz & Sontag (1993) discuss financial management as a concept grounded in human ecology theory and utility theory. This research uses family resource management theory, based in systems theory, to understand the financial management practices of players.

Social learning theory

Social learning theory helps explain the environmental influences people have over the years shaping them into who they are today. The financial attitudes and values players have about money come from their environment.

The Ecological model

The ecological model considers the various types of factors that are hypothesized to impact personal financial management practices especially investment. The model to be on personal finances can be broken down into several: demographic variables, financial variables, financial education, financial social learning, financial knowledge, and financial dispositions. This model suggests that there are two main avenues through which individuals acquire financial knowledge: formal education and social learning.

Research methodology

The study adopted quantitative research approach was followed for the following reasons. Firstly, deductive reasoning is used to the questions. Secondly, research questions are operationalised to suit the research. Thirdly, the outcomes of the inquiry are examined in relations to the theory and modified in light of the findings. The target population of the study is the players under contract with premier league teams in Kenya for the 2012/2013 season. There are 16 teams registered for the mentioned season, with each team having a minimum of at 30 players this giving to an approximate population of 480 players and a sample of 100 players was used chosen using a random sample. A questionnaire was used as data collection instrument. Descriptive statistics was used by using means, modes and standard deviation. The significance test using F statistic was carried out using Karl Pearson Coefficient of Correlation to show the relation of the variables.

Findings

Table 1: Education level achieved

	No.	%
Primary school	3	5
Primary school (KCPE certificate)	12	21
Secondary school (KCSE, 'A' Level)	36	64
College (Certificate, Diploma)	4	7
University (Degree)	1	2
TOTAL	56	100

The footballer's majority education level is the secondary school with KCSE certificate with about 64% having attained the level. About 21% of the respondents have a maximum of a primary level, with remaining spreading to the primary, college and university being the least with a 2%. It was established that the majority of footballers are young by age and mostly do not have any financial education other that obtained in school thus leading low investments initiatives. It was also found that, approximately 60% of the footballers have some information of formal investment schemes available in Kenya. The rest of them about 40% do have any information of such formal investment schemes existing in Kenya.

Table 2: Need for additional education on financial management matters

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
	%	%	%	%	%	%
Personal education on investment	4	2	9	14	71	3.9615
Sole proprietorship management	2	7	21	54	16	2.561
Basic entrepreneurship skills	0	5	11	29	55	4.3393
Insurance and risk management on individual matters	4	18	27	45	7	3.3393
Retirement benefits and future preparedness	0	13	18	23	46	4.0357
Securities market information	32	27	21	7	13	2.4107
Other alternative investment opportunities available	7	21	48	14	9	2.9643

The findings above indicate that there is need for some imparting some financial education and skills to the footballers as portrayed in the table. 71% strongly agree that they need some personal education on investments with the number reducing to the disagreement range. Sole proprietorship management aspect has also a high degree of agreement for the need for such, with 54% agreeing that they need such. The numbers also increase on the reverse side of disagreement with none disagreeing with the fact. Approximately 27% were neutral with 45% agreeing, but 18% had a contrary option and disagreed with the need. On the extreme end of strongly disagreement and agreement the average was about 5% for each. Retirement matters is a matter of concern to them since about 46% and 23% strongly agree and agrees respectively with the need while 18% are neutral. A 13% value disagrees with the matter of retirement need and education on the same. Security market information has a 32% strong disagreement and a 27% disagreement. On the extreme end of strong agreement is a 13% which also a significant figure that needs attention in overall.

Table 3: Income level

	No	%
0 – 15,000	2	4
15,001 – 30,000	30	54
30,001 – 40,000	16	29
40,001 – 50,000	5	9
Over 50,000	3	5
Total	56	100

In the table 3 above, the results shows that the means of the different variable needs by the footballers are all high. An average of 4.3393 need entrepreneurial skills while an average of 2.5 need security market matters. This might be a technical aspect which the footballers might not be interested in, given low degree of financial education. It may be concluded from that since football has started shaping up as a career and people are taking it up from a young age, most of the players do not concentrate on the academic and financial education matters but interested in life skills.

The average range of footballer's earning in Kenya is the range of 15,000 – 30,000 having a 54% proportion, then a 29% in the range of 30,000 – 40,000 but others have a monthly pay of over 50,000 with a proportion of 5% while at the bottom of the list is a range of 15,000 and below at 4%.

About 91% of the footballers depend on income derived from football while a 9% have other sources of income. The others sources of incomes are personal business at 50% of those having other sources and the rest of 50% are obtained from employment. The other sources have an extra incomes to them at a range of below 10.000 contributing a 50% while the range of 11,000 – 20,000 and 21,000 – 30,000 contributing 25% each.

Table 4: Informal groupings by footballers

	No	%
Informal groupings	29	52
No informal groupings	27	48
Total	56	100

Footballers also have informal groupings 'Chamas', of which 52% of them have participation with, while the other 48% have no association with any informal groupings to boost their earnings from football.

Table 5: Percentage saved by footballer

	No	%
0 -10%	20	36
11 - 20%	18	32
21 - 30%	12	21
31 - 40%	6	11
Above 40%	0	0
Total	56	100

From the response about 36% of them save less than 10% of their earnings while 32% saves a range of 11 – 20% and 21% saving the range of about 21 – 30% of their earnings with a small percentage of 11 saves between 31 – 40% from their earnings.

Table 6: Earning and investment initiative

		No	%
Is earning a factor in footballer's investment initiatives	Yes	42	75
	No	14	25
Total		56	100

In table 7 above, 75% of the footballers contends that their earnings is a major factor to any investment initiative, with a 25% having a contrary opinion that earnings is not a major factor in investment initiative to footballers.

Environmental Influence

Table 7: Family background

Variable	Characteristic	No.	%
Family background	Nuclear family	12	21
	Extended family	19	34
	Single parents	13	23
	Orphan	8	14
	Homeless	4	7
	TOTAL	56	100

Most of the of the players background is from extended families with a 34% proportion, 23% from single parents and 21% from nuclear family set up. Other are the orphaned at 4% and the rest approximately 7% are the homeless persons.

Table 8: Advisers of footballers on financial matters

Variable		No.	%
Advisers on investment matters	Professionals	4	7
	Relatives	16	29
	Peers	14	25
	None	22	39
	TOTAL	56	100

From the findings it is revealed that most of the players at 39% do not seek any advice from any person for investment matter, almost to the same proportion seek advice at about 27% from peers and relatives respectively and a small percentage of 7% seek advice from their professionals.

Table 9: Influence on investment initiatives

	Variables	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Influence in investment initiatives	Parents	7	18	21	14	39	3.607
	Relatives	18	25	32	14	11	2.750
	Peers	41	34	11	11	4	2.018
	Celebrities	32	25	14	21	7	2.464
	Self	0	0	0	29	71	4.714

Parents have a high influence on the investment initiatives to the extent of 39% strongly agree with the sentiments, 14% agreeing and 21% neutral while a significant proportion of 18% and 7% disagreeing and strongly disagreeing with the same. With relatives the result is skewed towards disagreement that they have influence over their influence with 18% and 25% strongly disagreeing and disagreeing respectively. A high percentage of 32% is neutral on the same while a total of 25% agreeing. A material percentage of 32% are not strongly influenced with celebrities with 14% being neutral while a combined total of about 30% agrees that they are influence by celebrities. Other than oneself the next great influence is obtained from the

parental with an average mean of 3.607 which portrays a high agreement level from all categories of respondents. Relatives also have a high mean of 2.750. This means that the persons who appear first in the life of the footballers have a great bearing on financial matters in their lives. The family background of the footballers have a higher influence on the investment initiatives than the current people they are with in the day to day that is the peer although to some considerable percentage the peer still have an influence on the investment they make.

Table 10: Savings

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Do footballers have a poor investment initiatives	0	0	2	29	70	4.679
Does savings have a negative relations with investment	4	9	2	32	54	4.232
Are authorities doing enough to instill savings in sportsmen	57	32	4	5	2	1.625
Does cultural background have influence to investment	18	11	9	38	25	3.411
Do footballers who earn more invest more	11	25	21	27	16	3.125

There is a highly skewed result on the overall footballers' poor investment initiatives with 70% strongly agreeing and 29% agree with the sentiments. A high number also strongly agrees that savings have a negative effect to investment initiative with 54% and 32% strongly agreeing and agreeing respectively with a total of about 15% on the other end of disagreeing. A 57% proportion strongly disagrees that the authorities are doing enough in education aspect on investment with 32% also agreeing with the same. A high combined percentage of about 65% contents that cultural background influences the savings and investment initiatives. There is almost an equal split on either side on whether footballers who earn more invests more with 21% respondents having a neutral answer, approximately 26% disagrees and agree respectively with the extremes having almost also an equal split of about 15%. There is a very high mean agreement rate that footballers have a poor investment initiative, this is depicted with the mean score of almost to the maximum score of 5. Cultural background of the respondents has also a high mean score of 3.411, meaning that the environmental setup and the surroundings greatly influence the investment initiative. The lack of authorities concerned is not encouraging a culture of savings in footballers rather even doing the opposite.

Table 11: Difference in players' financial need

Characteristics	No.	Mean	S.D	d.f.	F	P
Nationality						
Kenyan	53	3.6172	0.7414	13	0.33	0.579
Non Kenyan	3	3.3333	1.0886			

The ANOVA analysis shows there is no difference on the player's nationality – Kenyans and non Kenyan on the different needs tested since it resulted to a P value of 0.579.

Correlation between variables

Table 12: Correlation between variables and investment initiatives

	Education Level	Income Level	Environmental Influence factors	Savings culture
Educational Level	_	0.371	0.624	0.462
Income Level		_	0.546	0.576
Environmental influence factors			_	0.481
Savings Culture				_

From table 4.3.4.1 correlation was found between the four variables studied. There is a strong positive correlation between education level and environmental influence factors, Income level and savings culture, at 0.624 and 0.576 respectively, a moderate positive correlation between education level and savings culture, environmental influence factors and savings culture at 0.462 and 0.481 respectively. There exist a weak positive correlation between education level and income level of 0.371 among footballer in Kenya.

Conclusions

Football in Kenya is played by young people from Kenya and outside Kenya. They generally have low academic qualification and knowledge on financial matters. Most them entirely depends on football income as a source despite having some informal groupings 'Chamas' and businesses which they do and use the earnings to invest and save. The investment initiatives and guidance comes from themselves, relatives and peers which might be a wrong approach on investment.

Recommendations

There should be a national awareness campaigns conducted by the relevant authorities by use of combination of measures to instill and increase financial management and investment. The use of road shows, newsletters and brochures and publicity on the television and radio. Face to face interactions for instance, during league matches can be used as promotional campaigns. KFWA, FKF and KPL should lobby professional and corporates to sensitize players on financial matters. They can target use of specially made newsletters on finance and investments issues written and circulated to different clubs in the country. They should also seek partnerships with interested parties (universities, colleges, sponsors and NGOs) on the provision of finance and investment literacy programs and to deal with training (including training of trainers).

Since most of the footballers depend on football as a source of income there should be a harmonized way of their pay according to some benchmarks. Other means to generate income to footballers should be put in place through formal and informal ways. Use of the television (sports channels) for publicity can be a popular media of communication to the players and so its use should be maximized. Interactive sessions with audiences can be hosted on TV to encourage participation. Social networking websites such as face book and twitter are quite effective in reaching a majority of the players.

The football organizations should liaise with the government to seek ways of raising funds to support finance and investment programs. These funds can be channeled through training

institutions (partnership agreements with KFWA) to subsidize the programs. In conclusion Kenya should have a national sportsmen strategy that should include retirement planning. The strategy should aim to equip players with lifelong understanding of finance matters and should be made in consultation with all the relevant stakeholders.

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DERIVATIVES AS INSTRUMENTS OF RISK MANAGEMENT AMONG FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE

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Abstract

The objective of this study is to explore the usage of derivatives as instruments of financial risk management among quoted firms in Kenya. Data for this study was obtained through analysis of disclosures in annual reports of all firms quoted at the Nairobi Securities Exchange for the year 2011. Univariate and multivariate analysis were applied on variables obtained through analysis of past literature. The basic hypothesis of the study was to test whether there is statistical significance to support leverage, firm size, financing cost and growth opportunities as proxies for firm value. None of these variables was found to be statistically significant. This study concludes that 14% of companies listed at the Nairobi Securities Exchange use derivatives. Forward contracts are the most important derivatives used by Kenyan firms; 75% of the derivative users employ OTC forward contracts. The use of derivatives is not related to leverage, size, financing cost and growth opportunities. For companies quoted at the Nairobi Securities Exchange hedging does not increase firm value. This paper contributes to the debate on the introduction of derivative trading in the Kenyan Financial Markets.

Key words: Derivatives, forward contracts, firm value, financing costs, financial distress, growth opportunities

Introduction

Risk is an inherent component of business which leads to volatility of expected future cashflows. Businesses are exposed to risks from their operations and environment. Financial risk emanates from everyday transactions of a business is engaged and introduce uncertainty into the receipt and magnitude of future expected cashflows. There are three main forms of financial risk that a company can be exposed to from external sources; interest rate risk, foreign exchange risk and commodity prices risk (Froot, Scharfastein and Stein, 1994).

Corporate management entails the management of risks using various tools. Traditional tools of risk management includes establishing branches approach, leading and lagging were prevalent in the past. New tools were developed in the 1970s in the form of derivatives. A derivative is a financial contract that derives its value from an underlying financial asset, instrument or an economic good (Stulz, 2004). Derivatives are a significant component of the global economy, with notional market size exceeding $700 trillion (Bartram, Brown and Fehle, 2009.) The principle working of derivatives is that they transfer risk from those who do not want to bear it to those who want to be exposed to the risk. The basic types of derivatives also called plain vanilla derivatives are forward contracts, futures, options and swaps. Financial engineering has come with numerous variations of these derivatives.

While there has been an explosion of derivative use in the developed world, sub-Saharan Africa has not experienced the emergence and growth of a derivative exchange except in South Africa. In Kenya OTC derivative contracts are transacted through local banks. Currency forwards deals

are common among commercial banks on the overnight borrowing window. The Nairobi Securities Exchange has been implementing a demutualization drive which will among others lay down the necessary regulatory framework for the introduction of exchange-traded derivative.

This study looks in the usage of derivatives as financial risk management instruments among firms listed at the Nairobi Securities Exchange. Data for this study is collected form publicly available annual records. It is a regulatory requirement that firms disclose their risk exposure and risk management strategies including financial instruments held in their financial reporting. Extensive review of existing literature incorporating the latest papers available on the subject reveals the various variables that can be tested by appropriate hypotheses. The study employs both univariate employing independent t-test of means and multivariate analysis using logistic regression.

This study contributes to the existing body of knowledge on derivative usage and tests the known variables under the environment of the Kenyan markets. The study provides a point of reference for further research into hedging and derivatives among firms at the Nairobi Securities Exchange. The study also provides a definitive answer to the question of usage derivatives in the Kenyan market by providing the evidence of usage of such instruments.

Statement of the problem

According to ISDA, 94% of large companies globally use derivatives. With the exception of South Africa, there is dearth of published reports on derivative use in Africa. A survey by Holman, Correia and Jahrescog (2012) in South Africa targeting large listed South African non-financial firms found that 90% of respondents used derivatives. Kenya is an important financial hub where a futures market is on course to start operation. Over-The-Counter derivative contracts with banks are fairly common in Kenya (Tanui 2008).

Major studies on derivatives in Kenya have avoided the extent and motive of usage of derivatives by Kenyan companies focusing mainly on factors influencing the development of financial derivatives (Ngugi et al 2013). There is therefore a latent gap in research to establish the use of derivatives as risk management tools among companies listed at the Nairobi Securities Exchange and if the use of derivatives has any relation with firm characteristics vital for making risk management decisions.

Objectives of the study

The objective of the study is to establish to what extent are derivatives used by firms listed at the Nairobi Securities Exchange as tools of financial risk management. The specific objectives include:

To establish the extent to which firms use of derivatives is motivated by cost of financial distress

To describe the effect of firm size on use of derivative for hedging

To illustrate the effect on cost of financing on firm's use of derivatives for hedging.

To establish the extent to which firm's growth opportunities motivate use of derivatives for hedging

Hypothesis

The hypothesis developed can only generalized for firms listed at the Nairobi Securities Exchange. The following null hypotheses were developed for this study:

H01: Derivatives can significantly reduce the value of the firm by increasing cost of financial distress

H02: The use of derivatives is negatively related to firm size

H03: Derivatives can significantly reduce the value of the firm by increasing cost of financing

H04: Firms with higher growth opportunities are less likely to use derivatives as instruments of risk management.

Theoretical review

MM theory holds that it is irrelevant the way the firm is financed (Modigliani and Miller, 1958). Investors in a perfect market, with symmetrical access to information and no transaction costs can engage in diversification to eliminate unsystematic risk. The only relevant risk however is the systematic risk. In developed markets where tools of risk management are exchange traded investors will not attach premium to any hedging activities that management may engage in (Sharpe, 1964; Linter, 1965; Mossin, 1966).

Finance theory holds that firms use derivatives in risk management to increase shareholder value (Froot , Scharfsten and Stein,1993). There are two competing theories attempting to explain the rationale for use of financial derivatives. The first theory suggests that hedging is aimed at and leads to maximization shareholder wealth. The second theory contends that hedging has no effect on shareholder wealth and is purely done for managerial utility function (Jin and Jurion, 2007).

The proponents of the first theory maintain that maximization of shareholder wealth can be achieved through tax reduction, reducing costs of financing and financial distress and reduction of agency costs and reduction of the underinvestment problem. The overall result is reduction of cashflow volatility and enhancement of PV of future cashflows hence maximization of shareholder wealth (Stulz, 1984; Smith and Stulz, 1985).

In convex tax regimes, derivatives when combined with creative ownership structures reduce taxes by generating non-economic losses and offer alternative tax treatments of similar transactions (Donohoe, 2012a). Derivatives enhance debt capacity of the firm; hedging and leverage have a positive relationship (Dolde, 1995; Haushalter, 2000; Graham and Rogers, 2002). The enhanced debt capacity leads to a higher debt tax-shield (Myers, 1984; 1993). This seems to be a common practice by large by a large American banks who were accused by Congress of cooking up over 100 Billion derivative tax dodging in 2008 (Warner, 2008).

Hedging is aimed at reducing underinvestment problem; inability to undertake existing profitable investment opportunities due to shortage of cash. Companies would rather use their internal funds to fund existing opportunities. When has profitable investments and is facing high cost of debt, the firm would rather hedge its own cashflows saving itself the need to take up a costly debt (Gay and Nam, 1998; Froot et.al., 1993; Haushalter, 2000).

Proponents of the second theory contend that available evidence does not support the maximization of shareholder wealth but supports the managerial utility function. Research has shown that managers will engage in hedging using derivatives if their own personal wealth and interest are at stake and engaging in personal hedging activity outside the firm is impossible (Tufano, 1996; Jin and Jurion, 2007)

Empirical evidence

Empirical evidence is inconclusive on the ability of management to engage in derivates usage to enhance firm's value. Bartram, Gregory and Conrad (2011), carried out an extensive research using a large sample of 6888 non-financial firms in 47 countries and concluded that hedging reduces both total risk and systematic risk. Allayannis and Weston (2001) studying 720 large US non-financial firms between 1990 and 1995 find a positive relation between firm value and use of foreign exchange derivatives. Using Tobin Q ratio as proxy for firm value, the researchers find that firms that use foreign exchange derivatives for hedging have 4.87% premium over firms that do not. This is economically and statistically significant.

Studies have found a positive relation between firm size and derivatives use. Economies of scale in hedging and transaction cost of hedging which include cost of trading and informational systems enabling costs favour larger firms than smaller firms (Haushalter 2000; Geczy, Minton and Schrand, 1997; Dolde, 1995 and Nance Smith and Smithson, 1993). However, one study by Ang, Chua and McConnel (1982) found that small companies have higher probability of facing financial distress and going bankrupt and therefore more likely to hedge.

Hedging with financial derivatives may lower the deadweight cost of financial distress (Mayers and Smith, 1982; Smith and Stulz, 1985). Financial distress is related to debt. Higher total debt to total equity ratio leads to higher chances of facing financial distress. Companies with high level of debt are more likely to hedge than companies with a lower level of debt (Dolde, 1995; Guay, 1999; Graham and Rogers, 1999). Empirical evidence on tax avoidance schemes using derivatives was recently provided by Donohoe (2012b). This study shows that using derivatives a company can reduce its current taxes and cash paid by 1.7 and 4.0 percent respectively. However this is limited to regimes with convex tax systems.

Campello, Lin, Ma, and Zou (2011) intimate that hedging firms pay lower interest spreads and are less likely to have capital expenditure restrictions in loan agreements. These favorable financing terms, in turn, allow hedgers to invest more by alleviating the problem of underinvestment. The problem of underinvestment has received sufficient attention and has been explored in many studies. Studies show that companies with higher profitable opportunities are likely to hedge more (Gay and Nam, 1998; Froot et. al., 1993; Haushalter, 2000; Allayannis and Ofek, 2001; Geczy, Minton and Schrand, 1997). However, Chiorean, Donohoe, and Sougiannis (2012) believe that they have brought to an end the debate on firm's engaging in derivatives usage to alleviate the underinvestment problem. According to this latest research, "firms neither implement derivatives to reduce underinvestment nor alter their investment behavior after beginning to use derivatives".

Guay and Kothari (2003) demonstrate that the relationship between firm value and hedging is spurious and makes no economic sense. The gains postulated in hedging are too minute for large companies. Tufano (1996) states that "little empirical support for the predictive power of theories that view risk management as a means to maximize shareholder value". Similar studies by Jin and Jorion (2007) using Tobin Q as proxy for firm's value for 44 North American Gold Mining firms from 1991 to 2000, could not find any positive relationship between hedging

activities and firm value. Jin and Jorion (2007) conclude that since commodity price exposure is transparent and available to all investors, it is not rational to expect that hedging against commodity prices should lead to higher firm value.

Tufano (1996) finds support for management utility function theory suggesting managers who hold more options did not engage in hedging while firms whose managers hold more stock actively hedged their position. This suggests that managerial risk aversion informs firm's risk management programs. Graham and Rogers (2002) also reach a similar conclusion that managers' equity holdings affect their inclination to hedge.

The debate as to the effect of derivative usage and firm's value is yet to be settled. There are numerous papers that find a relationship between firm value and hedging using derivatives (Batram et. al., 2011; Allayannis and Weston, 2001; Graham and Rogers, 2002; Adam and Fernando 2003; Campelo et. al., 2011). However there exists a mountain of literature that find no relationship between hedging with derivatives and firm value (Mian, 1996; Tufano, 1996; Guay and Kothari, 2003; Bartran, Brown and Conrad, 2007; Jin and Jorion 2006; Callahan 2002). The difference in view cans be explained by different samples, different timelines and different proxies for the same variables.

In the African context the most basic derivatives; Forwards, Futures, Options and Swaps are yet to take root. South Africa is the only major market where Exchange-traded derivatives are available to investors. According to Tanui (2008), 56.8% of motor vehicle dealers in Kenya use forward contracts to hedge against foreign exchange rate. Mwangi (2007), suggests that lack of derivatives at the Nairobi Securities Exchange contributes to the slow pace of financial innovations in the African continent. No study has been undertaken on the extent and motive of the use of OTC derivatives as risk management among public companies in Kenya.

Methodology

Data collection: Data for this study was collected from 2011 annual reports of companies listed at the Nairobi Securities Exchange. There are 58 companies listed at the Nairobi Securities Exchange (Ngugi et. al., 2013). Financial Institutions and Investment companies totaling 20 were excluded from the sample. Banks and Insurance take are on the supply side of the derivative contracts and are the market makers. Investment companies are engaged in ownership of equity and debt positions in other listed companies and will have high correlations with the companies they own.

The sample selected for further study was reduced to 23 firms because information for several companies was missing from the public records. The sample obtained is 40% of the firms listed at the Nairobi Securities Exchange which is considered sufficient for the purpose of the study. Public companies are required by IFRS 7 and IAS 39 to disclose their risk exposures and risk management tools.

Data analysis methods: The data was analyzed using both univariate and multivariate analysis. Univariate analysis is used where the data being analyzed is parametric, unrelated and small. A t-test finds out if there is a significant difference in average means of one continuous or dichotomous group versus another and finds the significance of that relationship. In this case the date presented the data obtained is mainly ratio in nature and a t-test is found to be a suitable measure. To compliment the t-test a correlation test was carried out using Pearson's correlation coefficient.

Multivariate Analysis was used because the data is in binary dependent variables form with two dichotomous categories: Either a firm is a derivative user (1) or not a derivative use (0). Logistic regression is used here because normal OLS regression will not apply; the data is limited, discrete and non-continuous.

Variables description: The dependent variable is a binary, dichotomous measure which was coded "1" for firms that engage in hedging with derivatives and "0" for firms that do not engage in derivative use (Ahmed and Haris, 2012; Sprcic, 2007; Géczy, Minton and Schrand, 1997; Allayannis and Weston, 200; Smith and Smithson, 1993).

The hypothesis developed so far shows that financial distress, firm size, cost of financing and growth opportunities are the independent variables. The proxy for leverage (Financial Distress) is the ratio of book value of long-term debt to book value of assets (Géczy, Minton and Schrand, 1997). The proxy for firm size is book value of assets (Ahmed and Haris, 2012; Allayannis and Weston, 2001; Mian, 1996). The proxy for cost of financing is the interest cover ratio (Sprcic, 2007). Growth opportunities are related to growth of assets and investments. A good measure of growth opportunities is the ratio of investment expenditures to book value of assets (Sprcic, 2007; Haushalter, 2000; Géczy, Minton and Schrand, 1997; Smith and Stulz, 1985).

Results

Descriptive statistics

14% of the companies listed at the Nairobi Securities Exchange engage in hedging using derivatives. Forward contracts are the most popular derivatives used by the companies listed at the Nairobi Securities Exchange with over 75% of the derivative users. Only one firm among the derivative users has disclosed to using more than one type of derivative in risk management.

Table 1: Correlation Matrix

		Constant	V1	V2	V3	V4
Step 1	Constant	1.000	-0.249	-0.470	-0.452	-0.227
	V1	-0.249	1.000	-0.193	0.071	-0.072
	V2	-0.470	-0.193	1.000	0.090	-0.108
	V3	-0.452	0.071	0.090	1.000	0.017
	V4	-0.227	-0.072	-0.108	0.017	1.000

The variables tested have very low correlation as shown in table 1. The analysis therefore does not suffer from multicolinearity. However the sample is small and this may affect the robustness of the analysis. On the basis of independent T-test we fail to find any difference in means of the two samples. The p-values for Leverage, Firm Size, Financing Costs and Growth Opportunities are not statistically significant. This means the variables analyzed do not explain the hypothesis being tested.

Multivariate analysis

In the logistic regression shown in table 2 below Leverage, Firm Size, Cost of Financing and Growth opportunities were regressed. The p values highlighted shows that none exhibits statistical significance. This suggests that these variables are not explanatory in the firm's

decision to use derivatives as tools of risk management. However, Firm size shows a level of marginal effect on the use of derivatives. For every 1% increase in firm size, the likelihood of a firm using derivatives increases by 3.6%.

Table 2: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I.for EXP(B) Lower	Upper
Step 1(a)	V1	-1.127	1.978	0.325	1	**0.569**	0.324	0.007	15.627
	V2	1.280	1.181	1.174	1	**0.279**	3.596	0.355	36.411
	V3	-0.014	0.023	0.346	1	**0.556**	0.986	0.942	1.033
	V4	0.192	0.612	0.098	1	**0.754**	1.211	0.365	4.016
	Constant	-0.500	0.755	0.439	1	**0.508**	0.606		
a. Variable(s) entered on step 1: V1, V2, V3, V4.									

Conclusion

This study explores the usage of derivatives as tools of financial risk management among companies listed at the Nairobi Securities Exchange. Using the analysis above, 14% of companies listed at the Nairobi Securities Exchange use derivatives as tools of risk management. Forward contracts are the most important derivative instruments used by the companies quoted at the Nairobi Securities Exchange. This is a revelation because there have been no studies in this area that confirmed the existence of derivative usage among companies listed at the Nairobi Securities exchange.

This study fails to support the hypothesis that hedging with derivatives increases firm value. The dependent variables; Leverage, Firm Size, Financing Cost and Growth opportunities, do not explain the motives for usage of derivatives by these firms. This conclusion is in line with past studies (Jin and Jorion, 2006; Tufano, 1996). Using the repeated evidence showing that derivative usage does not increase firm value, it can be concluded derivatives are not necessarily for enhancement of firm value but rather for stabilization of firm value. Usage of derivatives locks in future currency rates, commodity prices or interest rates. This means the firm benefits from hedging if future expected outcome would have led to a loss due financial risk, otherwise the firm does not benefit at all. In this case therefore hedging creates a stable environment for wealth protection rather than wealth creation. This points to different direction from the anticipated and much discussed position that hedging increases shareholder value.

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THE ROLE OF EXTERNAL AUDITORS IN CORPORATE GOVERNANCE IN KENYA: THE CASE OF UCHUMI SUPERMARKET LIMITED

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Abstract

Public outcry and widespread need for disclosures due to corporate frauds has resulted in greater responsibility being thrust upon on internal and external auditors for the prevention and detection of corporate irregularities. Globally, irregularities in companies such as Enron, Worldcom and Satyam have been publicized. Africa and in Kenya has had no exception. The audit opinion issued during the period of reported irregularities for any company in question becomes unqualified, yet, users of audited financial statements generally expect external auditors to detect issues of fraud and mismanagement which affect the integrity of financial reports. External auditors, however, are more concerned with material misstatements in the audited financial statements. This study sought to clarify the role of external auditors in corporate governance in Kenya under the existing regulatory framework. The objective was to establish if there is a need for increased regulations that place specific responsibility on external auditors in the detection and reporting of corporate irregularities and fraud, to safeguard the interests of users who place reliance on audited financial statements, while enhancing the credibility of the audit profession. Lessons learnt in the United States; the Sabarnes-Oxley Act which was enacted in 2002 to enhance auditors' effectiveness in discharging their roles in detection and prevention of corporate frauds was a case in mind. The theories used for the study are the agency theory, stewardship theory, stakeholder theory and the resource dependency theory, however stakeholder and agency theories were the main ones used. The target population comprised financial statement users, accountants as preparers of financial statements, external auditors and the accountants' professional regulatory body. Convenience sampling and simple random were used on the accessible population members from whom to obtain information. A sample size was chosen on the basis of representation of financial statement users due to geographical spread of the large population size. Both primary and secondary data were utilized, with published media and internet sources being secondary data, while questionnaires were administered to obtain primary data. The study was descriptive in nature; therefore analysis was done through tabulations and pie charts. A confidentiality clause will be included in the questionnaire to protect the identity of respondents. The results indicated that the external auditor was exonerated from any blame while the public and shareholders relied on external auditor, therefore auditors should be accountable to the users of the financial statements and the entire public who rely on audit opinion. Further research should be on the extend of management responsibility towards detection of fraud and error and how external auditors should be able to detect and report issues of corporate governance internal and external factors.

Key words: Corporate governance, External Auditors, Uchumi Supermarket Limited

Introduction and background of the study

Corporate governance refers to the set of systems, principles and processes by which a company is governed. They provide the guidelines as to how the company can be directed or controlled such that it can fulfill its goals and objectives in a manner that adds to the value of the company

and is also beneficial for all stakeholders in the long term. Stakeholders in this case would include everyone ranging from the board of directors, management, shareholders to customers, employees and society. The management of the company hence assumes the role of a trustee for all the others. (Thomson, 2009).

Global cases of corporate fraud

The Enron scandal, revealed in October 2001, eventually led to the bankruptcy of the Enron Corporation, an American energy company based in Houston, Texas, and the de facto dissolution of Arthur Andersen, which was one of the five largest audit and accountancy partnerships in the world. In addition to being the largest bankruptcy reorganization in American history at that time, Enron was attributed as the biggest audit failure. Senior staff executives used accounting loopholes, special purpose entities, and poor financial reporting to hide billions of dollars in debt from failed deals and projects. The Chief Financial Officer, then and other executives not only misled Enron's board of directors and audit committee on high-risk accounting practices, but also pressured Andersen to ignore the issues. (Healy, Krishna G, 2003).

Local case of corporate fraud

Uchumi Supermarkets Limited was founded in 1975, as a public limited liability company, by three Kenyan parastatal companies, namely Industrial Commercial & Development Corporation (ICDC), Kenya Wine Agencies Limited (KWAL) and Kenya National Trading Corporation (KNTC). The main objective at the time was to create outlets for the equitable distribution of commodities and to create retail outlets for Kenyan manufactures. The shares of the company stock were listed on the Nairobi Stock Exchange (NSE) in 1992. Uchumi Supermarket chain was suspended in 2006 from trading at the Nairobi Securities Exchange following its collapse over accrued debts.

Effects of corporate fraud and audited financial statements

In the wake of these scandals, many of these companies saw their equity values plummet dramatically and experienced a decline in the credit ratings of their debt issues, often to junk status. Many of these firms were forced to file for bankruptcy protection from creditors. Accounting problems are widely cited as a reason for the stock market slump that followed these scandals. (Agrawal, Chadha, 2005). Delisting from a stock exchange, or material asset sales are other effects of corporate fraud. (Alexei Romanenko, 2011). The board of directors or top executives may be fired by the shareholders, as was the case in Uchumi Supermarkets Limited. Court cases may be filed against the fraud perpetrator, resulting in negative publicity for the organization, and decline of share values. Where external auditors fail to report on evident corporate misdeeds, audit firms have been barred from practicing, as was the case with Arthur Anderson. Locally, the corporate misdeeds of Uchumi Supermarkets saw several of its chains close down, resulting to loss of jobs for its workforce, and investigation of the then auditor, Price water house Coopers. (Wahome, 2006) Similarly, Audited Financial Statements regardless of the type of entity, whether in the public or private sector, or whether profit or not, all entities use economic resources to pursue their goals. Financial statements enable an entity's management to provide useful information about its financial position at a particular point in time and the results of its operations and its changes in financial position for a particular period of time. External financial reporting for these entities is directed toward the common interest of various users. Financial statements provide owners with information about the stewardship of management. They also provide a basis for investors' decisions about whether to buy or sell

securities, for credit rating services decisions about the credit worthiness of entities; for bankers' decisions about whether to lend money, and for decisions of other creditors, regulators, and others outside of the entity. (Chartered Accountants Auditing and Assurance Handbook, 2008).

Statement of the problem

During the audit, the auditor collects evidence to obtain reasonable assurance that the amounts and disclosures in the financial statements are free of material misstatement or accounting fraud. However, the characteristics of evaluating evidence on a test basis, the fact that accounting estimates are inherently imprecise, and the difficulties associated with detecting misstatements hidden by collusion and careful forgery, prevent the auditor from finding every error or irregularity that may affect a user's decision. Auditors are not trained to detect forgeries, nor will customary audit procedures detect conspiracies. As a result, a properly designed and executed audit may not detect material fraud. Therefore, audits can only provide reasonable assurance that financial statements are free of material misstatements and cannot absolutely guarantee the accuracy of financial statements. External auditors are not and should not be expected to provide absolute assurance regarding reliability of financial statements, but the public expectations concerning external auditors performance are high. Users of audited financial statements generally expect external auditors to detect financial statement fraud and employees' illegal acts and fraud, which affect the integrity of financial reports. External auditors, however, are more concerned with material misstatements in the audited financial statements. (Rezaee Z, 2009). Auditors are not trained investigators. However, the audit methodology is normally carried out on test basis due to the large number of transactions, hence even a thorough audit may fail to uncover frauds.

Objectives

Main objective

This study seeks to clarify the role of external auditors in corporate governance in Kenya as a means of addressing expectations of financial statement users.

Specific objectives

The specific objectives of this study are;

To determine whether there is an expectations gap between external auditors and financial statement users understanding of the role of external auditors in corporate governance.

To establish adequacy of existing audit obligations and determine if there is need for increased legislation or regulation that place specific responsibility on external auditors in the detection and reporting of corporate irregularities and fraud.

To safeguard interests of users of financial statements by ensuring they have an understanding of the extent to which they can place reliance on the auditors' opinion in as far as detection and reporting of corporate fraud.

To safeguard the image of external auditors as independent third parties to financial statement users by clarifying their professional obligations in as far as detection and reporting of corporate fraud.

Theoretical review

Agency theory: The theory is conceptually a simple theory that reduces the corporation to two participants of managers and shareholders. Second, agency theory suggests that employees or managers in organizations can be self-interested. In agency theory shareholders expect the agents to act and make decisions in the principal's interest.

Stakeholder theory: Stakeholder theory can be defined as "any group or individual who can affect or is affected by the achievement of the organization's objectives". Unlike agency theory in which the managers are working and serving for the stakeholders, stakeholder theorists suggest that managers in organizations have a network of relationships to serve – this include the suppliers, employees and business partners.

Dependency theory: Whilst the stakeholder theory focuses on relationships with many groups for individual benefits, resource dependency theory concentrates on the role of board of directors in providing access to resources needed by the firm. However, other related theories and political theory are; stewardship theory, transaction cost theory and political theory.

Role of external auditor and the audited reports: An external auditor performs independent, third-party reviews of all the financial records of a company or corporation. He evaluates all accounting, payroll and purchasing records, as well as any documents related to investments, stocks or loans. His job is to provide an accurate, unbiased analysis of the company's financial condition.

Audited reports: The auditor expresses his assurance on the financial statements in an auditor's report. The report, which contains standard words and phrases that have a specific meaning, conveys the auditor's opinion related to whether the financial statements fairly present the entity's financial position and results of operations. If the auditor has reservations about amounts or disclosures in the statements, he modifies the report to describe the reservations. The auditor's report and management's financial statements are only useful to those who make the effort to understand them. (Alexei Romanenko, 2011). Further in the case of Sarbanes-Oxley Act of 2002 of U.S, Hailed as the most significant change to securities laws since the 1934 Securities Exchange Act, a new penal law commonly known as the Sarbanes-Oxley Act of 2002, was signed into law by George W. Bush and became effective on July 30, 2002.The Act contains sweeping reforms for issuers of publicly traded securities, auditors, corporate board members, and lawyers. It adopts tough new provisions intended to deter and punish corporate and accounting fraud and corruption, threatening severe penalties for wrongdoers, and protecting the interests of workers and shareholders.

Literature review

An exploratory study of auditors' responsibility for fraud detection in Barbados (Alleyne and Howard, 2005), indicated that the expectation gap is wide, as auditors felt that the detection of fraud is management's responsibility, while users and management disagreed.

A paper by the Zabihollah Rezaee (2009) defined financial statement fraud as the deliberate misstatements or omissions of amounts or disclosures of financial statements to deceive financial statement users, particularly investors and creditors. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) study (2010) on fraudulent financial reporting in US Public Companies, reported 347 cases of fraudulent financial reporting from

1998 to 2007, where the most common technique involved improper revenue recognition, followed by overstatement of existing assets and capitalization of expenses. (Rezaee, 2009).

Anup Agrawal and Sahiba Shadha (2005) examined whether certain corporate governance mechanisms are related to the probability of a company restating its earnings. A company typically reveals serious accounting problems via a restatement of its financial reports. Findings indicate therefore that several key governance characteristics are unrelated to the probability of a company restating earnings. However, inefficiencies in the processes of accounting may amount to a professional scandal. (Noahankomah, 2011).

Research gaps

Kenya has had its' own share of corporate frauds, more recently the highly publicized corporate mismanagement of Uchumi Supermarkets and CMC Motors. The public questioned the audit process as both companies had previously received unqualified audit reports. Auditors of the companies were put to task on their failure to detect and report the mismanagement evident in the companies. A study on financial statement users expectations in regards to the roles and responsibility of auditors in detection and prevention of fraud is yet to be conducted in Kenya.

Methodology

A research design is simply the framework or plan for a study, used as a guide in collecting and analyzing data. The critical tenet of research is that the design of the investigation should stem from the problem. (Churchill, Iacaobucci, 2002). This study was in the form of descriptive case research design. Case study was preferred in this research because of the sensitive nature of the study. The target population was selected to capture parties affected by the corporate fraud of Uchumi Supermakets which took place in the year 2005. The respondents therefore comprise users of Uchumi Supermarkets financial statements for the year 2005, accountants, auditors, and the audit firm that issued unqualified audit report for the period. As well, the regulatory body and watchdog for the accountancy profession in Kenya, the Institute of Certified Accountants of Kenya (ICPAK).

Instruments

Primary data was obtained through self administered surveys. Secondary data was obtained from previously published media reports as well as internet and other social media. The opinion of financial statement was first hand as it is collated from what is posted to the internet by the users themselves.

Data analysis

Gender

From the analysis, it occurred that, 52% of the respondents who participated in the study were female while 48% of the respondents were male. This implies that, women are beginning to get a number of significant appointments in the corporate sector and are involved in day to day decision making in the corporate scene.

Profession

From the analysis, it occurred that, 57% of the respondents who participated in the study were auditors, 29% of the respondents were accountants, while 14% were in other professions such as marketing, the business community, and a senior official in a public entity. This confirms the reliability of the findings and data since more than 80% of the respondents are users of the financial information.

Corporate fraud as a major concern for business in Kenya

Here, 48% of the respondents who participated in the study were in agreement that corporate fraud is a major concern for business in Kenya, 33% of the respondents strongly agreed that corporate fraud is a major concern for business in Kenya, 9% of the respondents were neutral and 5% disagreed that corporate fraud is a major concern for business in Kenya and another 5% strongly disagreed that corporate fraud is a major concern for business in Kenya. This implies that, 81% of the respondents agreed that corporate fraud is a major concern for business in Kenya; hence corporate governance awareness in Kenya is increasing as is globally. Additionally, corporate fraud does dent the public image of organizations; hence organizations must give adequate attention to issues of good corporate governance.

Discovery of fraudulent activity having negative impact on the users of financial statement

From the findings, 48% of the respondents who participated in the study strongly agreed that discovery of fraudulent activity would have negative impact on users of financial statement, 38% of the respondents who participated in the study agreed that discovery of fraudulent activity would have negative impact on users of financial statement, 9% were neutral and 5% of the respondents who participated in the study disagreed that discovery of fraudulent activity would have negative impact on users of financial statement. It is imperative to note that cumulatively 86% of the respondents who participated in the study agreed that discovery of fraudulent activity would have negative impact on users of financial statement.

The role in external auditors in a specific duty to identify and report the corporate fraud

From the findings, 43% of the respondents who participated in the study strongly agreed that external auditors have a specific duty to identify and report corporate fraud, 28% of the respondents who participated in the study agreed while 24% disagree and 5% of the respondents who participated in the study strongly disagree. The results indicated a situation where users of financial statements believe external auditors have specific duty to identify and report corporate fraud therefore their opinion is highly relied on in decision making.

As to whether the auditor's report on financial statements can be relied on as a true reflection of the integrity of financial statement?

Here, 43% of the respondents who participated in the study were in agreement that auditor's report on financial statements can be relied on as a true reflection of the integrity of financial statement, 14% of the respondents strongly agreed, 29% were neutral while 14% of the respondents were in disagreement. The responses indicated that investors and any other stakeholder in the organization accept as true the auditor's opinion.

Legislation that places specific responsibility on external auditors to identify and report corporate fraud

47% of the respondents who participated in the study strongly agreed that there should be legislation that places specific responsibility on external auditors to identify and report corporate fraud, 43% of the respondents agreed that there should be legislation that places specific responsibility on external auditors to identify and report corporate fraud, 5% of the respondents were neutral while another 5% were in disagreement that legislation that places specific responsibility on external auditors to identify and report corporate fraud. The study therefore indicated need for specific legislation to ensure auditors can be held accountable for their opinions published in the financial statements of corporate organizations.

Have the recent corporate governance irregularities impacted negatively on the credibility of auditors as trustworthy and independent professionals who add integrity to financial statements

43% of the respondents who participated in the study were in agreement that the recent corporate governance irregularities have impacted negatively on the credibility of auditors as trustworthy and independent professionals who add integrity to financial statements, a further 29% of the respondents who participated in the study strongly agree, 19% of the respondents were neutral while 9% of the respondents disagreed that the recent corporate governance irregularities have impacted negatively on the credibility of auditors as trustworthy and independent professionals who add integrity to financial statements.

Situational Analysis

On if the auditors of Uchumi supermarkets achieved the audit objective of responding appropriately to fraud or suspected fraud identified during the period of reported corporate governance irregularities

From the findings, 38% respondents who participated in the study agreed that the auditors of Uchumi supermarket achieved the audit objective of responding to fraud or suspected fraud, however, 33% of the respondents who participated in the study disagreed that the auditors achieved the objective of the audit objective of responding to fraud or suspected fraud, 14% of the respondents were neutral and did not comment on the issue, while 10% strongly agreed that the auditors achieved the objective of the audit objective of responding to fraud or suspected fraud and 5% of the respondents strongly disagreed that the auditors achieved the objective of the audit objective of responding to fraud or suspected fraud. From these findings it implied that this is a contentious issue.

If ICPAK was justified in clearing the auditors of professional negligence in the audit of Uchumi Supermarket after unqualified (clean) opinion was issued despite the bad corporate practices later reported

From the analysis, 33% of the respondents were in agreement that ICPAK was justified in clearing the auditors of professional negligence in the audit of Uchumi after issuing unqualified opinion despite the bad corporate practices later reported, 29% of the respondents disagreed that ICPAK was justified in clearing the auditors of professional negligence in the audit of Uchumi after issuing unqualified opinion despite the bad corporate practices later reported, 9% of the respondents strongly agreed with ICPAK decision, 10% of the respondents strongly disagreed with ICPAK action while 19% of the respondents were neutral and non committal to ICPAK

decision of clearing the auditors of professional negligence in the audit of Uchumi after issuing unqualified opinion despite the bad corporate practices later reported. The results therefore indicate that half of the respondents were in agreement with ICPAK while approximately the same numbers were in disagreement with ICPAK.

From the analysis of secondary data

As if Uchumi's was a case of corporate crime: from an investor opinion

Representing users of financial statements, specifically investors, the opinion of a commissioner at the Kenya National Commission on Human Rights posed in the East African Standard (2012) is cited.

He states, "This wide coverage and dynamic notion of ethical conduct on the part of a company appears to say that legal compliance alone is not enough. There is a whole realm of duties that relate to the area that current discourse on social responsibility refers to as 'beyond compliance.' There exists a difference between direct abuse and complicity. It is against this background that the Uchumi Supermarkets make an excellent case study that may just start Kenya's own version of Sarbanes-Oxley Act." This is also the name given to an Act that was sponsored by US Senator Paul Sarbanes and Congressman Michael G. Oxley following the corporate scandals of Enron, WorldCom and others in the US.

Institute of certified public accountants of Kenya (ICPAK) investigations

An investigation by the Institute of Certified Public Accountants of Kenya (ICPAK), on whether the auditors' opinions were in step with set accountancy professional standards, absolved them from accusations that it did not raise the alarm that the supermarket chain was crumbling under debt. The auditors were found to have operated above board and cleared of any malpractice in the lead up to the collapse of Uchumi Supermarkets. (Capital FM Business, 2008).

As to shareholders opinion on Uchumi; and the role of external auditors

The following was published in "Analyses of issues at the Nairobi Stock Exchange and other matters" in 2006.

In the last Uchumi AGM, there was a heated discussion with some minority shareholders on one side and the board on the other regarding the continuation of Price waterhousecoopers as external auditors of the company. The shareholders argued that that PWC did not raise a red flag when Uchumi was going under. This issue was not clearly resolved with the board promising to take the views of the shareholders into consideration. This question cannot be more relevant than today. The CMA should consult widely and seek to enact a law to define the roles of auditors and other parties on matters of corporate governance; this was also similar to USA opinion.

Opinion from member of public (2006) surveyed in the daily papers had said that the CEO of price Waterhouse Coopers Kenya who were Uchumi auditors were supposed to be arrested just like the CEO of Capital markets Authority, Nairobi Securities and Central Depositories and Settlement Corporation.

Summary and conclusion of the key findings

PWC, the external auditors, exonerated themselves from responsibility in the identifying and reporting of corporate mismanagement in the Uchumi scandal. Investigation by their regulatory body, ICPAK, also demonstrated that the auditor is not placed with this responsibility in the normal course of their work. The public and shareholders on the other hand seem to place reliance on external auditors to identify and report issues of governance and fraud.

The role of auditors must be clarified to users of financial statements. While in US there was a tightening of regulations to place more responsibility on auditors, such a regulation has not been passed in Kenya. However, auditors remain accountable to users of financial statements as the public places reliance on the auditors' opinion. In conclusion the findings indicate that the expectation gap is wide, as auditors feel that the detection of fraud is management's responsibility, while users disagree.

Recommendations

The study reveals a gap in expectations which can be addressed by educating the public on the duties and scope of work of external auditors in Kenya. This can be spearheaded by the Institute of Certified Public Accountants of Kenya. Given the impact of corporate governance issues on investors and the public as a whole, and the increasing public demand both locally and globally for greater transparency and accountability, a law similar to Sarbanes-Oxley Act passed in the US would give assurance and increase confidence of financial statements users in the work of external auditors in matters corporate governance. A study on the impact that Sarbanes-Oxley Act has had on corporate governance in the US would serve as a guide on whether such legislation could benefit Kenya.

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EVALUATION OF FINANCIAL DISTRESS IN UCHUMI SUPERMARKET LTD

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Abstract

There exists no conclusive agreement on which financial ratio(s) are most appropriate to assess the likelihood of financial distress and the successful turnaround strategies of recovering firms. This study evaluates financial health in Uchumi supermarket limited by testing whether Altman's Z score model is accurate in predicting corporate financial distress for a study period of 2003 to 2012. The research also assesses the success of turnaround strategies. The company was selected because of its historical record of financial difficulties in the mid 2000s that led to its receivership in June 2006 and its current recovery to profitability. Analytical formulas in Altman's model were applied on the financial statements and questionnaires were administered. Stratified random sampling was used to select a sample size. The results reveal that the model is accurate with Z values reflecting a distress zone especially in the period under receivership and a grey zone in 2012 which is an alarming matter that may lead to corporate bankruptcy in near future unless corrective measures are undertaken. The study also highlights that successful recovery is not a function of a single strategy but a combination of various tactics within the four main restructuring activities.

Keywords: Financial distress, Altman, Turnaround strategies.

Introduction

According to Glen (2005) financial distress is a situation whereby a firm does not meet creditors' obligations or are met with difficulties. Financially distressed firms have problems in meeting and/or paying off their due or overdue financial obligations to its creditors. Wruck (1990) defines financial distress as a situation where a firm's operating cash-flow are not sufficient to satisfy current obligations and the firm is forced to take corrective action.

Financially distressed firms face possible conflicts that can either be described as a cash shortage on the assets side of the balance sheet, or as an overdue obligation or debt in liabilities. This marks the genesis of cash flow insufficiency to settle current obligations. Most distressed firms resolve the situation by raising capital to fund their restructuring although very few are liable to trust this risky investment owing to the fact that a financial boost does not guarantee a lasting solution to the problems at hand. Previous studies show that financial distress arises mainly due to unwise use of debt financing. Arnold (2005) states that one of the cheapest ways to finance a company is through debt but firms tend to run into financial distress, induced by payment of interest regardless of the cash flow of the business. If the firms hit a rough patch in its business activities it may have trouble paying its bond holders, bankers and other creditors their entitlement. Firms that hit a rough patch in business fail to meet creditors' entitlement. Debt is highly emphasized as the main cause of financial distress yet with this information it's still inevitable.

Outecheva (2007) concluded that resolution from financial distress provides unsatisfying results varying from 10% to 34%. This shows a low interrelation between financial distress and

recovery that needs constant results. McCarthy (2011) found out that apart from demographic and economic variables leading to financial difficulties, behavioural factors also matter. Argyrou (2006) argued that financial distress occurs when a company's shareholders' equity falls below 40% of the company's share capital. Evidently, financial difficulties in companies have been a chronic problem and appropriate actions should be incorporated. The motivation of this study emanates from the arguments that there is no conclusive agreement on which ratio(s) are most appropriate to assess the likelihood of financial distress and assess the success of turnaround strategies of distressed firms. The study determines the accuracy of Altman's model and appropriate measures that enhance recovery of financially distressed firms.

There have been severe cases of financial distress in Kenya such as: Uchumi supermarket, Bulk medical limited, E. A. Packaging industries limited among others. Firms deal with financial distress in several ways such as selling off major assets, merging with other firms, reducing capital spending, research and development, issuing new securities, negotiating debts with its banks and other creditors, exchanging debt for equity and filing for bankruptcy. This means that firms should plan and evaluate their financial condition in such a manner that the risk of financial distress is minimized at all costs for sound performance of the business. Despite various theories in existence, firms are experiencing financial distress, some in ultimate distress that is bankruptcy, while some have collapsed already. In light to the above it is important to note and conclude that business firms and in particular public companies have a role to play in the entire management. Large financial failures in the recent years have pointed to the need for extensive research on financial distress.

Uchumi supermarket is the only publicly quoted supermarket in Kenya. The headquarters is in Kenya and it has various branches throughout the country and also retail outlets in East Africa. The company came into existence in 1975 as a public limited liability company that was formed by three state owned companies namely; Industrial Commercial & Development Corporation (ICDC), Kenya Wine Agencies Limited (KWAL) and Kenya National Trading Corporation (KNTC). The main objective initially was to trade in commodities for Kenyan manufacturers. In 1976, the shareholders to the company signed a management contract with an Italian supermarket to train Kenyans to run the new business enterprise. The company's shares were listed on the Nairobi Stock Exchange currently known as the Nairobi Securities Exchange (NSE) in 1992. In the early 2000s, the company encountered severe financial constraints and went into receivership in June 2006. This state led to de-listing of the company from the NSE. Later on the company resumed trading under an interim management. Since January 2011, Uchumi supermarket has managed to regain profitability. The company was re-listed on NSE in May, 2011.

Literature review

Beaver (1966) holds the pioneering efforts of the current state of literature in financial distress prediction and management. Beaver (1968) conducted the first cornerstone study on distress prediction, which allowed researchers to comprehend how firms enter a failure path. Much research work on financial distress has been carried out over several years more so in the industrially developed countries. Almeida and Philippon (2000) analyzed risk adjusted cost of financial distress of public companies in the United States which have issued corporate bonds and have difficulties to pay coupon and its bond. Fitzpatrick (2004) conducted an empirical study on the dynamic of financial distress of public companies in the United States whereas Gennaiola and Rossi (2006) explored the optimal solution of financial distress in Sweden.

Intensive research also extends to Outtecheva (2007) who analysed the probability of financial distress and the different avenues to avoid it in New York Stock Exchange (NYSE).

It is worth noting that few studies have been conducted in most developing countries. Hui and Jhao (2008) explored the dynamics of financial distress of 193 companies which have experienced financial distress in China in between the years 2000-2006. Ugurlu and Hakan (2006) conducted a research to predict corporate financial distress for the manufacturing companies listed in Istanbul stock exchange for the period, 1996-2003. Bemmann (2005) argues that the Z scores, developed by Professor Edward I. Altman is perhaps the most widely recognized and applied model for predicting financial distress. Altman (1968) uses multiple discriminate analysis that is also applied in this study. Since the establishment of Altman's financial distress prediction model, several studies pertaining to the model have been conducted including, Deakin (1972), Taffler (1983), Goudie (1987), Agarwal and Taffler (2007).

According to Scherrer (2003), for the turnaround to be successful, business decline must be acted upon as soon as warning signals are identified and key elements such as competent management, cooperation of firm stakeholders and sufficient bridge capital to carry out the turnaround plan must be present. A company that is experiencing financial distress has several turnaround or exit options. Selection is done depending on the appropriateness of an option or the expected benefits to an organization. There exist four main generic strategies that can be adopted by a financially distressed firm for survival as a going concern.

According to Lasfer and Remer (2010), operational restructuring is generally the first broad strategy undertaken by companies. This includes strategies to boost revenue generation, and improve efficiency. The ultimate aim of this restructuring is to typically conserve or generate more cash inflows to the business and can include; reducing Capital Spending on Research and Development, cutback action and/ or layoffs. Lasfer and Remer (2010) acknowledge that asset restructuring is the second and it typically generates much needed cash quickly but it is considered to be a drastic option. It involves; disposing of real property and/ or merging with other firms. The third strategy is financial restructuring that involves debt and/or equity restructuring and can either generate or conserve cash. Gilson et al. (1990) defines debt restructuring as a transaction in which existing debt is replaced by a new contract which either: reduces interest or capital, extends maturity or swaps debt for equity. The strategy here includes; issuing new shares, negotiating with creditors, cutting and/ or omitting dividends. Lastly is management restructuring that involves changes in the management of the company and it does not directly involve cash (Lasfer and Remer, 2010). In an extensive study on financial distress and corporate turnaround Loui and Smith (2007), conclude that previous studies identify the top management change as a pre-requisite for any successful recovery. Reorganization handles all the people issues in the business and it entails restructuring, re-staffing, re-skilling and change of leadership with an objective of improving the organizational management, structure, alignment and culture. Previous studies which include; Lasfer and Remer (2010), Collard (2010), Outecheva (2007) and Situma (2006) have failed to clearly highlight the appropriate turnaround strategies that can be adopted to rectify shortcomings of a distressed firm.

Many empirical studies have been done concerning financial distress but most companies still suffer from financial problems heading to the extreme exit option of liquidation and bankruptcy. This is alarming, not because of the collapse of individual firms but also enormous for the entire financial system. A research gap exists in that despite several attempts to predict business failure and bankruptcy, an unambiguous conclusion has not been achieved on which

combination of ratios would derive the most appropriate model for financial distress prediction. Much of the research carried out also fails to clearly explain how to successfully turnaround a distressed firm. This study seeks to close the gap by evaluating accuracy of Altman's revised model and determine if it is necessary to develop a more up to date model of predicting financial distress in Kenya and how to successfully revive collapsing firms.

Methodology

The study relied on both primary data that was collected through questionnaires issued to the managerial staff members in Uchumi supermarket and secondary data which involved evaluating financial statements using Altman's model for a span of 10 years from 2003 to 2012. Descriptive research design was applied which involved examining the adopted turnaround strategies to give a description of the state of affairs as it exists. Stratified random sampling was used to select a sample size. The first objective was analysed by computing ratios for X1, X2, X3 and X4 so as to determine the Z score in the model. Variance analysis was used to compare the zones of discrimination in the multiple discriminant analysis model. A likert's scale was used for the second objective with a scale of 1 to 5 where 1 and 2 gave an average of positivity, 3 being the average for neutral or uncertain responses and lastly 4 and 5 gave the average for negativity.

Econometric specification of Altman model: Bemmann (2005) argues that the Z scores, developed by Professor Edward I. Altman, is perhaps the most widely recognized and applied model for predicting financial distress. According to Altman (1968), he formulated the Z-score formula for predicting the probability of a firm to face financial distress or go into bankruptcy by using multiple corporate income and balance sheet values to measure the financial health of a company. Z-score is a linear combination of four or five common business ratios, weighted by coefficients that were estimated by identifying a set of firms which had declared bankruptcy and then collecting a matched sample of firms which had survived, with matching by industry and approximate size (assets). Altman applied the statistical method of discriminant analysis to a dataset of publicly held manufacturers. The estimation was originally based on data from publicly held manufacturers, but has since been re-estimated based on other datasets for private manufacturing.

The Z-score estimated for non-manufacturing industrial and emerging market credits is a linear combination of four ratios hence applicable for predicting financial distress in Uchumi supermarket since it's a non-manufacturing organizations. It applies the following ratios;

$$Z = 6.56X_1 + 3.26X_2 + 6.72X_3 + 1.05X_4 \qquad \text{where;}$$

$X_1 =$ <u>Working Capital</u> $\qquad\qquad$ $X_2 =$ <u>Retained Earnings</u>

$\qquad$ Total Assets $\qquad\qquad\qquad\qquad\qquad$ Total Assets

$X_3 =$ <u>Earnings Before Interest and Taxes</u> $\quad$ $X_4 =$ <u>Book Value of Equity</u>

$\qquad$ Total Assets $\qquad\qquad\qquad\qquad\qquad$ Total Liabilities

Zones of Discrimination: $\quad$ $Z > 2.6;$ $\qquad$ - Safe zone
$\qquad\qquad\qquad\qquad\qquad\qquad$ $1.1 < Z < 2.6;$ - Grey zone
$\qquad\qquad\qquad\qquad\qquad\qquad$ $Z < 1.1;$ $\qquad$ - Distress zone

Results and discussion

Table 1 clearly illustrates computed ratios in the Altman's model with their respective Z scores on a yearly basis for a period of 10 years (2003 - 2012).

Table 1: Prediction of Financial Distress

Financial Year	T_1	T_2	T_3	T_4	Z_{Score}
2003	− 0.338	0.049	− 0.049	0.257	**− 2.12**
2004	− 0.406	− 0.149	− 0.193	0.035	**− 4.41**
2005	− 0.885	− 0.918	− 0.581	− 0.375	**− 13.10**
2006	− 0.521	0.00	− 0.406	− 0.328	**− 6.49**
2007	− 0.019	0.00	− 0.069	− 0.386	**− 0.99**
2008	− 0.200	0.00	0.178	− 0.339	**− 0.47**
2009	− 0.305	0.00	0.133	− 0.068	**− 1.18**
2010	− 0.032	0.203	0.170	0.953	**2.59**
2011	− 0.036	0.238	0.129	1.321	**2.79**
2012	− 0.123	0.269	0.087	1.164	**1.88**

The organization was in a distress zone during the 2003 financial year implying that it was susceptible to financial distress in the near future estimated to be after two succeeding years from the base year. This model proves to be accurate in a local Kenyan scenario since in the succeeding years the Z score tabulated continuously remained to be less than 1.1 showing the company was deteriorating financially. This is also supported by the fact that Uchumi supermarket further landed into receivership in years 2006, 2007, 2008, 2009 and partly 2010. The study is in accordance with Altman (1968) discriminant ratio model that proved to be accurate in predicting financial distress in 94% of firms studied in U.K and 95% of all firms in bankrupt and non bankrupt groups of classification.

The ratios in Altman's model have been used as yardsticks for evaluating the financial health of Uchumi supermarket from 2003 to 2012. Working capital in the total assets is used as a measure of a firm's underlying operational efficiency. A decrease or negative working capital may portray the idea that a copy is operating in an efficient way since cash held up in inventory or debtors cannot be used to pay off any of the company's obligations. However if a company extends for long with a negative working capital, it implies that the firm may face a bankruptcy or serious financial trouble.

The working capital in Uchumi supermarket remained to be negative in the years under study signaling possibility of an underlying problem in the company's operations more so if the accounts payables over shadow accounts receivable and inventories. The study reports a fluctuating negative X1 (Working Capital/ Total Assets) over the years being a red flag that

calls for corrective measures to be put in place to avoid shortage of liquid funds causing stock outs.

X2 (Retained Earnings to Total Assets) measures a firm's reinvestment level that reflects its ability to accumulate earnings using its assets. If 1:1 retained earnings to total assets ratio is achieved, it indicates 100% growth financed through profits and not increased debt whereas a low ratio shows unsustainable growth financed from increasing debt. The study shows a negative ratio in the earlier years that shifts to a zero. A ratio of 0.203 is achieved in year 2010 that gradually increases in the other two years. This implies that the company is in a position to generate adequate reserves for future growth.

X3 (Earnings Before Interest and Taxes to Total Assets) measures a firms effectiveness in generating earnings using its assets before contractual obligations are met. The ratio is used by investors to determine the return attributable to profits pulled from its assets and the higher the ratio the more the effectiveness. The EBIT to total assets ratio remained negative in the initial years reflecting the company's consistent loses. In 2008 a positive ratio of 0.178 was reported with fluctuations prevailing to year 2012. Year 2012 record a decline to 0.087 which is not good sign. The management should exercise caution to enhance the ratio.

X4 (Book Value of Equity to Total Liabilities) ratio measures the extent to which a company is financed by debt. The result indicates a low ratio in initially then translates to a negative in the years under receivership. However, from year 2010 it becomes positive but still minimal indicating that the proportion of debt and equity had an impact on the financial performance. According to Ray (2011) those businesses with ratios above 200 percent are safest.

The computed Z scores also prove that by year 2010 the company was moderately resuming its commercial activities because it shifted from a distress zone to a grey zone with a computed Z score of 2.59 as demonstrated on table 4.13. According to Uchumi supermarket limited and subsidiary annual report (2011) it documented that lending financial institutions lifted the company's receivership in 2010 and the supermarket group was successfully re-listed in the Nairobi Securities Exchange on 31st May 2011. The results further reveal the accuracy of the model by upholding that by year 2011 the company had regained profitability and it shifted from a computed Z score of 2.59 in year 2010 to 2.79 in year 2011 implying a transition to a safe zone free from susceptibility to financial distress in the future period. In the financial year ending 30th June 2012, there was a drop in the Z score which reduced to 1.88 showing a draw back to the grey zone. The results can be attributed to the restructuring of the company on implementation of turnaround strategies and expansion of the business into a wider branch network. A grey zone implies a moderate degree of risk to financial failure which is an alarming matter that may lead to corporate bankruptcy in near future unless corrective measures are undertaken.

The sample group administered with questionnaires by the researcher consisted of sixty five members of staff in Uchumi supermarket and only fifty one questionnaires were valid and returned accounting for 78% responsive rate. The study reveals that a combination of strategies was put in place and the various respondents determined the extent of their effectiveness. Table 2 reveals that majority of the respondents admit that reduction of capital spending on research and development had a positive effect with a mean of 2.0.

On laying off staff most respondents argued there was no effect with a mean of 3.4. Cost cutting measures had a positive effect according to a majority response with a mean of 1.9. The results illustrate that under operational restructuring; cost cutting strategies are most effective with the

minimal coefficient of variation indicating it is less variable hence more stable. The strategy is successful for the supermarket and the study is in line with a research by Zimmerman (1989) on managing a successful turnaround where it was found that recovered companies are diligent and maintain their costs low. On asset restructuring, disposal of real property was considered to have a positive effect with a mean of 3.7. Gilson et al. (1990) argued that although disposal of real property is common for obtaining cash while in distress, the sales may not be optimal since financially distressed firms may get a bad price for their assets. This strategy was not effective hence unsuccessful and can be attributed to the above fact.

Table 2: Turnaround Strategies

		Mean	S.D	C.V
	Operational Restructuring			
a)	Reduced capital spending on research and dev.	2.0	0.96	0.48
b)	Staff lay off	3.4	1.25	0.36
c)	Cost cutting (cost reduction and asset reduction) 0.34		1.9	0.64
	Asset Restructuring			
d)	Disposal of real property	3.7	1.01	0.27
e)	Merged with another company	0.0	0.0	0.0
	Financial Restructuring			
f)	Negotiation with creditors on payment mode	2.5	1.22	0.49
g)	Float of new shares to the public for subscription	2.2	1.05	0.48
h)	Omitted or cut dividend payment 0.32		3.9	1.25
	Management Restructuring			
i)	Change of management after financial distress	1.7	0.63	0.37
j)	Reorganization of staff members	2.2	1.15	0.52

The research displays that under financial restructuring, float of new shares to the public for subscription was the most effective strategy with a mean of 2.2 and a coefficient of variation of 0.48 as shown on table 4.12. Negotiation with creditors on mode of payment was the second effective strategy in the category with a mean of 2.5. Most of the respondents (mean of 3.9) claimed that omitted/ cut dividend payment had a negative or no effect. Strategies under financial restructuring entail debt and/or equity restructuring with an objective of either generating or conserving cash. The results imply that floatation of new shares generated cash for resolutions and expansion hence a high degree of success. According to Gilson et al. (1990) debt restructuring is characterized by one or more of the following; interest or principal reduction, debt maturity extension and/ or debt is swapped for equity. The study conforms to Datta and Iskandar (1995) who found out that 50% of companies that undertake financial restructuring are successful in renegotiating the terms of their debt contracts. Dividend omission/ cut can lead to negative signaling and taint the corporate image.

Management restructuring was successful to reinstate the organization back to its roots. A high number of the respondents with a mean of 1.7 attested to the effectiveness of change of management after financial distress. The coefficient of variation was also minimal (0.37) indicating uniform results. Reorganization of staff members was also considered effective with a mean of 2.2 from the respondents. Improvement in industry economic condition is a significant determinant of recovery for companies in economic distress but not for those that

were historically poorly managed (Whitaker, 1999). The results imply that sound management is very crucial to sustain stability of a recovery firm.

Summary and conclusions

This study examines the outcome of various financial ratios with the aid of Multiple Discriminate Analysis (MDA). Altman's Z score model proves to be accurate in predicting corporate financial distress in a Kenyan scenario based on the study. The study conforms to the financial situation experienced by Uchumi supermarket over the period under study hence can be relied upon in predicting the future financial health of a business. The model is useful in discovering financially troubled firms that may face bankruptcy. In year 2012 the supermarket lies on a grey zone which is alarming matter in that it implies the possibility of corporate bankruptcy in near future unless corrective measures are undertaken. The management and investors of various companies can apply the model for financial planning with the empirical evidence of providing a warning signal.

Advanced prediction of the future terrible financial status of a company would help rectify it before landing to the ultimate bankruptcy through remedial turnaround action such as operational, asset, financial or management restructuring to avoid potential bankruptcy costs. It is evident that successful recovery of a company is not a function of a single strategy but is a combination various degrees of the four main restructuring activities.

Research shortcomings

This research focused on a case study exposing it to a risk that the results might have been affected with regards to the sample size thus a similar study can be conducted for other business organizations to find out if similar results would be realized. This would facilitate comparison and comprehensive results on findings.

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MICRO-FINANCE

THE EFFECTS OF MOBILE PHONE MONEY TRANSFER SYSTEM (M-PESA) ON THE PROFITABILITY OF MICRO AND SMALL ENTERPRISES IN BUNGOMA SOUTH SUB- COUNTY IN KENYA

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Abstract

There have been relatively few studies focusing directly on the way mobile payments are used to enhance the quality of the services of MSEs especially those in rural areas and therefore increasing their profitability. The main objectives of the study were to determine the effect of cost reduction, sales revenue and market share by use of mobile phone money transfer services on the profitability of MSEs. Descriptive research design was used to obtain information about the existing phenomenon by use of questionnaires. The target population was Micro and Small Enterprises. The sampling technique used was multi-stage random sampling where a total of 57 sample size was yielded. Excel Computer Package was used to analyse data which was descriptive and presented in form of graphs, pie-charts and percentage tables. Some of the major findings included that almost each business own or have used a mobile phone in their business at 98% which signifies that the high penetration of the mobile phone among the MSEs in rural areas can serve to help the high percentage of unbanked small businesses access financial services through M-pesa which helps them to increase their profits and as a result, the mobile phone industry can be seen as an ideal partner to offer mobile services to MSEs in rural areas. The government should assist in bringing down the cost of m-pesa transactions so as to induce MSEs in using mobile money transfer services.

Key words: Micro and Small Enterprises, Mobile money, Profitability.

Introduction

Lack of employment alternatives has pushed many people into self employment activities which largely form the micro and small enterprises sector in the country. A micro enterprise is one having not more than ten employees including the owner, while a small enterprise is the one having eleven to fifty employees (Stevenson, 2005). So far, there has been no clear insight into the role that mobile phone money transfer system play in the development of micro-business. This implies that technology providers, government agencies and development partners may not address the required interventions and there is therefore a need to examine the contribution of mobile payment technology on micro businesses and the effect on their business profitability. The micro business operator also needs to fully understand the entrepreneurial effect of this new technology on their business so as to cope with the increasing developments in the mobile payment services on one hand, and the challenges of the micro business operating environment, on the other hand.

Statement of the Research Problem

There is significant potential for a mobile phone to increase profitability of MSEs but current supporting evidence is scarce, methodologically heterogeneous and economically unreliable

(Donner and Escabori, 2009). There have been relatively few studies focusing directly on the way mobile phones are used in enhancing productivity among the users in the developing world, some businesses also lacks the awareness regarding the potentials that exist in the use of mobile phones and ICTs. MSEs from the rural areas were also facing problems in settling their day to day transactions as they had to visit banks to settle their obligations (Donner, 2005).

General Objective

The main research objective was to determine the effects of mobile phone-money transfer system (M-PESA) on the profitability of Micro and Small Enterprises in Bungoma South sub county.

Specific Objectives

1. To determine the effect of cost reduction by use of mobile phone money transfer system

on the profitability of Micro and Small Enterprises.

2. To determine the effect of sales revenue by use of mobile phone money transfer system

on the profitability of Micro and Small Enterprises.

3. To determine the effect of market share by use of mobile phone money transfer

system on the profitability of Micro and Small Enterprises.

Research Questions

1. What is the effect of cost reduction by use of mobile phone money transfer system

on the profitability of Micro and Small Enterprises?

2. What is the effect of sales revenue by use of mobile phone money transfer system

on the profitability of Micro and Small Enterprises?

3. What is the effect of market share or growth by use of mobile phone money transfer system on the profitability of Micro and Small Enterprises?

Justification of the study

The study may benefit a number of groups, among them the MSEs owners to understand the benefits of the mobile-based money transfer system in their businesses. The government too under the Ministries of Trade and National Planning and vision 2030 will find the study appropriate for strategic reasons, crafting appropriate policies to ensure MSEs utilizes benefits accrued by the mobile base money transfer system (M-PESA).

Literature Review

Morawczynski and Pickens (2009), made a study to show how M-PESA can be beneficial to businesses. The study shows how the transaction costs have reduced due to the technology simplicity, quickness and reliability. The introduction of mobile phone on marketing in Indian fisheries led to increased arbitrage among local fish markets leading to reduced price

dispersions (Jensen, 2007). Using micro-level survey data, he elicited that the adoption of mobiles by fishermen and wholesalers led to reduced price dispersion, elimination of dead weight loss, the near-perfect adherence to the Law of One Price, and ultimately the improvement in the welfare of wholesalers. Arunga and Kahora (2007), concluded that sole proprietors and small businesses in Kenya benefited hugely from the mobile phone revolution as they are able to make savings and gain access to more customers and new services.The micro-business operators are able to transact payments directly with their customers and suppliers through a mobile phone in the palm of their hands without necessarily going through a bank) and without having to leave their business premises (Anuradi et al., 2009).

Independent Variables Dependent Variable

Cost Reduction

Sales Revenue

Market Share

MSEs PROFITABILITY
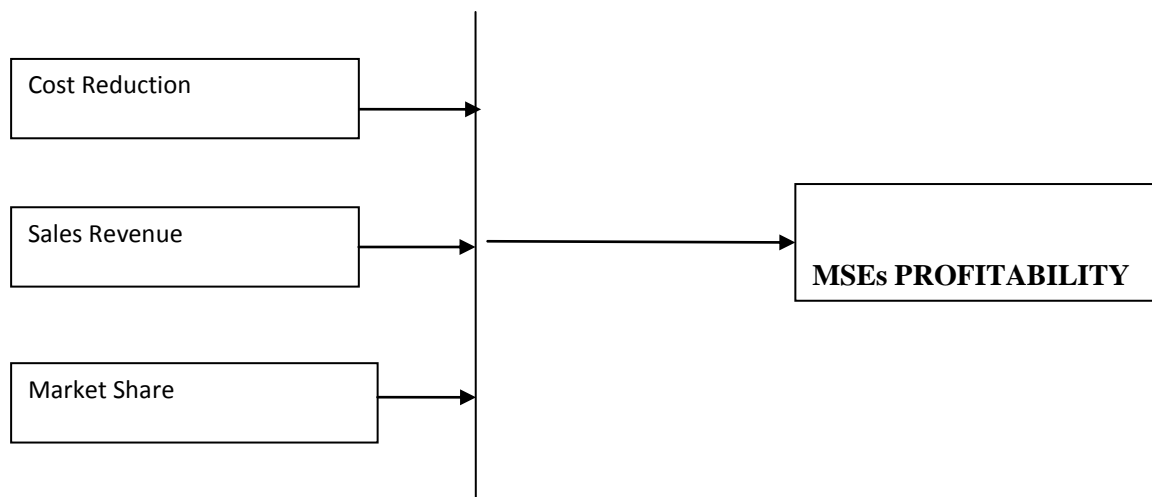
Figure 2.1 Conceptual framework

Research Methodology

Research Design: The researcher employed a descriptive or survey research design. Descriptive research involves surveys, a fact finding enquires of different kinds. It attempts to describe and explain conditions of the present by using many subjects and questionnaires to fully describe a phenomenon.

Target Population: The total target population of Micro and small businesses for the entire Bungoma County was 8,074 (Business Register-County Council of Bungoma, 2012) that of Bungoma South was 2,557 (Bumula constituency had 861 businesses while Kanduyi constituency had 1,696 businesses). The research involved businesses such as retail shops, tailoring, chemists, hardware's, carpentry, metal workers, hair salons, repair services and butcheries.

Sampling Technique: Multi-stage random sampling technique was used where a sample was prepared in stages and sampling was ideally random at each stage.

Sample size: The total target population of the studied wards was 570. The researcher studied only 57 MSEs out of the total 570. This sample is enough for conclusive generalization of the whole population as it constitutes 10% of the target population (Kothari, 2006).

Data Collection Procedures and Instruments: The main primary data collection instrument that was used was the questionnaire. Closed-ended questions in the long run were used to collect data.

Data Analysis and Presentation: Analysis of data in this study was descriptive. Nachmias and Nachmias (2004) noted that descriptive statistics enables the researcher to summarize and organize data in an effective and meaningful way. Microsoft Excel was used in the processing of data and the information generated was presented in the form of graphs, pie charts, frequency and percentage tables.

Findings and Discussions

Ownership of Mobile Phone by Businesses

According to the findings, 92% of Micro and small business owners own a mobile phone while a further 6% can access one through family or friends. The study also found out that in totality, therefore, 98% of Micro and Small businesses in Bungoma South Sub-County can access mobile phone money transfer services through M-PESA if they wanted while 2% of Micro and Small businesses cannot access M-PESA services. It can be seen therefore that the high penetration of the mobile phone among the MSEs in rural areas can serve to help the high percentage of unbanked small business access financial services through M-pesa which helps them to reduce costs. The mobile phone industry can therefore be seen as an ideal partner to offer mobile services to MSEs in rural areas.


OWNERSHIP OF A MOBILE PHONE

Do not own a mobile phone 2%

Access through family/friend 6%

Own a mobile phone 92%
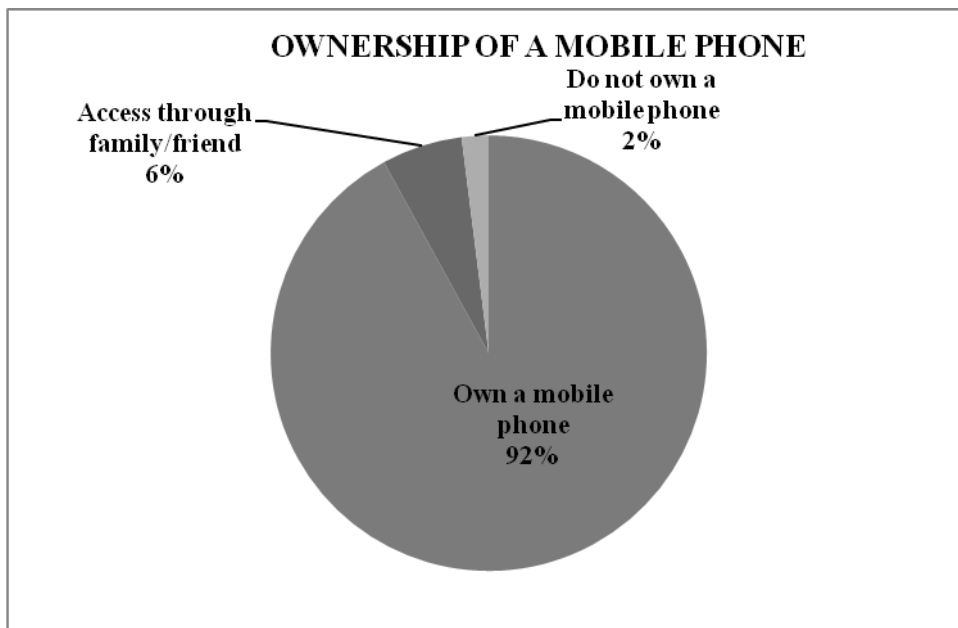
Figure 4. 1 Ownership of mobile phones

Nature of phone used in a business

Mobile phones were the ones mostly used in a business and had the highest perceived impacts on their MSEs at 96% of the respondents while only 4% of the respondents used simu ya jamii in their business. However, most respondents felt that fax machines and fixed lines were not used in their businesses. This was contributed by the fact that most of the micro entrepreneurs

had no access to fixed lined and faxes machines and hence felt no impact about them on their businesses. The mobile phones were the mostly available tool and effective communication channel for conducting businesses transactions with the micro entrepreneurs' due to their easy accessibility to persons with limited resources and semi permanent structures as in the case of jua kali /MSEs.
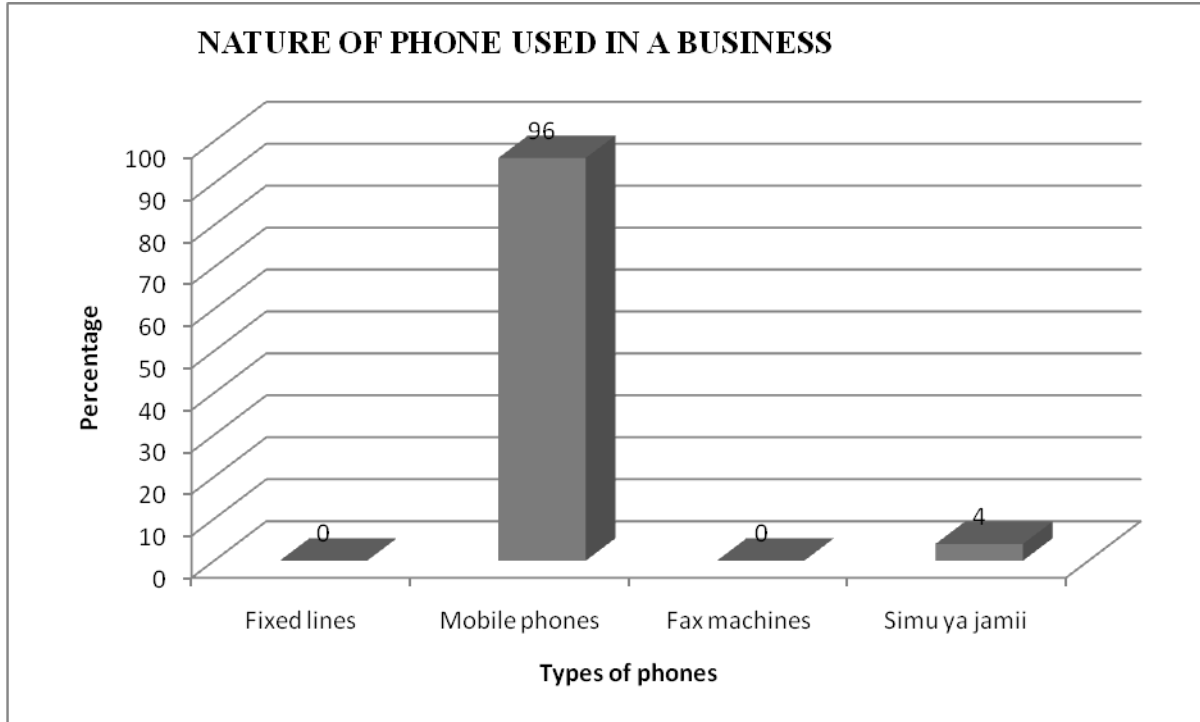
**Figure 4. 2 Nature of phones used in a business**

Education Level

The results are evidence that those running the Micro and Small business are High school leavers at 73% followed by tertiary college at 13%, primary school level at 10% and only 4% with university education level. It is evident that most of the entrepreneurs (83%) had secondary education and below. Lack of school fees and formal employment could have been one of the reasons that pushed these entrepreneurs into venturing into different types of businesses. Those with little education are yet to realize the better side of running businesses due to lack of information and adequate knowledge on how to run and sustain the MSEs to maturity. Therefore, education matters a lot in running a small enterprise. University graduates holds only at 4% who are involved in running small enterprises but not micro.

Education level has an effect on running the business and hence the profitability of that business. Businessmen with different education levels perceive the importance of Mobile Money Transfer services on their businesses in different ways. The higher the levels of education, the better for the entrepreneurs' to take advantage of different business changes. There is a challenge posed to education level and skills training by the large numbers employed in micro and small enterprises particularly on the advantages of the current technology by use of mobile phones to help them reduce costs and increase profitability.

Comparison of mobile money transfer services, traditional banking and money transfer companies

The study reveals that mobile money transfer services forms the highest percentage of banking usage among the respondents at 86% as opposed to the traditional banking hall set up and money transfer companies at 10% and 4% respectively. Respondents prefer using this mode of service compared to traditional banking halls and money transfer companies because Mobile Money Transfer Services holds the prospect of offering a low cost, accessible transaction banking platform for currently unbanked customers in Kenya (Info DEV, 2006).

Additionally, the flexible operating hours of the M-pesa agents leaves them with greater opportunities to satisfy banking requirements that may arise at any time. On the contrary, Kenyan banks operate for an average of seven hours per day. The supplementary Automated Teller Machines (ATMs) do not have a sufficient outreach since they are only available in major towns. While money transfers companies are expensive, not reliable and takes more time to deliver the service.
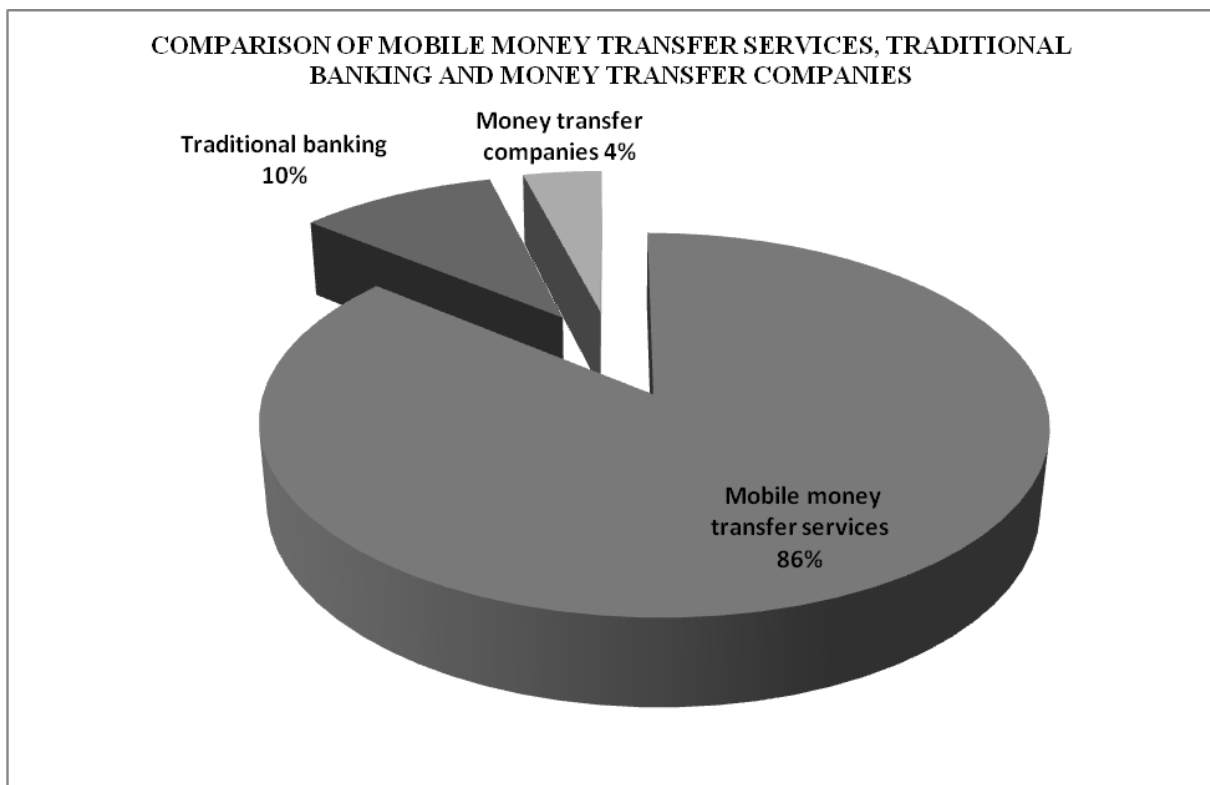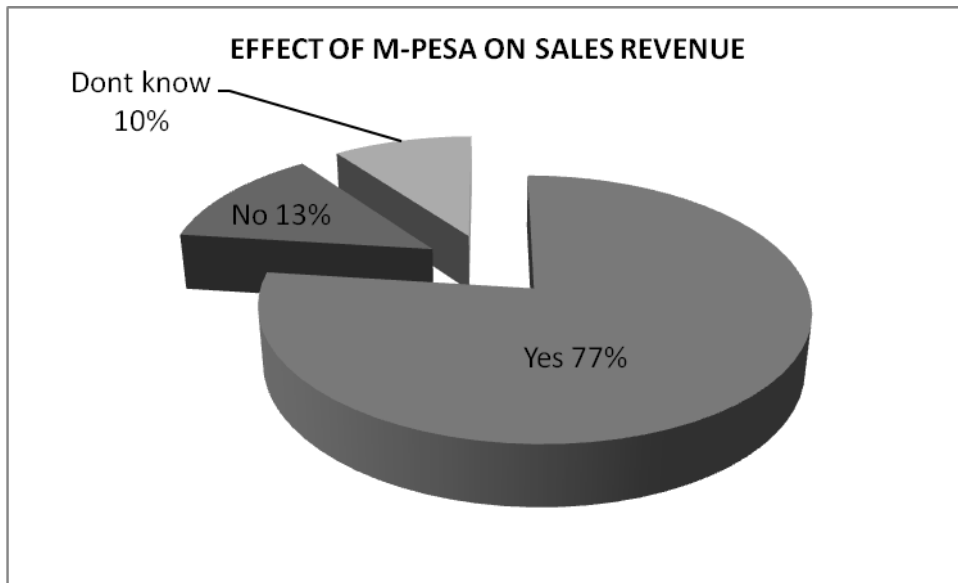

Figure 4.4 comparison of mobile money transfer services, traditional banking, money transfer companies

Effect of M-PESA on sales revenue

The research revealed that 77% of the respondents interviewed agreed that mobile money transfer services has an effect on sales revenue while 13% did not agree and a further 10% were not aware whether MMTs has any effect on sales revenue. Most respondents felt that the use of mobile phone money transfer services increases their sales revenue in the sense that customers do not have to go to the bank to withdraw money so as to purchase goods and services as they

already have a mobile bank with them and can make purchases anytime, anywhere as they so wish.

Figure 4.5 Effect of M-PESA on sales revenue

Respondents opinion if M-PESA has reduced costs and increased profitability

The research revealed that 77% of the respondents felt that M-PESA services reduces costs and hence increases profits of a business, while 15% felt that it does not reduce costs and 8% do not know. Mobile Money Transfer (MMT) services dramatically reduce the cost of delivering financial services this is aptly demonstrated by the 77% score of the respondents interviewed. CBK (2007), statistics put the average monthly cost of operating a current account with a Kenyan commercial bank at over Ksh 900 ($13). M-pesa reduces the cost of basic banking services to customers with over 60 percent from what it would cost through traditional channels. The electronically managed transactions result in huge cost savings, the benefits of which are transferred to the users. This is explained by the absence of charges at the time of registration. It can be deduced that majority of MSEs seeking MMT attach a high consideration to the monetary consequence of enrolling into a banking facility. Thus the absence of opening account balance boosts their preference for the service.

Cost cutting techniques used in a business

From the survey conducted 75% of the respondents rated a mobile phone as the main cost cutting technique used in their business followed by training at 10%, others at 7%, hiring outside analyst at 6% and use of face book and twitter at 2% for marketing. Most MSEs use mobile phones because majority of them own or have access to a mobile phone. Due to lack of enough capital and knowledge majority of them cannot afford training in order to enhance their business management skills and also hire outside analyst as majority do not even have accounting books. They also lack knowledge or enough stock to use face book and twitter for marketing purposes.

## *Category in which business uses M-PESA frequently*

Mobile phone money transfer services are mainly used by MSEs for money transfer in their business. The 48% consensus in response expresses this reality as a product like mobile money, provides a faster, safer, traceable, long distance way to pay people (that doesn't require change). A further 42% uses the facility for social services such as making calls to say hello to friends and relatives, watching TV, listening to radio, accessing internet, receiving sms from other mobile operators and it is used as a way for workers in urban settings to send money home and support their family. The 6% and 4% are used on political purposes and others respectively. Small business owners and entrepreneurs in rural areas are also getting in the action of using mobile money as a key part of their business. Many of them reported time and cost savings in making mobile payments, and considerable efficiency improvements in their logistics and customer service stemming from this medium.

Techniques applied in business to increase market share

The researcher noted that most MSEs in rural areas use a mobile phone in their businesses to increase market share since they form a total of 82%. This is an indication that there is a need for the businesses to diverse other better methods to increase their market share so that they may not be competed out of the business

Rating of Mobile Money Transfer Services

According to the data collected the researcher noted that most respondents rated mobile money transfer service as above average at 58%, excellent at 19%, average at 11%, satisfactory at 8% and good at 4%. This shows that most of the MSEs have confidence and satisfaction in the services provided by Safaricom providers.
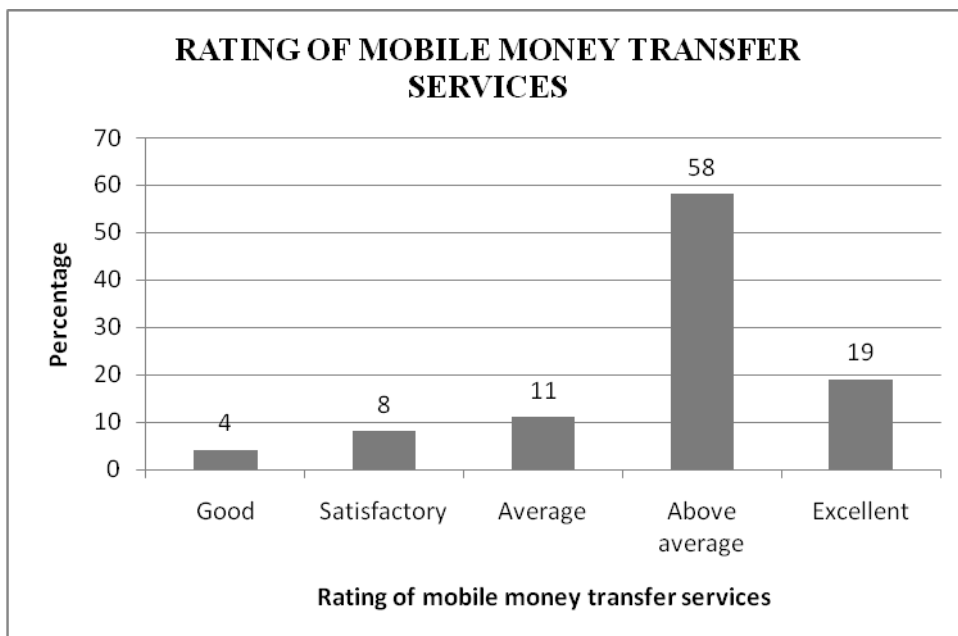
Figure 4.10 Rating of Mobile Money Transfer Services

Recommendation of M-PESA to other people

The Research showed that a high percentage of respondents would recommend M-PESA services to other people at 92% compared to those who would not at 8%. This shows how effective and efficient the service is among the users who are satisfied with the success factors attributable to its usage such as reduction in transaction costs, convenience, security, support from the mobile payments provider and good relationship with the regulator and other banks.

How M-PESA has influenced the profitability of micro and small businesses

The research reveals that many of the business owners felt that by use of the mobile phone money transfer system has helped their businesses to cut costs and hence increase their profitability. Thus, 86% of the respondents agreed that it has made a tremendous positive change in different sectors or areas of operation within the business. Only 14% of those who own and transact using the service felt it was yet to bring about a positive change in terms of cost savings and safety.

How M-PESA has influenced the profitability of micro and small businesses

The 86% of those who felt the system has helped their businesses increase their profitability highlighted that it has helped their business save on cost, reduced number of times of going to the bank i.e. time saving on queuing, it left individuals with more time to run and monitor their businesses one on one, transaction fees were lower than those charged by most banks, it's easier to use it when paying for clients and customers in their rural areas, they used it to pay for the goods and services like water , It reduced their transport cost and risks when sending cash compared to other means.
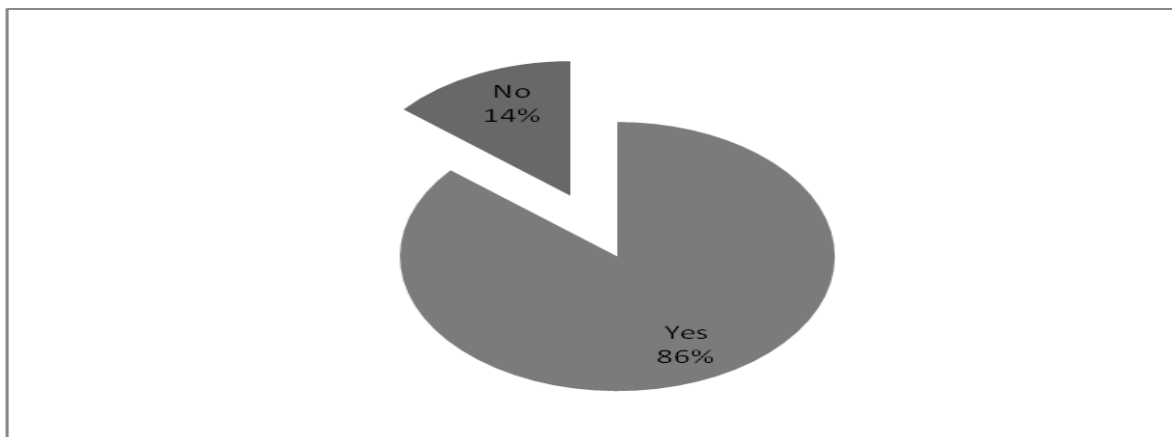
Figure 4.13 How M-PESA has influenced the profitability of micro and small businesses

Conclusions

There are high chances for all the people in the rural areas to own a mobile phone and thus there will be increased use of the Mobile Money Transfer services among the MSEs in rural areas. Most of the MSEs are literate people due to current unemployment in formal sectors and therefore institutions should come up with lessons to teach mobile phone usage technology which is transforming the lives for better in the informal sector and train the public on business benefits of mobile money transfer services. Based on the research model and research findings, the government and the mobile service providers can enhance the micro business operators' use

of the mobile payments and the digital technology by: Providing infrastructure that minimizes congestion periods within the mobile network and enhance security measures.

This study identified that mobile money transfer service increases market share as more and more people are increasingly using the mobile payment services and a more extensive research should be conducted to bring out those factors that are necessary to ensure that the micro businesses embrace the digital technology in the conduct of their business and enhance their business performance not necessary for social network.

Mobile payment technology is increasingly being used by micro business enterprises in Kenya as most respondents agreed to recommend MMTs to other people. These findings provide evidence to support that the mobile payments users consider the technology to be convenient, well supported and that perceived advantages will influence the behavior to use the technology. There is evidence that the entrepreneurs have accepted the use of the technology and hence the governments should provide appropriate policies to facilitate the use of the mobile technologies in the MSEs and explore the viability of mobile commerce in the informal sectors. The policy makers, ministry of finance, ministry of labor and human resource development and mobile service providers should educate the masses more about the benefits of integrating and using mobile technologies to enhance small businesses and also the need to enhance technical capabilities of entrepreneurs to allow widespread use of emerging technologies in MSEs.

Recommendations

Studies that have been done so far on information and communication technologies (ICTs) in the informal sector have focused on the internet and computer usage rather than on applications of a mobile phone, and yet the mobile phones are wide used in the informal sector for business transactions. The researcher recommends that institutions should come up with policies to educate individuals on the importance of ICTs also focusing on mobile payments by use of phones but not only computers. The training should not only concentrate on computer studies but on information and communication technologies. There is need to popularize the connection between computers and other ICTs, in particular, the mobile phone which is widely used. Research work for this report showed that rural people are entrepreneurs; what might be lacking is exposure, and the right business environment and infrastructure.

Policies to encourage innovation among the MSEs should be formulated so as to create jobs within the sector, as stipulated in Kenyan Vision 2030. The people who publicly demonstrate new inventions in mobile phone applications should be identified and facilitated so as to continue with their inventions.

It is commendable that the Kenyan government has removed tax from mobile handsets making mobile phones affordable by many people. Nevertheless, it should also assist in bringing down the cost of airtime further so as to induce most of the MSEs in using the mobile money transfer services. Internet enabled mobile phones are already on the Kenyan market and most MSEs in rural areas do not use these service therefore training is required to enlighten rural people as the internet is important for the import or export of goods, and MSEs that would like to participate in global markets should be given a chance to make informed market choices by being enlightened on.

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MANAGEMENT OF OPERATIONAL RISKS AND LOAN PORTFOLIO QUALITY: A SURVEY OF MICROFINANCE INSTITUTIONS IN KISII MUNICIPALITY

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Abstract

Microfinance institutions are exposed to risks for which most of them lack the capacity to effectively manage hence impacting negatively on their portfolio quality. The risks rage from financial, through operational to strategic risks. For most MFIs, operational risks are the most important because it is this area that a MFI stands to lose most. This study focused on two methods of managing operational risks. These are investment in human resources which is used to manage human resource risk and standardization of internal policies which is used to mange strategic risks. The general objective of this study was to establish how MFIs manage operational risks and how this influences their portfolio quality. The specific objectives were: to determine the influence of investment in human resources on loan portfolio quality and to establish the influence of standardization of internal policies on loan portfolio quality. The researcher used a descriptive research design. From a target population of 59 composed of credit officers and managers of eight MFIs, a sample of 50 respondents was selected through stratified purposeful sampling. Using questionnaires, quantitative information was collected and organised in tables and analysed using percentages and frequencies while qualitative data was presented through narrations. From the results, investment in human resources has enabled MFIs to improve portfolio quality up to 61% and most MFIs strictly implement their integrated policies up to 73%. It is evident that internal policies contributed more to better portfolio quality than investment in human resources. The findings of this study will provide the managers of MFIs with more effective techniques of managing risks and be able to isolate specific areas for capacity building for enhancing their portfolio quality thereby improve the quality of investment for investors. The researcher recommended employment of enough staff, offering competitive compensation and incentive schemes to retain key staff and use optimum policies for better portfolio quality. Two areas suggested for further research are, the influence of organizational structure on MFIs portfolio quality and optimal policies for maximization of portfolio quality.

Key words: Microfinance institutions, operational risks, risk management, portfolio quality, portfolio at risk and internal policies.

Background of the Study

Microfinance institutions (hereafter MFIs) are organisations that lend small loans to the poor and small entrepreneurs who cannot access mainstream bank loans due to lack of collateral and unreliable sources of income. The mission of most MFIs is to incorporate the lowest sector of productive labour force into the formal financial system and thereby expand the financial sector reach (Maria, 1998).

Kumar (2011) states that MFI's role as financial intermediaries offering small, short-term and unsecured credit, makes microfinance business risky. Furthermore as (Anderson, 2009) notes, MFI's dependence on subsidised funds, their a large clientele , lack of good MIS, and pressure to cut costs expose MFIs to several risks for which they lack proper systems to manage. According to (Khan, 2010), the risks range from financial, through operational; to strategic

risks. For many microfinance institutions, operational risk is the most relevant because it is this area that MFIs stands to lose the most (Sabetta, Isem,Joyce,Leman,Brandy,Mc Cord, and Sbana 2003). The Rural Financial Learning Centre (RFLC) (2010) categorised operational risks into: human resource risk and transaction risk among many others.

Techniques used to manage them are tailored to fit an MFI's unique circumstance (Khan, 2000). Allesi (2012) who was reporting for the Basel committee and Biswas (2010) concurred with same opinion. These risks are growing putting MFI's ability to handle them to the test Anderson (2009). This is because MFIs have been slow to react to their changing environment (Lasclles, 2012) and have not integrated risk management concepts into their day to day activities (Ruchmer et al 2012).

In India Kumar (2011) explains that operational risks are mitigated using the techniques like, setting cash retention limits for branches and giving each branch a risk score to establish branches with poor portfolio quality. In Cambodia, Naim, (2009), and Saleh, (2010) reporting for the IFC conference, argued that the rise in portfolio at risk and NPLs was attributed to the risk management systems of the MFIs. The proceedings recommended the following risk management techniques: Comprehensive information systems to reduce over-lending; Strong financial literacy and education; responsible ethical collection practices; and robust internal control systems.In Nigeria according to Kieanyibe (2009) recommends the following techniques in managing this risk: acquisition of qualified personnel for MFIs; developing the skill and abilities of personnel; motivating staff to high levels of performance; and maintaining their commitments to the MFIs.   K-Rep bank is the oldest of the formal microfinance institutions operating in Kenya (Karugu, 2007). This model MFI in Kenya's microfinance sector manages its operational risks through educational campaign; Training to increase manager's capacity ; Random operational checks; Enforcing human resource policies ; Establishing a good relationship with the regulatory authorities through open communication ; And ,using simple standardized cash transaction procedure.

Statement of the problem

Microfinance information exchange Market report (2010) show that while MFIs in Kenya are able to maintain low financial and operational expenses, they register high Portfolio at Risk (PAR). As contained in a Central Bank of Kenya report (2010), it is reported that the banking industry had been registering high Non Performing Loans (NPLs) in the last three years. According to the report there was a decrease in NPLs between 2009 and 2012. It is shown that in 2009/2010, NPLs were 61.5 billion (7.4%).In 2010/2011, NPLs were 58.3 billion (5.4%). In 2011/2012, the NPLs were 57.5 billion (4.5%). Though there has been some decrease in NPLs, the figures still remain high.Therefore this research sought to establish the extent MFIs have implemented the techniques and how they influence loan portfolio quality in microfinance institutions in kisii municipality.

General objective

The general objective of the study was to examine how MFIs in Kisii municipality manage operational risks and how this influences the quality of their loan portfolio.

The specific objectives

1. To determine the influence of investment in human resources on loan portfolio quality.

2. To establish the influence of standardisation of internal policies on loan portfolio quality

Research questions

1. What is the influence of investing in human resources on MFI's portfolio quality?

2. How does standardisation of internal policies influence MFI's portfolio quality?

Justification

The findings of the study will be beneficial to the management of MFIs who will learn new and more effective risk management techniques. They may also help them to isolate specific areas for capacity building and technical assistance for enhancing the portfolio quality of MFIs. Investors will benefit from improved quality of their investment. Employees may enjoy job security as a result of reduced loan losses as the money saved may be used to improve their compensation.

Literature review

Investing in human resources

In this section the review will focus on how the use of major human resource principles including recruitment, compensation, training and motivation by microfinance to manage the human resource risk.

Human resource risk is the risk that a MFI hires incompetent staff and management or fails to retain them leading to inefficiencies and ineffectiveness and consequently losses (Allesi, 2010). MFIs handle many small loans which require large staff that are expected to manage cash using either manual or computerised methods yet most microfinance employees are of limited educational qualification or computer skills which enhance operational risks. If there is continuous and large turnover of key management and staff, it will certainly affect performance of a MFI (UNH- SMDP, 2010).

The quality of human resource plays a key role in the success or failure of a MFI. Good human resource can meet most challenges while weak human resource enhances operational risks (Allesi, 2010). Therefore its quality needs to be assured right from the recruitment stage. Human resources are the MFIs staff and managers that execute or oversee processes (Arunachalum, 2011). Arunachalum explains that personnel should be qualified and competent and perform as expected. They should understand the MFI's mission, values, policies, and processes. MFIs should design compensation programs to attract, develop, and retain qualified personnel. In addition, compensation programs should be structured in such a manner that encourages strong risk management practices. This involves activities like training and capacity building, competitive remuneration and motivation.

As Ross (2010) notes, the private sector has shown time and again that the organisations that "get" the people side of things are more successful than those that don't. As far as training is concerned, human capital is one area that is often overlooked, though it was one of the causes of India's Andhra Pradesh microfinance unrest as Ross wrote.

According to Grammling and Holtmann (2007) short term individual staff incentives can produce significant positive effects on loan officer productivity and loan portfolio quality. An

MFI can dramatically reduce its vulnerability to most risks if it has well trained and motivated employees. In his hand book, Churchill (2001) explained that this can be accomplished through a three pronged strategy: Hiring staff with the right values, training and rewarding. Norell (2001) in his study of the Georgian credit fund, recommend training and rewarding staff to keep them motivated and enthusiastic about their work.

Standardisation of internal policies

The review in this section is aimed at finding out the internal policies proposed by other scholars in the management of transaction risk faced by MFIs. These guide microfinance

employees to work towards a common goal and thus maintain the institution's portfolio quality. Transaction risks refer to risks that affect all products and services on a daily basis in a MFI as transactions are processed. They are particularly high for MFI because they handle many small short-term loans on a daily basis which create opportunity for errors and fraud. Examples of transaction risks include skipped or wrongly documented or posted figures (Allesi, 2010).

According to Arunachalum (2011), policies often define the limits for various actions and set standards (on risk tolerance, for example) and should be consistent with a MFI's underlying mission, values and principles. According to Norell (2001), the policies should be crafted by the board of directors and dully understood by credit officers. One of the actions where policy is necessary is loan restructuring and loan refinancing as most restructured loans end up not being paid MABS (2005). MFIs need a policy to regulate and track cash movement against collection for MFIs operating in remote areas can be defrauded. Kumar (2011) argues that setting cash retention limits for branches with deviations approved and recorded can improve portfolio quality by reducing fraud risk.

However for the policies to work properly Mbeba (2007) cautions MFIs that there should be delegation and segregation of duties to assist a MFI to avoid fictitious loans which raise the value of NPLs and for staff to be responsible. To reinforce separation of duties and MFI needs a transparency policy to ensure policies are followed (Eliane, 2012). According to Norell through policies, it is better to prevent risk than treating it. Clients should understand from the onset that arrears will not be tolerated and each credit officer's portfolio record should be tracked. In a survey carried out by the Pakistan microfinance network, Haq and Khalid (2011) found out that most microfinance recognised that fraud especially at loan staff level caused dire implication as it encouraged wilful default at client level.

The survey findings recommended that fraud can be managed by: ensuring the existence of robust risk mitigation strategies and internal control measures; and reviewing staff incentive and salary structure. Mosin and Sharon (2009) have given various policies like loan approval policies; loan provisioning policies; and loan write-off policies.

In their study on the role of various factors on portfolio quality, Gonzalez and Javoy (2011) came up with findings that policies used should be strict in order to achieve high loan performance. In their study on performance of MFIs in Meru, Moti, Masinde, Mugenda and Sindani, M.(2012) found out that microfinance institutions should adopt stringent policy as a method of collecting loans as compared to lenient policy.

Loan Portfolio quality

Portfolio quality also called loan repayment, according to Rosenberg (2009), and CGAP (2006), is the indicator used to measure financial performance of microfinance. It measures how well the lender is collecting its loans. It is measured using Portfolio at Risk (PAR) Tainytsky (2011) using the following formula.

$$\text{PAR} = \frac{\text{Principal balance of loans with missed payment one day or month}}{\text{Total principal loan balance}}$$

Poor Loan portfolio quality means lack of microfinance sustainability and failure.
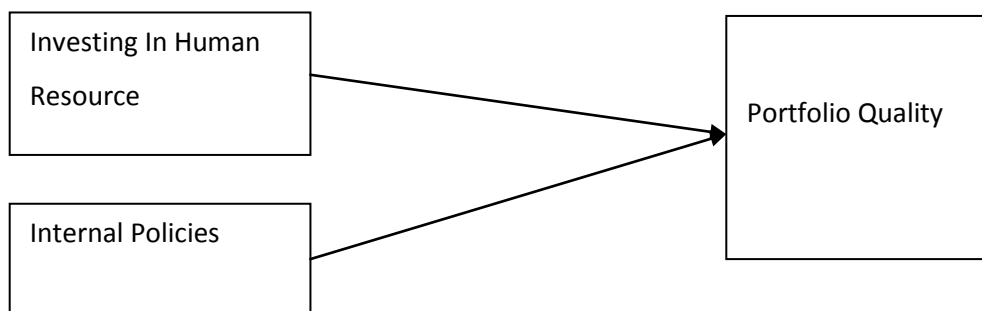
Figure 1: Conceptual Framework

Figure 2.1 Conceptual framework model which was used to illustrate the relationship between the independent variable (x) and dependent variable (y).The arrows show the direction of influence of human resources and internal policies on portfolio quality.

Methodology

***Research design:** I*n this research, descriptive research design which Sounders (2009) define as one that portrays an accurate profile of persons, events or situations. The research portrayed the risk management methods as they are used by MFI and explored how they influence their portfolio quality.

Target Population: According to Mugenda and Abel (2004), target population is the population to which a researcher wants to generalize the results of the study. It is obtained from the population which Malage (2009) defines as the entire group under study. The target population of this study consisted of eight institutions offering microfinance within Kisii municipality. The target population therefore consisted of a total of 59 employees.

Sample and Sampling technique: Sampling is the procedure by which some members of a given population are selected as representatives of the entire population (Malage, 2009). From the population of 59, a representative sample was calculated using the formula by Glenn D. I (2012): n= N / [1+N (e) ²] where n is the sample size, N is the population size and e is the precision level (5%). Based on the formula, the sample size was therefore 50. The number of respondents sampled from the credit officers was obtained using the formula while all the eight managers were included. This sample generated information on the risk management techniques

used, the people responsible for their implementation and their impact on the value of the MFIs' loan portfolio quality.

Data collection instruments: The instrument consisted of questionnaires which were administered to the loan officers and risk managers after a successful pilot study. The questionnaires were designed with both closed and open ended questions derived from the research questions. It was delivered to the respondents who were requested to fill them up in a period of two weeks, and then they were picked later.

Reliability and validity of the instrument: Reliability is the ability of the research instrument to give the same results after repeated tests in a research (Mugenda and Mugenda 2003). The reliability of the instrument for this study was determined during the pilot study which was carried out on non-sampled population of similar institutions and workers in Nyamira town. On analysis, it was established that the responses were answering the research questions, indicating that the instrument was reliable. As for validity, the researcher relied on the experts' judgement by the supervisors and lecturers of the university. Then necessary adjustments were made to the instrument before administering it for the main study.

Data collection procedure: Data was collected from the sampled credit officers and managers of the various MFI's after a brief introduction to the respondents with the aim of establishing rapport, obtaining permission and informed consent. This included explaining the nature and importance of the study to the respondents. Filled up instruments were picked later.

Data processing and analysis: The data collected was analysed using quantitative measures, that is, frequencies and percentages. Then interpretations on the impact of the individual techniques on the portfolio quality as well as generalisation were made. The information was presented using frequency tables.

Results and discussions

Study Response Rate

The researcher issued 59 questionnaires to the respondents. On collection 42 of them were received. This reflected a response rate of 84%.

Employee's Demographics

The Study captured relevant characteristics of bank workers including employees' designation, work experience and departmental staff size. Results indicated that 90% of respondents were credit officers and that 81% respondents had worked for less than five years. Fifty nine percent of respondents felt their staff size was small.

The influence of investing in human resources on a MFI's loan portfolio quality

The effect of investing in human resource and its influence on the portfolio quality was tested using various questionnaire items as discussed bellow. The results were summarized in the table below.

Table 4.4 Influence of investment in human resources on loan portfolio quality

Area investment	percentage of MFIs
Advertising	83%
Networking	64%
Staff size	68%
Information on recruitments	71%
Training	83%
Orientation	78%
Compensation	59%
Incentive	67%

The results indicate that advertising is used more by 83% of MFIs to recruit the right staff.That 71% of them recruit with enough information. Training is emphasized by 83% of the institutions too together with orientation of employee. However, 68% institutions have inadequate staff. It is also evident that the level of compensation is low for 59% of the respondents. Motivation for employees is satisfactory for only 67% of the institutions.

Influence of standardization of internal policies on loan portfolio quality

Table 4.5 Influence of standardization of internal policies on loan portfolio quality

Policy	Percentage of respondents
Approval of loan restructuring and refinancing	95%
Setting cash limits for branches	47%
Dual signature for all transactions	100%
Assigning clear responsibilities to staff	88%
Compulsory leave for errant staff	47%
Separation of duties	83%
Loan write-off	36%
Review of policies	71%

The results show that the dual signature policy is full adhered to, followed by approval of loan restructuring and refinancing policy at 95% and assignment of clear responsibilities for835 of MFIs. The other policies are not strictly followed. This contributes inefficiencies in loan tracking and monitoring. This could be the reason why the policies are reviewed any time it

becomes necessary. Generally 73% of respondents agreed that policies do influence their portfolio quality.

Conclusions

The major aim of this research was to establish how MFIs institutions manage their operational risks and how this influences their portfolio quality. What emerged is that the portfolio quality is a function of investment in human resources, internal policies and information system security. From the findings, the two operational risk management methods depicted strong influence on the MFIs portfolio quality. Internal policies ranked first at 73% and investment in human resources second at 61%. This implies that human resource remains the most challenging to the institution's performance. Some of the human resource areas that raised concern include the small staff size, low compensation level, employee's short work experience and unsatisfactory motivation of employees which prevented the MFIs from achieving optimum performance.

While most of the policies are strictly applied, some like the separation of duties, loan write-off policy and compulsory leave for errant employees are not strictly adhered to. This explains why some MFIs experience poor portfolio quality. On the antifraud policy the cash limits are sometimes exceeded, while some MFIs do not design clear responsibilities for their managers. This lowers the portfolio quality because they encourage malpractices like kickbacks in return for camouflaging a loan to be a defaulted loan or allowing a client to take more loans even without ability to pay. This survey was subject to certain limitations neutral responses, which represented a blind sport in the data, differing interpretations of questions and the interest of respondents which could have distorted the influence of the risk management methods on portfolio quality. The small geographical area covered makes generalization of conclusions to be done with caution.

It is hoped that research on operational risk management in MFIs will be extended to widen the microfinance industry's understanding of the importance of operational risk management. Otherwise from the research results, use of the two operational risk management methods has enabled MFIs to register good portfolio quality for.

Recommendations

Microfinance can "get the people side" by sticking to the professional recruitment of employees. Given the many weaknesses of networking as a recruitment method, the researcher recommends the use of advertisement of vacancies to get the right people. More investment to increase staff size and revision of their compensation and incentive schemes to make MFIs more competitive and to retain employee for longer periods is also recommended. According to the findings it seems policies are not strictly adhered to due to issues surrounding the microfinance institution's human resources and technological issue. The researcher recommends the use of optimum policies that can work for a MFI unique circumstances. MFIs should ensure that every credit officer has all the technological facilities to prevent unauthorised access to information.

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A MODEL TO ENHANCE SAVINGS AND CREDIT COOPERATIVE SOCIETIES MEMBERS' INVESTMENT CULTURE IN KENYA

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Abstract

A high saving economy accumulates assets faster and thus grows faster than a low saving economy. The investment culture is very low in Kenya. Kenya's vision 2030 for financial services is to create a successful and globally competitive financial sector that promotes high levels of saving and financing for Kenya's investment needs. This vision can be fully achieved if cooperative societies in Kenya can improve the investment culture of their members. This study, therefore, sought to establish a model that can enhance cooperatives members' investment culture in Kenya. The study adopted descriptive research design. A population of 25145 members of all the 8 registered Savings and Credit Cooperative Societies (SACCOs) in Gucha district was targeted. Simple random sampling was used to select a random sample of 379 respondents from a population of 25145 SACCO members. Both closed and open ended questionnaires were used to collect primary data. Secondary data was obtained from periodicals, internet and published SACCO reports. Data was analyzed using statistical techniques with the help of Excel computer software. Multiple linear regression was used to model the relationship between the study variables. The findings in this study showed that saving in SACCOs influence the investment culture of their members. Moreover, consumption was found to reduce investment. The regression model connecting investment (dependent variable), savings and consumption (independent variables) was found to be $\hat{Y} = 7543.415 + 0.9683X1 – 0.7653X2$. The study concluded that savings and credit cooperative societies improved the investment culture of their members. The model $\hat{Y} = 7543.415 + 0.9683X1 – 0.7653X2$ was developed to enhance cooperatives members' investment culture. Based on the above findings, the following recommendations were proposed: the government should mobilize the formation, strengthening and restructuring of SACCOs with the aim of enhancing investment in order to achieve vision 2030 on financial services; in the same vein members' consumption should be minimized as it was found by the study to reduce investment; the government, donors and other stakeholders should assist SACCOs to undertake member education about SACCOs operations, credit, shares and investment.

Key Words: investment, savings, consumption, culture

Introduction

Through investment a country can sustain its growth and development. High rates of investments depend on high rates of saving (Pelrine & Kabatalya, 2005). Many scholars have written on investment but little effort has been made in establishing a model that can enhance cooperatives members' investment culture in Kenya. According to Lipsey and Chrystal (1995) a high saving economy accumulates assets faster and thus grows faster than a low saving economy. SACCOs link borrowers and savers (Tache, 2006). The savers pool their money as savings and shares against which they borrow in form of loans. SACCOs are not-for- profit- organizations as their basic purpose is to help members save (Kyendo, 2011). Bailey (2001) defines SACCOs as cooperatives which provide their members with

convenient and secure means of saving money and obtaining credit at affordable interest rates.

According to Tache (2006) SACCOs were invented in south Germany in 1846 by two community business leaders: Freidrich and Herman. The two are the founding fathers of SACCO movement. In Italy, Luigi Luzzatti established saving and credit cooperatives which combined the principles established by the two business leaders. The SACCO movement spread all over Europe, Northern America, Latin America, and Asia from 1900 to 1930 and thereafter to Ghana by a catholic Bishop. Towards the end of 1950s African farmers promoted and registered cooperatives for cash crops like pyrethrum and coffee. Mudibo (2005) suggests that cooperatives have played a prime role in the development of the economies of Kenya, Uganda and Tanzania.

According to the Republic of Uganda (2008) cooperative movement in Uganda was started in 1913 to involve Ugandans in domestic and export marketing. SACCOs emerged in Kenya in the years 1965-1970 (Chao-Beroff, et.al, 2000). The SACCOs came as a result of the credit systems of the farming cooperatives. In these cooperatives farmers would access financial services through the union's banking sections. In the cooperatives' banking sections farmers saved and obtained advances that were serviced from income earned from the harvest. The SACCOs' banking services are provided even today in Kenya with already 219 SACCOs that offer banking services spread all over the country (Kyendo, 2011). The first co-operative society in Kenya was Lumbwa cooperative society (Bottleberge & Agevi, 2010). In 1908 the European Farmers made this cooperative formal. Its main objective was marketing and purchasing of farm inputs. According to KUSCCO report of 2011 cooperatives in Kenya have led to the development in agriculture, storage, housing, fishing and credit. The Ministry of Cooperative Development and Marketing (MCDM) conference report of 2010 indicates that there are currently over 5200 registered SACCOs with over 5.6 million registered members in Kenya.

Like in most African countries, cooperatives in Kenya have developed through two main eras, that is, the era of state control and the era of liberalization (Wanyama, 2009). According to Wanyama, the first era made cooperatives platforms for implementing socio-economic policies to the extent that failure of state policies expressed themselves in the cooperative movement. The failures saw the need for the liberalization of the cooperative movement in early 1990s (Porvali, 1993). Wanyama (2009) argues that the new economic environment that Africa experienced in the 1990s steered Kenya to formulate new policy and legislation framework in 1997 in order to liberalize cooperatives.

The Government of Kenya recognizes cooperatives as the major contributor to national development with the total population of Kenya estimated at 37.2 million people (Republic of Kenya [RoK], 2008a). The ministry of cooperative development and marketing [MCDM], 2008) estimates that 63 % of Kenya's population participates directly or indirectly in cooperative based enterprises. Thus, the remaining Kenyans which constitute 37% do not take part in cooperatives.

The policy governing cooperatives in Kenya is provided by sessional paper number 6 of 1997 (RoK, 1997a). The policy is on cooperatives in a liberalized economic environment (RoK, 1997b). This policy was formulated when the state withdrew control over cooperative movement following the liberalization of the economy. The policy made cooperatives autonomous and changed the government's role from that of control to that of regulation.

However, the 1997 policy did not provide for the government's supportive role of development of cooperatives and was also silent on the cooperative societies Act of 2004. This prompted the MCDM to formulate a revised policy framework called Kenya Cooperative Development Policy 2008 which addresses restructuring, strengthening and transforming cooperatives into successful economic entities.

In legislation, the Cooperative Societies Act of 2004 (RoK, 2004) guides the formation and management of cooperatives in Kenya. The Act enhances state regulation of the cooperative movement through the office of the commissioner for cooperative development. In addition to this legislation there is the SACCO Societies Act of 2008 (RoK, 2008b) that provides for the licensing, regulation, supervision and promotion of SACCOs by the SACCO Societies Regulatory Authority (SASRA). SASRA licenses SACCOs to carry out deposit- taking businesses called Front Office Service Activity (FOSA) and can also intervene in the management of SACCOs that are mismanaged. SASRA is a Government agency under the MCDM. For example, in intervening in management of mismanaged SACCOs the MCDM has suspended senior managers and tellers of Ogembo tea SACCO in Gucha district over Ksh 20 million fraud (Moraa & Ambala, 2012). Mishkin and Eakins (2007) have shown that SACCOs have characteristics that differentiate them from other financial institutions. The characteristics include non- profit motive, tax exempt status, common bond membership and mutual ownership.

Kenya's vision 2030 for financial services is to create a successful and globally competitive financial sector capable of promoting high levels of saving and financing for Kenya's investment needs (Adam, Collier & Ndungu, 2011). The county's vision 2030 recognizes the role of financial services in mediating between borrowing and investment. However, access to financial services is a stumbling block which has led to low investment culture in Kenya. This is confirmed by the world council of credit unions [WOCCU], 2008) that 38.3% of the Kenyans are still not included in financial services and use. Kenya's deteriorating infrastructure and rising costs has made many foreign investors to divest or consolidate their activities outside Kenya (United Nations Conference on Trade and Development [UNCTAD], 2005). Moreover, the World Bank's World Business Environment Survey [WBES], 2000) indicates that investors rated the infrastructure quality very poorly, especially roads, water and telecommunications. The vision 2030 for financial services in Kenya can be fully achieved if SACCO members can transform their savings into viable investments. Hence, this study sought to investigate into the influence of consumption and saving in cooperatives on members' investment culture in Kenya.

Statement of the problem

Investment can enhance income and promote productivity with the intention to break through the vicious cycle of poverty (Keynes, 1936). However, the levels of domestic savings and investment in Kenya have been very low (Lawrence, et al., 2009). The deterioration of public infrastructure, governance problems and insecurity have discouraged private investment in Kenya (UNCTAD, 2005). Moreover, some of the installed capacity has deteriorated due to lack of investment or maintenance. World Bank (2003) approximates capacity utilization in Kenya at 63%. Kenya's vision 2030 for financial services is to create a successful and globally competitive sector that drives savings and investments in the country. However, the vision 2030 argues that access to financial services still remains low (Adam et al., 2011). WOCCU (2008) has shown that 38.3% of Kenyans are not included in financial services and use. All these indicate low levels of investment in Kenya. The problem of low savings and

investment comes at a time when African Confederation of Co-operative Savings and Credit Association [ACCOSCA], 2011) workshop has classified SACCOs as vehicles for economic growth. Moreover, the government of Kenya recognizes cooperatives as the major contributor to national development with the country's population approximately 37.2 million (RoK, 2008). Kyendo (2011) confirms that most SACCOs have been lending at 12% per annum, which is lower than what banks have offered. The basic function of SACCOs is to provide credit facilities at low cost (Saunders & Cornet, 2007). This is done through pooling together members' savings. SACCOs have been pooling together members' savings until 1990s when sector liberalization enabled them to diversify their financing sources through offering of FOSA services (Owen, 2007). According to Landi and Venturelli (2002), diversification of financing sources improves the performance of the diversifying institution. The improved performance of SACCOs is assumed to translate into improved service delivery to members including affordable loans that hopefully should enhance the investment culture which is low in Kenya (Lawrence et al., 2009). This study therefore, sought to develop a model that can enhance cooperatives members' investment culture in Kenya

Objective

To develop a model that can enhance cooperatives members' investment culture in Kenya.

Research hypotheses

Ho1:   Savings and consumption do not influence members' investment culture

HA1:   Savings and consumption do influence members' investment culture

The study variables were believed to obey the model I= f(S, C), that is $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$ where,

$I = Y$ = investment

$S = X_1$ = saving

$C = X_2$ = consumption

β_0 = the intercept term

β_1 and β_2 are the slope coefficients

μ = the disturbance

Methodology

The study was carried out using a descriptive research design. Simple random sampling was used to select a ran the help of dom of 379 respondents from a population of 25145 SACCO members. Both closed and open ended questionnaires were used to collect primary data. Secondary data was obtained from periodicals and published SACCO reports. Editing and sorting of data was done with the help of Excel computer software. Multiple linear regression was used to model the relationship between investment, savings and consumption. The study variables were believed to obey the model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$ where: Y =

investment, X1 = saving, X2 = consumption, β0 = the intercept term, β1 and β2 are the slope coefficients and μ = the disturbance

Results and discussion

The study sought to establish a model that can enhance cooperatives members' investment culture. The researcher used the loans advanced by SACCOs to members to represent the SACCOs influence on members' investment culture. It is from the loans that the members invested in various business activities. The Excel output for the data on investment, savings and consumption was shown in table 1.

Table 1:Summary output

Regression output	Statistics
Multiple R	0.991371
R Square	0.982817
Adjusted R Square	0.982689
Standard Error	39911.89
Observations	272

ANOVA

Significance	df	SS	MS	F	F
Regression	2	2.45E+13	1.23E+13	7693.054	4.2E-238
Residual	269	4.29E+11	1.59E+09		
Total	271	2.49E+13			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	7698.435	3109.971	2.475404	0.013925	1575.456	13821.41	1575.456	13821.41
X1	0.967898	0.009414	102.8176	6E-218	0.949364	0.986432	0.949364	0.986432
X2	-0.75767	0.07448	-10.1729	8.87E-21	-0.90431	-0.61103	-0.90431	-0.61103

From the Excel output table 1, $\hat{Y} = 7698.44 + 0.9679X_1 - 0.7577X_2$.

Se = (3109.97)   (0.0094)   (0.0745) , t = (2.4754) (102.8176)   (10.1729)

p = (0.0139)   (0.0000)   (0.0000), R^2 = 0.9828

From table 1, $\beta1$ obtained is 0.9679. The positive coefficient indicate that holding the influence of consumption constant, an increase in savings by khs.1, on average, increases investment by about 0.97 cents. The findings were in line with Balassa (1989)'s study on regression analysis who established a relationship between savings and investment. However, the results contradicted Agu (1988) who concluded that the relationship between savings and investment is insignificant.

However, the value of $\beta2$ obtained is negative. This shows that, holding the influence of saving in SACCOs constant, an increase in consumption by khs.1, on average, decreases investment by about 0.76cents. Moreover, the value of $\beta0$ obtained implies that when both consumption and savings are zero investment is about kshs.7698 which is of less physical meaning.

The values of t and p obtained shows that the parameters estimated are significant. This is because t>2 and p<0.05. That is, t = 102.8176>2 for $\beta1$ and t = 10.1729>2 for $\beta2$. Similarly, p = 0.000 for $\beta1$ and $\beta2$, showing that the parameter estimates, $\beta1$ and $\beta2$ are significant. Moreover, the R2 obtained was 98.28% implying that about 98% of the variation in investment is explained by both saving and consumption. Hence the remaining percentage of about 2% of variation in investment is explained by other factors (μ) that affect investment but are not taken into account explicitly by the model. This showed that the model was a good fit and that the regression results make sense.

Since the value of t observed for $\beta1$ is greater than 2, that is, t = 102.8176>2 the null hypothesis that SACCOs do not influence the investment culture of their members was rejected. Moreover, the value of t observed for $\beta2$ is greater than 2, that is, t = 10.1729>2. This led to the rejection of the null hypothesis that consumption does not affect investment made by SACCO members.

Conclusions

From the foregoing, it follows that SACCOs influence members' investment culture. The study developed the model $\hat{Y}$ = 7698.44 + 0.9679X1 − 0.7577X2, connecting investment, savings and consumption that can guide the investment decision making of SACCO members. The study further concluded that consumption reduces investment.

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