ADFJ ISSN 2522 - 3186.

African Development Finance Journal

VOLUME 4 (IV)

Relationship between Management Control Systems and Financial Performance of Commercial Banks in Kenya

Paul Marwa Ikwabe
Dr. Dominic Murage Njeru
Prof. Cyrus Iraya Mwangi

Date Received: October, 05, 2022

Date Published: December, 22,2022

Relationship between Management Control Systems and Financial Performance of Commercial Banks in Kenya

By: Paul M. Ikwabe[1], Dominic Murage Njeru (PhD,CPA)[2] & Prof. Cyrus Iraya Mwangi (PhD, CPA) [3]

Abstract

The management control schemes act as a planning tool plus help to provide data that help to promote the allocation of resources and other decision making activities. When used in organizations the managing mechanism systems help companies to achieve their financial objectives and goals through maximizing the utilization of resources and avoidance of wastages. Commercial Banks can use the management control system models to promote, evaluate and boosts their fiscal performance. The main aim of this research was to establish the relationship between management control systems together with overall banking sector presentation. The study also intended to review the growing body of academic together with empirical researches that have tried over the years to look at the array of extent together with influence of systems of management control systems on commercial banks' performance. The target population was all the 42 licensed commercial banks. Primary together with secondary data collection sources were used. Primary information was gathered for the management control systems using questionnaires and secondary data was collected for financial performance. It was a cross-sectional study, data was collected for several units of analysis over a uniform time frame. The study utilized descriptive statistics to gauge the existence of management control systems in the commercial banks. The research employed inferential statistics, which included correlation analysis together with multiple linear regression equation with the technique of estimation being Ordinary Least Squares (OLS) to create the association of management control systems and fiscal performance of commercial performance. The study findings revealed that the management control aspects are applied to high or very high extents in the commercial banks. Further study findings were that a management control system significantly affects financial performance and it can significantly predict financial performance but however, Continuous Improvement Process is the only management control system aspect that significantly impacts on financial performance. The study made recommendations to policy makers like the National Treasury and CBK and also commercial bank practitioners and consultants to institute management control systems to augment financial performance. Further recommendations was that particular focus should be made on the management aspect of Continuous Improvement Process in order to attain optimal fiscal presentation. .

Keywords: *Control Systems, Financial Performance, Management*

Introduction

Management control schemes act as a planning tool plus help to provide data that help to promote the allocation of resources and other decision making activities (Sangmi, 2010). When used in organizations the managing mechanism systems help companies to achieve their financial objectives and goals through maximizing the utilization of resources and avoidance of wastages. According to Hightower (2013),

[1] *Department of Finance and Accounting, Faculty of Business and Management Sciences, University of Nairobi*
[2] *Lecturer, Department of Finance and Accounting, Faculty of Business and Management Sciences, University of Nairobi*
[3] *Professor, Department of Finance and Accounting, Faculty of Business and Management Sciences, University of Nairobi*

organizations such as Commercial Banks can use the management control system models to promote, evaluate and boosts their financial performance.

Additionally, Mohammad (2014) noted that the managing control structure is critical in the process of controlling the behavior of the organization financial resources and help management to adopt formal plans in the control of all their internal operations and activities. Thus, it can be argued that management control system is effective towards distribution of assets together with the regulator and monitoring of the financial plans of the firm leading to proper financial performance levels in the firm (Muraleetharan, 2011).

Systems theory, contingency theory and stakeholder theory give details of association amongst management control systems and monetary presentation. Systems theory holds that rather than reducing a unit to belongings of its essentials, systems theory concentrates on inter-relations amongst portions which join them into full (Johnson, 1964). Organizations like wise have a self-governing system represented by various sections including finance or accounting, human resources, business development or strategy and supply chain, among others (Johnson, 1964). Stakeholder theory pinpoints and models the clusters of stakeholders in a company (Fontaine, 2006). It entails administrative management in occupations leading to development of principles and standards in handling an entity (Fontaine, 2006). Contingency theory holds that no firm is solitary in its organizational arrangement but also depends on size, features of organizational structure, organization's culture, type of the technology, environment stability and the organizations information systems (Scott, 2014).

Management Control Systems

As per Ghosh (2005) systems of management control are made to plan, direct, synchronize, inspire and assess activities in intricate organizations, and study in the field need to begin with a brilliant consideration of the managing control systems and processes in actual organizations. According to study done by Muraleetharan (2011); Anthony (1997), the management control systems is one of the methods where the executives ensure that assets are acquired and used resourcefully plus competently in attainment of institutions aims.

There are five types of control activities in an organization namely; directive, preventive, detective, corrective and recovery (Anthony, 1997). The different mechanisms of MCS are Total Value Management,

Time Based Management, Activity Grounded Costing, Balance Score Card, Bench Marking, Re-engineering, Shareholder Value Analysis and Continuous Improvement Process (Simons, 2017). According to Malmi and Brown (2008), MCS includes wholly the methods executives practice to certify the manners plus judgements of workers are dependable on the business's goals plus policies. Any system, such as formation, accounting, accountability centers, cost administration, decision creating, administration control, performance capacity, and reparation are regarded as MCS (Anthony & Govindarajan 2001). MCS in addition have other features which impact their usage.

For instance, management controls may be official or informal (Langfield-Smith, 2007). The presence, usage or absence of MCSs importantly effects the actions and results conceded inside an organization (Anthony & Govindarajan, 2001). Thus, MCS is the appropriate and information-based systems which executives use to uphold or change arrangements in organizational undertakings (Simons, 2017).

Financial Performance

Fiscal presentation entails the financial goals of the institutions and covers various factors that promote the success of a firm such as leverage level, the liquidity ratio as well as the firm size in terms of risk and tangibility ratios. Financial performance is determined by the interest rates and the exchange rates offered by the firm. According to Scott (2014) financial performance measures include the procedures for assessing the outcomes of firms' strategies and procedures in monetary standings (Bertoneeche & Knight, 2001). A firm's performance comprises amassed finale outcomes of all the firm's business practices and undertakings.

Financial presentation measures a firms' total economic wellbeing over a specific time period. In addition, it is also used to relate comparable firms across similar industry (Bertoneeche & Knight, 2001). The bank's ultimate goal is to achieve profitability through more efficient use of resources directed at a bigger segment of the market while providing better products to address client needs (Gerrit & Abdolmohammadi, 2010). Financial performance indicates cost-effectiveness, development and abidance to guidelines and procedures by the organization (Gerrit & Abdolmohammadi, 2010). Financial performance is indicated by revenue development, income, and yield on resources involved (Whittington and Kurt, 2001). Others are market value added (MVA) for firm price established on the stockholders holding anti full sum of savings as per John and Morris (2011). It is established on the old-style features of monetary presentation namely overall

revenues, sales development, profit development and net margin. In addition are price of long-standing savings, economic dependability and usage of business resources (Dwivedi, 2002).

Commercial banks are fast growing with regards to service supply and client gratification through their innovativeness in terms of product development (Brownbridge, Harvey & Gockel, 1998). As a result, both management and supportive staff have immense concern for the business environment and market competition in the banking industry (Brownbridge *et al,* 1998). Globally, MCS entails consistent scrutiny of efficacy of controls to resolve if they are designed well and operating correctly. Flaws in MCS arise to letdown to attest that capitals are assigned to clear importance and warranty worth for cash (Basel Committee, 2002). The extensive worldwide financial disgraces in recent years enlighten the significance of MCS. Management is mainly accountability for appropriate controls hence MCS is essential in assisting management realize its mission and objectives geared to better monetary presentation (Basel Committee, 2002). The study, therefore, seeks to examine the level to which management control systems affect fiscal presentation in commercial entities.

Literature Review

Contingency Theory

Paul Lawrence and Jay Lorsch founded this theory in the late 1967. The theory indicates that organization cannot use one method or procedure to succeed in their operations and achieve their goals. This theory is effective in control risks and managing challenges in the firm. Evidently, the contingency theory holds paramount means to organize is subject to the nature of the environment to which an entity should identify (Scott, 2014). Therefore, there is no single kind of administrative arrangement that is totally appropriate to all administrations. Rather, it depends on the size of the entity, characteristics of the administrative arrangement, organization's culture, type of the technology, environment stability and the organizations information systems (Scott, 2014).

In this study, the theory can help banks to adopt different ways and methods to manage and guide their operations. The banks management should understand that using one way of organizing and planning organizations activities is not effective. Therefore, it is imperative that the banks adopt a number of ways and methods to meet their needs and objectives. This may include the use of different resources and different models to fit the bank within the challenging environments where they operate. This will allow the banks

to engage in flexible view of problem solving and reduce strategic challenges facing their operations. The bank will use its information to control and evaluate management issues (Adez & Caulding, 2008).

Determinants of Financial Performance

Asset Quality

Bank asset is a factor that affects a bank's lucrativeness. Example of bank assets includes; static assets, investments, non-current assets, credit collection. For example, bank loans since they generate a main part of the revenue in banks through interests charged on the debtors. Therefore, the bank's lucrativeness is determined by worth of the loan collection. According to Dang (2011), most of the banks face high risks that emanate from the losses made by the delinquent loans. The banks should maintain the amount of non-performing loans low to hedge against the financial risks of incurring losses. In addition, the banks should minimize losses incurred through lending activities and investments. The banks use the nonperforming loan ratios to determine the quality of the assets (Dang, 2011).

Capital adequacy

Capital is a factor that affects profitability levels in a bank. Capital refers to the sum of cash available to sustain the businesses of the banks where it acts as a precaution in the event of hostile circumstances (Athanasoglou et al., 2005). Capital availability in banks improves liquidity owing to the detail that the deposits are susceptible to bank scores and that are most fragile. Additionally, better bank capital lessens the likelihood of financial distresses. Capital Adequacy Ratio determines the suitability of capital and it shows the bank's internal strong point to bear losses and is comparative to the bank's flexibility in loss circumstances (Athanasoglou et al., 2005). Sangmi and Nazir (2010) opine that it has an undeviating effected on viability of banks by defining its growth to uncertain, nonetheless cost-effective activities. Banks ought to sustain sufficient capital to meet both regulatory guidelines and strategic needs (Sangmi & Nazir, 2010).

Bank Size

It determines the ranks of asset base, revenue development together with the level of client gratification as per Kloot (1999). The size of commercial banks also determines the market share with large banks controlling majority of the market share thereby generating more revenue. As a result, banks are implementing novel approaches that include expansion to rise productivity. Utilization of appropriate MCS

minimizes operational costs and achieves maximum profits. Expansion in the number of employees may also lead to the achievement of the banks' financial goals (Kloot, 1999).

Empirical Review

Eze (1992) reviewed the influence of internal control method on income presentation of Nigeria banks. He used a correlation study design that targeted all the main offices and branches within Enogo state. He discovered that both banks had adequate internal control features, but the percentage installation of UBA was higher than OBN and also the installed internal control system were not effectively and adequately operated. However, his research failed to clearly find the association amongst internal control systems and fiscal presentation.

Mwangi (2011) researched about the association amongst internal controls and fiscal presentation of Alexander Forbes (EA) Company. She adopted use of case study for her research method. Questionnaires and interviews constituted primary data and the company's published financial statements were used as her source of secondary data. The respondents were the employees of the company from different managerial levels. The investigation was conducted by means of descriptive statistics and regression investigation and concluded that company's external auditors reported to the board to ensure that proper control systems have been established.

Ngige and Karwirwa (2015) conducted research on interior control systems as fraud regulator in credit taking financial organizations in Imenti North in Kenya. Information was gathered using questionnaires besides focused group conversation. Data gathered was evaluated using descriptive together with statistics of inferential in nature. The results showed interior control systems were effective in fraud control. However, in their study, they did not focus on how internal control systems assist in improvement of organizations financial presentation.

Methodology

Cooper and Schindler (2006) refer to the design of a research as a general plan chosen to assimilate the various constituents of research in an articulate and in a reasonable method. The research utilized the descriptive study design to ascertain the association amongst proper organization control systems together with fiscal presentation in banking sector in commercial Kenyan banks. The research emphasis was on

Kenyan Commercial Bank and the populace encompassed all Kenyan banks as the target population. As per the recent study by Central Bank of Kenya (CBAK), there exits forty-two (42) commercial banks in Kenya (CBK, 2020).

The research utilized secondary and primary information. The researcher used questionnaires as the primary method of data gathering. The questions included different subdivisions. The investigator made use of the bank's yearly reports, websites together with journals and books to establish the financial performance of banks as part of the secondary information gathering method. Since the study was a cross-sectional study, data on financial performance was collected for a single time period, the year 2019.

Correlation analysis was used to show if plus how management control systems are associated with financial performance. The goodness of fit among the different models was established using the coefficient of determination (R^2). The dependent variable was continuous (ratio measurement scale) while the independent variables were categorical (ordinal measurement scale). The independent variables in this case were assumed to be continuous because the categories are equally spaced. Thus, multiple linear regression analysis was utilized to gauge how management control systems have any significant impact on financial performance.

Research Findings

Correlation Analysis

The correlation analysis employed in the study established that financial performance is significantly correlated at the 5% significance level to; total quality management, time based management, bench marking, re-engineering, Share Holder Value Analysis together with CI process and consequently financial performance is not significantly correlated at the 5% significance level to Activity Based Costing and Balanced Score Card. The multiple linear regression analysis revealed that a management control system significantly affects financial performance and it can significantly predict financial performance but however, Continuous Improvement Process is the only management control aspect that significantly impacts on fiscal presentation.

Table 1: ***Correlation Analysis***

		Return on Assets	TQM	TBM	ABC	BSC	BM	RE_ENG	SHVA	CIP
Return on Assets	Pearson Correlation	1								
	Sig. (2-tailed)									
TQM	Pearson Correlation	.706**	1							
	Sig. (2-tailed)	.000								
TBM	Pearson Correlation	.717**	.812**	1						
	Sig. (2-tailed)	.000	.000							
ABC	Pearson Correlation	.219	.194	.195	1					
	Sig. (2-tailed)	.229	.288	.285						
BSC	Pearson Correlation	.254	.064	.291	.574**	1				
	Sig. (2-tailed)	.161	.727	.107	.001					
BM	Pearson Correlation	.548**	.386*	.476**	.193	.644**	1			
	Sig. (2-tailed)	.001	.029	.006	.291	.000				
RE_ENG	Pearson Correlation	.745**	.868**	.790**	.507**	.435*	.522**	1		
	Sig. (2-tailed)	.000	.000	.000	.003	.013	.002			
SHVA	Pearson Correlation	.741**	.661**	.918**	.156	.433*	.512**	.722**		
	Sig. (2-tailed)	.000	.000	.000	.394	.013	.003	.000		
CIP	Pearson Correlation	.622**	.622**	.521**	.497**	.534**	.685**	.685**	.444*	1
	Sig. (2-tailed)	.000	.000	.002	.004	.002	.000	.000	.011	
	N	32	32	32	32	32	32	32	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.670[a]	.448	.367	.01270

a. Predictors: (Constant), LOG10CIP, LOG10abc, LOG10BM, LOG10BSC

The Co-efficient of Determination (R^2) indicates deviations in reply variable as a consequence of variations in variables which are predictor. From Table 4.16, the R^2 value is 0.448, a discovery that the management control system aspects included in the study cause 44.8% of the deviations in financial performance. Other factors not incorporated in the model warrant for 55.2% of the variations in fiscal presentation.

Table 3: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	4	.001	5.488	.002[b]
	Residual	.004	27	.000		
	Total	.008	31			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), LOG10CIP, LOG10abc, LOG10BM, LOG10BSC

The null hypothesis is that management control systems significantly influence financial performance. The significance value obtained in the study (0.002) is a lesser amount of than critical figure of 0.05. Consequently, the null hypothesis is rejected. Additionally, the critical F-Value is 2.89510731, and the F-Value obtained in this research (5.488) is superior to the critical value. Hence, the null hypothesis is also rejected. Thus, a management control system significantly affects financial performance. Therefore, a management control system can significantly predict financial performance.

Table 4: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.010	.023		-.442	.662	-.058	.037
	LOG10abc	.017	.041	.082	.410	.685	-.068	.102
	LOG10BSC	-.069	.058	-.305	-1.185	.246	-.189	.050
	LOG10BM	.082	.041	.495	2.000	.056	-.002	.165
	LOG10CIP	.026	.013	.401	2.086	.047	.000	.053

a. Dependent Variable: Return on Assets

The null hypothesis was that there was no substantial association between each management control system aspects and financial performance. All management control aspects apart from Continuous Improvement Process have significance values that are greater than the critical significance 0.05 value. Additionally, the T critical figure for a two-tailed test is ±2.068658. The T values of all the response variables utilized in the study fall within the range of ±2.068658 except the t value of Continuous Improvement Process (2.086). Thus, the null hypothesis that Continuous Improvement Process does not significantly impact on financial performance is rejected. Therefore, Continuous Improvement Process has a significant positive association with fiscal presentation. The following model was thus developed; **Y = -0.10 + 0.026X.** This implies that when there is no Continuous Improvement Process, the financial performance -0.1**.** Subsequently, when one improves Continuous Improvement Process by one unit, there is an increase in fiscal presentation by 0.026 units.

Conclusions

The study concluded that a management control system significantly affects financial performance. The study conclusion is in tandem to the conclusion by Sangmi (2010) who enumerated that management control schemes act as a planning tool plus help to provide data that help to promote the allocation of resources and other decision making activities and when used in organizations the managing mechanism systems help companies to achieve their financial objectives and goals through maximizing the utilization of resources

and avoidance of wastages. Additionally, the study conclusion is congruent to a conclusion by Hightower (2013) that organizations such as Commercial Banks can use the management control system models to promote, evaluate and boosts their financial performance. Finally, the study conclusion is similar to the conclusion by Wielstra (2014) that management control systems have temporary influence on the operation of a business and is the pillar of an institute and guides the affluence or the downfall of an institution. The study further concluded that Continuous Improvement Process is the only management control aspect that significantly impacts on financial performance.

References

Anthony, R. N. and V. Govindarajan (2003). *Management control systems*. 11th edn. McGraw-Hill/Irwin, New York.

Athanasoglou , P. Asimakopoulos, I. G., & Georgiou, E. A. (2005). The effect of merger and acquisition announcement on Greek bank stock returns. *Economic Bulletin*, (24), 27-44.

Ayagre, P., Appiah-Gyamerah, I., & Nartey, J. (2014). The effectiveness of Internal Control Systems of banks. A case study on Ghanaian banks. *International Journal of Accounting and Financial Reporting*, 4(2), 377-412.

Baglieri, D. (2014). *Information systems, management, organization and control: Smart* practices *and effects*. Toronto: Carnegie Publishers.

Beasley, M., Chen, A., Nunez, K., & Wright, L. (2006). *Working hand in hand: balanced scorecards and enterprise risk management*. Chicago: Tullon House.

Bertonèche, M., Knight, R. (2001). *Financial performance*. Oxford: Butterworth-Heinemann.

Bilge, O., Gulsen, A. K., Senay, C. D., &Savas, A., (2011), Multivariate methods for ground-level ozone modeling. *Atmospheric Research*, 102, 57-65.

Blattberg, C. (2004). *Welfare: Towards the patriotic corporation. From pluralist to patriotic politics: Putting practice first*. New York: Oxford University Press.

Brown Bridge, M., Harvey, C., & Gockel, A. F. (1998). *Banking in Africa: The impact of* financial *sector reform since independence*. Trenton,

Cooper, D. R., & Schindler, P. S. (2003*). Business research methods marketing*. New York: Mc Namara Publishers.

Etuk, I. C. (2011). *Evaluation of internal control system of Banks in Nigeria*. A PhD. Dissertation, St. Clements University, Boston USA.

Eze, P. N. (1992). *Impact of internal control system on profit performance of commercial banks*. PhD dissertation, University of Lagos, Lagos Nigeria.

Fontaine, C. (2006). *Stakeholder Theory*. Boston, MA: Penguin publishers.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.

Ghosh, N. (2005). *Management control systems*. New Delhi: Prentice-Hall of India.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *multivariate data analysis.* London: Pearson Education Limited.

Hassan, H.F (2013). *Effects of internal controls on profitability of private firms: a case study of KCB South Sudan*. Unpublished MBA Project, University of Nairobi.

Hightower, R. (2013). *Internal controls policies and procedures*. Hoboken, N.J: Wiley.

Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of applied corporate finance*, *14*(3), 8-21.

Jensen, M. C., Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

Johnson, R.A. (1964). Systems theory and management. *Management Science,* 10(2):367-384.

Kabue, L. N. (2015). The effect of internal controls on fraud detection and prevention among commercial banks in Kenya. Unpublished MBA Project, University of Nairobi.

Kantzos, C., & Chondraki, A. (2006). *Auditing theory and practise II*. Stamouli, Athens.

Langfield-Smith, K. (1997). Management control systems and strategy: a critical review`, *Accounting, Organizations and Society*, 22(7):207−232.

McNaughton, D., & Barltrop, C. (1992). *Banking institutions in developing market.* Washington, D.C: World Bank.

Mohammad, S. (2014). *Liquidity creation and liquidity risk exposures in the banking sector: A comparative exploration between Islamic, conventional and hybrid banks in the Gulf Corporation Council region*. Working Paper 3, 2014, University of Durham.

Muraleetharan, P. (2011). Internal control and impact of financial performance of the organizations. Special reference to public and private organizations in Jaffna district. *Journal of Accounting and Finance*, 8(3), 74-91.

Mwangi, L. (2011). An investigation of the relationship between the internal controls and financial performance of Alexander Forbes Financial Services of (EA) Limited. Unpublished PhD Dissertation, University of Nairobi.

Ngugi, R. W., & Kabubo, J. W. (1998*). Financial sector reforms and interest rate liberalization: The Kenya experience*. Nairobi: Longhorn.

Malmi, T., & Brown, D (2008). Management control systems as a package opportunities, challenges and research directions. *Accounting Research,* 19(1):287–300.

Sangmi, M. Nazir. (2010). analyzing financial performance of commercial banks in India: Application of CAMEL Model." *Pak. J. Commer. Soc. Sci, 2(9)*:40-55.

Serem, E.K. (2014). *The Relationship between Internal Management Controls and Efficiency of Service Delivery of Commercial Banks in Kenya*. Unpublished MBA Project, University of Nairobi.

Smit P. J., & Cronje, J. G. (2002). Management principles. Capetown: Juta Publishers.

Wanemba, M. A. (2010). *Strategies applied by commercial banks in Kenya to combat fraud*. Doctoral dissertation, Department of Business Administration, School of Business, University of Nairobi.

Wanyoike, C. (2007). *Survey of internal control practices in Banking Industry in Kenya*. Doctoral dissertation, Department of Business Administration, School of Business, University of Nairobi.

Yang, D. C., & Guan, L. (2004). The evolution of IT auditing and internal control standards in financial statement audits: The Case of the United States. *Managerial Auditing Journal*, 19 (4), 544-555.