Risk and Financial Performance of Investment Banks in Kenya

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Abstract

This paper addresses the ascendancy of operational risk on performance of investment banks in Kenya. The study adopts a mixed methods research design. The population of the study was drawn from 16 investment banks operating in Kenya. Secondary data for the study was collected from the annual financial statements of the investment banks for the years 2011 to 2019. Primary data was utilized from 27 interviewees composed of managers of the investment banks. Both descriptive and inferential analysis methods were employed in the analysis. The regression results indicate that operational risks by investment banks in Kenya have a negative and significant effect on financial performance of investment banks in Kenya. Being a less capital intensive entity, the investment banks in Kenya do not have many operations to be managed. However, there are increases in fixed costs such as office space, employee benefits and legal fees. These costs cannot be managed without jeopardizing the business operations and causing more undesirable effects. As such, the only way to manage them is to offset the operational cost by improving the business returns. However, the improvement of returns depends on other business factors. Therefore, the growth in operational costs coupled with decline in profits explains the negative and significant relationship between operational risk and financial performance of investment banks in Kenya.

Keywords: Operational Risk, Financial Risk, Financial Performance.

Introduction

Investment banks are pertinent institutions of the economy because they provide crucial services that are essential to the movement of capital (Mahajan, 2016). They perform the role of intermediaries that help unite providers of capital with those who need to use it to exploit profitable investment opportunities. They also trade in equity and debt securities where they act as brokers, helping connect sellers to buyers of the financial assets. Furthermore, they provide fund management services for individuals, pension funds as well as institutional investors in addition to playing a key role in structuring and advising on mergers and acquisitions of companies. Additionally, investment banks act as transaction advisors to firms seeking to restructure their capital sources either by issuing more shares through initial public offers, rights issues and private placements or absorbing different types of leverage including bonds, loans and commercial papers (Walter et al., 2008).

Financial performance in investment banks is the extent to which the bank is able to achieve its policies, financial and non-financial objectives. Financial performance assists the management in establishing if the investment bank is operating profitably (Baraza & Kavale, 2018). Performing investment banks attract new shareholders and clients which culminate to

the rise in amount of revenue (Njoki, 2018). Financial performance measurement is therefore key to successful management of any business (Franco-Santos et al., 2012).

Prior to the 2008 financial crisis, attention of risks mainly revolved around financial risks such as credit risks, liquidity risks and market risk. However, following the collapse of some global banks there has been a surge in studies on the root cause of the loss events. Surprisingly, many of the studies alluded bank failures to inadequate management of operational risks. Operational risks mainly occur due to absence of internal controls and unmanaged operational risks. Fadun and Oye (2020) asserted that the 2008 financial crisis resulted from failure to manage operational risk in banks and mortgage brokers. These myriad of issues made regulators beam more light on the banking industry and increase the demand for better management of operational risks.

Inadequate operational risk management can result in unpredictable financial performances. It can also impact negatively on banks' revenues and erode banks' net worth, most importantly, it can have calamitous systemic consequences as was highlighted on the part alluded to have been played by operational risk in the 2008 financial crisis (Muriithi & Waweru, 2017). Effective operational risk management results to lower capital charge, improved decision making, improved customer and staff satisfaction and improved regulatory compliance (Accenture, 2015). Effective management of operational risks assists in reducing operational losses, reduce compliance and audit costs, prompt identification of illegal activities and reduce exposure to future risks.

There are a number of past research which have been carried out to find out the effects of operational risk on the performance of financial institutions. Similar to other financial intermediaries, investment banks have staff, systems, processes and external events that make them vulnerable to operational risks. Operational risk is not a new risk; it is simply a tagging of some old risks by regulators to improve the visibility of such risks and drive the culture of self-regulation of banking operations (Hemrit et al., 2013). The notion of operational risk became prominent after the collapse of Barings Bank in 1995 and the 1998 Long-Term Capital Management (LTCM) crisis which investigation credited to failure of operational risk management (Oye, 2020; Siminyu et al., 2017; Hussain & Shafi, 2014). Prior to this period, operational risk was neglected and viewed as a mere residual risk, that is, part of other risk types that fall outside the purview of market risks and credit risks (Siminyu et al., 2017; Power, 2003). Following these events, Basel II recognized operational risk as a separate risk class different from credit and market risk (Raman, 2008). The hype by regulators and the eventual inclusion of Operational Risk in Basel II; as one of the risk types attracting regulatory capital, drove the wide acceptance and institutionalization of operational risks (ORX, 2018).

Problem Statement

It has been noted that over the recent years financial performance of investment banks has been varied with some posting high profit margins while others recording losses (Ruibi, 2012). The varied financial performance could be attributed to the different financial management practices of each investment bank among other factors (Ngeno, 2018).

The financial performance of several investment banks in Kenya has been worrying. According to audited financial statements for 2018, Equity Investment Bank for instance, made a loss of Ksh. 18.82 million (Equity Investment Bank Annual Report 2018, 2019). Similarly, the audited

financial statements for 2018 of Kingdom Securities Ltd and ABC Capital recorded losses of Ksh. 6.33 million and Ksh. 37.68 million respectively. Suntra Investment Bank in 2015 had operational deficiencies by failing to maintain and preserve detailed client records which set out all client transactions contrary to Regulation 19(e) of the Capital Markets (Licensing Requirements) (General) Regulations 2002 (CMA Annual Report, 2017; CMA Annual Report, 2016; CMA Annual Report, 2015). These examples illustrate the financial struggles some of the investment banks are facing.

Poudel (2015) avers that investment banks operate in a highly volatile environment and operational risks among other risks. These risks could be the reason to varying financial performance of the banks. This reason necessitates research on the nexus between operational risks and financial performance of investment banks.

Studies in operational risks and financial performance are limited and inconsistent. Bekele (2015) identified insignificant positive effect of operational risk on financial performance. Further, Fadun and Oye (2020) indicated positive impact of operational risk management practices on financial performance of firms. Oye (2020) while studying Pakistan commercial banks, found out that operational risk has negative effects on performance of large commercial banks but a positive influence on performance of small banks.

Majority of studies in Kenya and globally on financial risks and firm performance focus on the commercial banks (Haneef et al., 2012; Arrifin and Kassim, 2014); Maniagi, 2018; Mutwiri, 2019). Due to this limitation, there is growing challenge in identifying the impact of risk management in investment banks' financial performance. This is despite the fact that investment banks are faced with additional risks due to the specific features of financing investments, contracts, liquidity infrastructure, brokerage legal requirements, and governance underlying investment bank's operations. Additionally, in view of the increasing pressure of globalization, effective and efficient risk management in the investment banks is particularly important as they endeavour to cope with the challenges of cross border financial flows.

From the above studies it is seen that there are contradictions between the nature of the relationships between financial risk and financial performance hence the need for more comprehensive studies on the same. Additionally, these studies focused on financial performance of commercial banks in Kenya, and no single study investigates the influence of financial risks on investment banks. In that regard, there is a knowledge gap in regulation because commercial banks are regulated and supervised by Central Bank of Kenya (CBK) while investment banks are licensed and regulated by Capital Markets Authority (CMA).

To fill the identified gap, this paper sought to examine whether operational risk practices of investment banks have any bearing on their financial performance.

Theoretical Review

Agency Theory

Agency Theory was brought forth by Jensen and Meckling (1979). The theory posits an agency risk that arises when the principal (shareholders or investors) appoints an agent (managers) to act on their interest. The theory deals with defining solutions for problems which occur in agency relationships. It suggests that an agency relationship arises whenever a principal hires and delegates decision making authority to an agent. This situation gives professional managers

(agents) an opportunity to pursue their interest instead of that of shareholders (Muritala, 2012) and a principal/agent conflict arises. Padilla (2002) notes that the principal expects that the agent will act in good faith and the principles best interests however due to unprincipled behaviour, the agent may not necessarily act in the best interest of the principal. Agency theory helps in understanding the root cause of operational losses and provides guidance to establish appropriate performance targets that act as an incentive for risk management in such an example as in recruitment of risk managers' and internal auditors' positions (Sheedy, 1999). The principal-agent theory relates to firm size given that managers may expand the firm more or less not at the best interest of shareholders but to increase their own benefits, such as more prestige, better pay, and stock options (Pervan & Višić., 2012).

Methodology

The study premised on a positivist ontological research philosophy and employed an explanatory sequential mixed methods design which allows for both quantitative and qualitative approach. The population of the study was drawn from 16 investment banks operating in Kenya. Secondary data for the study was collected from the annual financial statements of the investment banks (using data collection sheets) for the years 2011 to 2019 to compute financial ratios. Primary data was utilized to validate the findings of the secondary data analysis (using interview guide tool) from 16 interviewees composed of managers of the investment banks and staff working at the NSE and CMA. Descriptive statistics were employed to summarize the data, as well as show trends, assess normality and spread the predictors. Qualitative data was analysed using stepwise linear logistic regression. Inferential statistics namely correlation analysis and panel data regression methods were used to generate inferences regarding the relationship between variables. Diagnostic tests were conducted for normality, stationarity, multicollinearity and heteroscedasticity using Shapiro-Wilk, Harris-Tzavalis, variance inflation factor and Breusch-Pagan tests respectively. The findings were presented in figures and tabular format.

Results

The proxy measure for operational risks was the operating expense ratio. A higher operating expense ratio implies that the investment banks management is inefficient and may face operational risks.

Trend Analysis

Table 1: Investment Banks Operating Expense Ratio

	2011	2012	2013	2014	2015	2016	2017	2018	2019	Overall
Mean	1.21	0.83	0.90	1.39	0.93	1.34	0.89	2.2	0.74	1.16
Std	1.15	0.87	0.51	1.49	0.55	1.11	0.41	15.17	0.44	1.72

Table 1 shows that on overall, operating expense ratio of the investment banking industry is high at 1.16; implying that the companies could be struggling with efficiency and could face operational risks. However, this is a generalized result and may be skewed to the direction which has the strongest outlier.

Diagnostic Tests

The study conducted diagnostic tests to determine whether the data has the qualities required for inferential analysis. The tests conducted are test of linearity, normality and stationarity.

Linearity Tests

Linearity assumption requires that the data, independent and dependent variables to be linearly related. Linearity test was conducted using scatter plots.

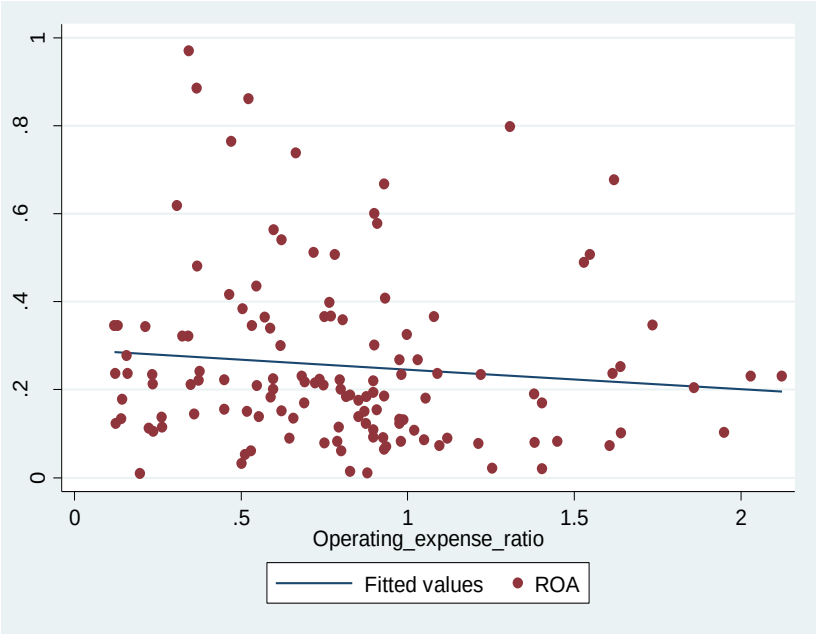

Figure 1: Liniearity Test of Operating expense ratio vs Return on Assets

Figure 1 depicts a linear relationship between Return on Assets (ROA) and operating expense ratio. The scatter graph shows that the points are scattered without particular pattern and the line of fit shows a negative relationship between operating expense ratio and ROA.

Normality Tests, Correlation Analysis, Stationarity and Hausman Test

Tests conducted include normality tests, correlation analysis, stationarity and Hausman tests.

Table 2: Normality Tests, Correlation Analysis and Hausman Test

	Normality		**Correlation**		**Stationarity**		**Hausman Test**	
Operating Expense Ratio	Skewness	Kurtosis	Coefficient ®	P.value	Z-t-tilde-bar	P-value	chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)	Prob>chi2
Values	0.0000	0.0000	-0.1004	0.2576	-2.9429	0.021	0.85	0.3565

Skewness and kurtosis of 0.0000 indicates that data for all the variables is normally distributed. The correlation analysis shows that operating expense ratio has a weak negative and insignificant relationship (r= -0.1004, p= 0.2576) with return on assets. The result suggests that increase in operating expense ratio correlates with decrease in ROA however, that association is not significant. The Im-Pesaran-Shin unit-root test results of operating expense ratio show that the panels do not contain unit roots. This is revealed by p-values of less than the standard

threshold of 0.05, hence the null hypothesis that all panels contain a unit root is rejected. The chi-squared value of Hausman test is 0.85 and its respective probability value is 0.3565 which is greater than the standard threshold of 0.05. In that regard, since p-value is insignificant, this study used random effects model rather than fixed effects model.

Regression Analysis (Random Effects Model)

Regression analysis was conducted to establish the relationship between operational risk management proxy (operating expense ratio) and financial performance (ROA) of investment banks in Kenya. Increasing operating expense ratio shows poor and/or ineffective operational risk management and would have negative effect on financial performance. Table 3 shows the summary of the results, and the analysis was guided by the following model.

$$Y = \beta_0 + \beta_4 X4_{it} + \varepsilon \qquad (A)$$

Table 3: Random Effects Model Regression Results (Operational Risk vs Financial Performance)

	Number of obs =	**129**	**Wald chi2(1)**	**3.61**
	Number of groups =	16	**Prob > chi2**	**0.018**
	Obs Per Group: min =	5	**R-sq between**	**0.132**
	avg =	8.1	**R-sq overall**	**0.101**
	max =	9		

ROA	**Coef.**	**Robust Std. Err.**	**z**	**P>|z|**	**[95% Interval]**	**Conf.**
Operating Expense ratio	-0.0178	0.012	-2.39	0.018	-0.132	0.002
_cons	0.2760	0.047	5.81	0.000	0.222	0.394

Table 3 reveals that operating expense ratio has a low but negative and significant influence on financial performance (ROA) of investment banks in Kenya (Coef. = -0.018, p=0.018). In addition, the z statistics (-2.39) which is a measure of precision or reliability with which the regression coefficient is measured indicates that the coefficient is reliable. A z statistic greater than 2 indicates that the regression coefficient is reliable and different from zero. The results imply that a unit increase operating expense ratio, that is a unit increase exposure to operating risk expense would result to decline in ROA by 0.0178. The optimal regression model is expressed as follows:

$$Y_t = 0.276 - 0.0178\ Operating\ Expense\ ratio + \varepsilon \qquad (B)$$

Autocorrelation Test and Hypothesis Test

Table 4: Woodridge Test and Hypothesis Test

Risk	Autocorrelation Test (Woodridge test)	Hypothesis Test
Operational Risk (Operating Expense ratio)	There is no presence of autocorrelation (F(1, 15) = 1.873, p= 0.1912). The null hypothesis avers that there is no serial correlation. Since the p-value is greater than the standard threshold of 0.05, the study fails to reject the null and conclude the ROA and operating expense data does not have first-order autocorrelation.	Operating expense ratio has negative and significant relationship with financial performance (ROA) of investment banks in Kenya (Coef. = -0.0178, p=0.018). Therefore, this study rejects the null hypothesis and concludes that there is significant negative effect of operational risk on financial performance of investment banks in Kenya.

Qualitative Analysis on Operational Risks and Financial Performance

A high operating expense ratio means a higher percentage of an investment banks income is utilized to pay operational and maintenance expenses. Investment banks reported varying operating expense ratios. The research sought to investigate the reasons behind, and what the variation implied in terms of operational efficiency of investment banks. The responses were analysed thematically and presented in prose form. The most occurring themes were that investment banks are not capital intensive and therefore their operational costs only revolve around employee payable benefits, office space and electricity.

According to the respondents the reason why there is variation in operational cost expenses among the investment banks is because of increasing costs they incur in terms of employee payable business, legal fees, and office space. The investment bank relies mostly on the high skilled individuals who are certified financial analyst and the cost of hiring them in terms of employee salary is also high. In addition, there are costs such as cost of business premises and insurance coverage. The cost per square feet here in Nairobi is high. These costs have however, been increasing hence leading to decline in profit margins.

Conclusion

The study finds the relationship between operational risk and financial performance to be significant. The Capital Markets Authority, who is the prime policy maker for investment banks, should include operational risk as a high risk in their risk based supervisory frameworks, and conduct enhanced inspections on investment banks that have high operations. The management of investment banks should improve on the current practices of operational risk to reverse the relationship between the two variables. Investment banks should practice internal control systems, succession planning, risk and control self-assessment and scenario analysis to manage operational risks. Coupled with quantitative and qualitative measures and management of operational risks, investment banks should understand their own operational risk to enable them collect operational risk loss data, and create functions that focus on managing, monitoring and mitigating operational risks. Investment banks should have a policy on ensuring business continuity and the accuracy of information used internally and reported externally. They should devise strict policies for the assignment of duties and responsibilities among and within the business and support functions and by following a system of internal control and supervision. The main principle for organising workflows is to segregate business-generating functions from recording and monitoring functions.

Recommendation

The negative effect of operational risks can be attributed to the fact that investment banks are not capital intensive, hence there is not a lot of operations to be managed. However, there is increase in fixed costs such as office space, the employee payable benefits and legal fees. These costs cannot be managed without jeopardizing the business operations and causing more undesirable effects. As such, the only way to manage them is to offset the operational cost by improving the business returns. However, the improvement of returns depends on other business factors. Therefore, the growth in operational costs coupled with decline in profits explains the negative and significant relationship between operational risk and financial performance of investment banks in Kenya.

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