

INFLUENCE OF INNOVATIONS ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN NAIROBI COUNTY KENYA

¹HENRY MWINYA WANDERA, ²DR. TOBIAS OLWENY, ³DR. WEDA C.W

^{1, 2, 3} COLLEGE OF HUMAN RESOURCE DEVELOPMENT, JOMO KENYATTA UNIVERSITY OF AGRICULTURE
AND TECHNOLOGY

Abstract: The objective of this study was to investigate the influence of innovations on financial performance of deposit taking Sacco's in Nairobi County. The study covered a period of 5 years from 2012 to 2016. The research adopted a descriptive survey design employed to all the 41 deposit taking SACCOs in Nairobi County licensed by SASRA. A census study targeted 123 members of staff from the 41 SACCOs. A Structured questionnaire was used to collect primary data from respondents. Secondary data was sourced from the Sacco's annual financial reports and SASRA supervisory reports. Descriptive statistics like means, standard deviation, co-efficient of variation and percentages was used to summarize results that were presented in tables, charts and graphs. A multiple regression analysis was used to show the causal relationship between the independent variables and the dependent variable. The results indicated that there was a positive relationship between innovation and financial performance of deposit taking Sacco's in Nairobi County. The study concluded that innovation is a predictor of financial performance of Saccos in Nairobi County. All the three types of innovation had a positive and statistically significant influence on the financial performance. The study recommended that the government should pass legislation that will support the Sacco's to adopt more innovation in order to improve performance. This will help them move from the traditional products to more innovative products that are tailored to meet members' needs.

Keywords: innovations, financial performance, deposit taking Sacco's, SASRA.

1. INTRODUCTION

Background to the study:

The International Cooperative Alliance (ICA, 2005) defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.

According to Cobia (2008), cooperative efforts have occurred throughout history. Since the early days, man cooperated with others to help kill large animals for survival and so as to achieve the objectives that they could not reach if they acted individually. Cooperation has occurred throughout the world. Ancient records show that the Babylonians practiced cooperative farming and that the Chinese developed savings and loan associations similar to those in use today. In North America, clearing land in preparation for the planting of crops, threshing beans, and barn raisings all required cooperative efforts. In the United States, the first formal co-operative business is assumed to have been established in 1752, almost a quarter-century before the Declaration of Independence was signed.

In today's society, cooperative financial institutions hold a considerable market share, the World Council of Credit Unions (WOCCU) statistical report for 2015, recorded a total of 60,500 Credit Unions (SACCOs), spread across 109

countries and 6 continents. The world's Credit Union system has a combined savings of \$ 1.5 trillion (US dollars), and an asset base of \$ 1.8 trillion (US dollars) out of which \$ 1.2 trillion (US dollars) constituted the loan portfolio. The average worldwide penetration rate of the Credit Union system stood at 8.2 percent.

To mention some, in Western Europe there are around 11,000 local and regional saving and credit cooperatives banks, with over 56,000 outlets, a 33 million strong membership and a staff of more than 400,000. Their market share is 17 percent of savings, ranking third after the commercial and savings banks (Shaw, 2006). The French SACCO, Agricole, is the largest bank in the world outside of Japan. Ireland has a strong SACCOs or Credit unions movement, with 1.6 million people (44 percent of the population) in membership. Canada has one of the highest concentrations of SACCOs. In the French-speaking Quebec region, there are 1300 SACCOs, with five million members and more outlets than the banks. They have more than a third of the region's savings on deposit, and make a third of all consumer loans. In English-speaking Canada, specifically in Saskatchewan 57 percent of the population belong to SACCOs or Credit Unions (Tache, 2006).

In the USA, some very large cooperative banks account for about a quarter of the credit needs of US agriculture. Credit Unions are also well established; there are over 18,000 Credit Unions, serving 70 million members and with more than \$300 billion in assets. They have 13 percent of the consumer credit market and eight percent of consumer savings (Tache, 2006). North America, consisting of Canada and United States, are the major players and contribute 80% of global savings and 79% of global loans (WOCCU, 2012a).

Previous research on cooperative finance during crisis indicates that they tended to fare better than investor-owned savings and loans institutions, as they pursue more conservative investment policies (Chaddad and Cook, 2004). For instance, analysis from the IMF indicates that co-operative banks in developed countries tend to be more stable than commercial banks, especially during financial crisis, as their investment patterns tend to be less speculative and returns are therefore less volatile (Hesse and Cihak, 2007).

Co-operative finance in developed countries tends to have a supply of funding that is more stable and less responsive to monetary policy and market rates. Co-operative finance also tends to offer comparatively lower fees than other types of commercial banks, which not only helps to increase access of the poor to credit, but also reduces the cost of remittance transfers (Schenk, 2007, WOCCU, 2009).

The African Confederation of Co-operative SACCOs (ACCOSCA) was formed in 1968 to empower SACCOs in Africa through financial, social and technical assistance so as to improve the livelihood of people living in Africa in accordance with cooperative principles. ACCOSCA is the Pan African confederation of national associations of SACCOs. Regionally at least 28 countries in Africa have established Credit Unions (SACCOL, 2014). According to WOCCU statistical report on 101 countries surveyed in 2012, Africa has a membership of 16 million making it third in membership size after North America and Asia which have 105 million and 41 million respectively. SACCO's just like Commercial banks in Kenya accept deposits from individuals and accrue some profit by using the deposits to offer loans to businesses with a high interest rate.

There are more than 2000 SACCO's in Kenya with only 175 registered SACCO's by SASRA and which are authorized to conduct (FOSA) front office service operations. The total assets for the Sacco subsector stood at Ksh.354 billion in December 2015, a growth of 13.7% from the Ksh.302 billion recorded in 2014. The growth in assets was funded mainly by member deposits and share capital. This reinforces the fact that Sacco's' core business is to lend to their members. The balance of the funds is financed by retained earnings and loans from commercial banks, KUSCCO and other financial institutions (SASRA Supervision Report, 2015).

Statement of the Problem:

Deposits taking SACCO's in Kenya have always struggled to keep pace with this ever changing technology with some of the SACCOs collapsing and others operating under losses. Long lines due to increased membership, transaction error, and insecurity and network failures are the common challenges in the financial markets (Smith, 2013).

Majority of SACCOs growth in Kenya is decimal. Many of them still do not have FOSA services. How to strategize for innovation basing on the available resources to attain growth has become a great challenge. There is clear inadequacy of innovation among SACCOs in Kenya. More than 81% of Kenyans rely on SACCO's to access financial services (Mwanahawa, 2012). However, the use of SACCOs by Kenyans as a financial service provider has been declining over

the last five years. The decline has been from a high of 13.5% in 2009 to as low as 9.1% by the end of the year 2013. During the same period, customers accessing commercial banks for financial services has grown from a low of 13.5% in 2006 to 29.2% in 2013 (Kiragu, 2015).

This trend in loss of customers is attributed to the competition from banks which have embraced innovations thus being able to offer better services like easy access transaction accounts and consumer loans through mobile and internet platforms (SASRA, 2014). SACCOs have been losing their market share irrespective of their geographical location in the country compared to other financial institutions (Nyaga, 2012). Although several studies have been done on innovations in Kenya, few have focused on the relationship between innovations and the financial performance in Saccos. Mutua (2013) examined the effect of mobile banking on the financial performance of commercial banks. Nyathira (2012) assessed the impact of financial innovation on the financial performance of commercial banks in Kenya. Gichura (2011) did research on the determinants of financial performance of microfinance institution in Kenya and found that there was a positive relationship between the determinants and performance. Gatimu (2014) focused on the impact that financial innovation had on the administration of credit as administered by SACCOs in Kenya. Mbugua (2012) also did a study on the impact of deposit taking on financial performance of micro-finance institutions in Kenya. Although extensive studies have been done mostly in developed countries on innovation and financial performance, literature and data on Kenya's innovation and financial performance in the Sacco sector is limited. Failure by previous researchers to keep updating with the current innovations in the deposit taking SACCO's, the problems of ineffectiveness and poor financial performances that the SACCO's are experiencing. Thus this research sort to investigate the role of current innovations and how they influence the financial performance of SACCO's registered with SASRA in Nairobi County.

Objective of the Study:

1. To establish the influence of product innovation on the financial performance of deposits taking Sacco's in Nairobi County.
2. To investigate the influence of technological innovation on the financial performance of deposit taking Sacco's in Nairobi County.
3. To determine the influence of institutional innovation on the financial performance of deposit taking Sacco's in Nairobi County.

2. LITERATURE REVIEW

Theoretical Review:

The study was based on various innovation theories; these are the Innovation Diffusion Theory, Schumpeter Theory of Innovation and Task-Technology Fit Theory

Innovation Diffusion Theory:

Innovation Diffusion Theory (IDT) by Rogers (2003) has been employed in studying technology adoption. Rogers defines diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social society" (Rogers, 1995). Rogers, (2003) states that an individual's technology adoption behavior is determined by his or her perceptions regarding the relative advantage, compatibility, complexity, trialability, and observability of the innovation, as well as social norms.

Schumpeter Theory of Creative Destruction:

Joseph A. Schumpeter held that the key mechanism of economic development is radical innovation, In his view the economic equilibrium is continuously disturbed by actions of entrepreneurs, introducing novel goods and services in the market. These innovations may replace existing goods and services and thereby impact related industries. If this happens as a cascading process it is called *creative destruction* (Klimek, 2012). Creative destruction is the incessant product and technological innovation mechanism by which new production units replace outdated ones. The disruptive technology achieves its aim by either reducing the cost of production or increasing the demand for a product. This restructuring process permeates major aspects of macroeconomic performance, not only long-run growth but also economic fluctuations, structural adjustment and the functioning of factor markets. Over the long run, the process of creative destruction accounts for over 50 per cent of productivity growth (Caballero ,2010).

Task-Technology Fit Theory:

As stated by Goodhue & Thompson (1995), the task-technology fit (TTF) addresses the appropriateness of the job at hand and the technology in question. The task-technology fit models have four major constructs, Technology Characteristics, Task Characteristics, which jointly affect the third one Task- Technology Fit, which later influences the outcome variable, either Performance or Usage. TTF models hypothesize that (ICT) will be utilized if, and only if, the (ICT) functionality are appropriate to the user tasks. Rational, knowledgeable users will choose those tools and methods that will help them complete the task with the maximum net benefit. (ICT) that does not offer satisfactory benefits will not be used (Mosoti and Masheka, 2010). SACCOs spend millions of dollars on information systems to add value to performance that eventually would translate into increased growth and profits (Wyman, 2012). (ICT) is an important factor to SACCOs operations in achieving growth. Customers rationally would prefer being served quickly and sufficiently.

Financial Performance:

The financial performance of a financial institution is normally evaluated by determining its profitability. Generally, researchers note that the sustainability of a firm is largely determined by its level of profitability (Ongore and Kusa, 2013). Financial performance is a measure of how well a firm can use assets from its primary mode of business and generate revenues, it also measures how well a firm is generating value for the owners.

Financial management theories have over the years provided various indexes for measuring banks' performances. However, Levonian (1994) stated that there was no single universally accepted measure for firm's performance (as cited in Soylu and Durmaz, 2013).

In evaluating a firms' performance, the use of financial ratio is most prevalent in existing literatures. For instance, O'Connor (1973) and Libby (1975) used ratios as a measure of performance (as cited in Hassan, Sharkas and Samad, 2004). Accounting measures have several strength, besides, it's readily availability due to regulatory requirements for its publication; they are also subject to internal controls, which enhances data reliability. Generally, return on asset (ROA) and return on investment (ROI) have been widely used as profitability indicators. Samad (2000) observed that bank regulators often used financial ratios to evaluate banks performance over the years.

3. RESEARCH METHODOLOGY

The study adopted descriptive research design. Descriptive research is the investigation in which quantitative data is collected and analyzed in order to describe the specific phenomenon in its current trends, events and linkages between different factors at the current time. Descriptive research design enables the researcher to generalize findings to a larger population. The descriptive design approach has been credited to the fact that it allows analysis the relations of variable.

The population under study is made up of 41 SASRA registered deposit-taking SACCOs in Nairobi. The number was obtained from a list of licensed SACCOs provided by SASRA, as registered under the SACCO Societies Act of Kenya for the financial year ending December 2016. The study targeted finance managers, ICT managers and operational managers from all the 41 SASRA registered deposit-taking SACCOs in Nairobi. Therefore the study adopted census which target 123 managers from all the 41 SACCOS.

The study used both primary and secondary data. Primary data was collected using the close-ended questionnaires that are appropriate as they provide a standard set of questions for all respondents, as the information set is quantitative in nature. Drop and Pick later method was used. Secondary data on performance was sourced from the Sacco's annual financial reports and SASRA supervisory reports. The data covered the period 2012 to 2016.

Data Analysis:

Data analysis was done through descriptive and inferential statistics. The particular descriptive statistics was mean scores, frequencies and standard deviations. The particular inferential statistics is regression analysis.

The tool of analysis was the statistical Package for Social Science (SPSS) Version 20 software. The results were presented using tables and graphs to give a clear picture of the research findings at a glance

The regression model used in this study was

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where,

Y = Represent the dependent variable that measure financial performance.

β_1 , β_2 , and β_3 the coefficient function of the independent variable.

X_1 Represent the independent variable that measured Product Innovation.

X_2 , Represent the independent variable that measured Institutional Innovation.

X_3 , Represent the independent variable that measured Technological Innovation.

ϵ was the error term.

The F-test was used to analyze the joint significance of all the coefficient and ANOVA was used to analyze the significance of all variables.

4. CONCLUSIONS AND RECOMMENDATIONS

Conclusion:

The study concluded that product innovation, Institutional innovation and Technological innovation are key influencers of financial performance of deposit taking Sacco's in Nairobi County. The results as presented by the regression model revealed that the variables influence was statistically significant.

These findings are similar to those established by other researchers such as Muteke (2015) who found a positive relationship between financial innovation and financial performance among Sacco's in Mombasa County.

The study further concludes that Sacco's should adopt different types of innovations so that they can expand their financial performance. On the overall the study concludes that there is a strong positive and statistically significant relationship between innovation and Sacco's financial performance in Nairobi County. The Sacco's are encouraged to explore different types of innovations that will help them perform better since product, Institutional and technological innovations considered in this study were found to improve the financial performance. **Recommendation**

From the results, the study gives a recommendation that in Nairobi county, product, institutional and technological innovations are key influencers of financial performance of deposit taking Sacco's in Nairobi county. It was observed that all variables had a different influence on the financial performance of deposit taking Sacco's in Nairobi County. However the overall the variables were found to be statistically significant and therefore managers and other stakeholders in the industry should take into account the influence of these variables when making financial decisions.

Product Innovation was found to be statistically significant and therefore it is recommended that managers should be keen on the product innovations in their Sacco's. The management of these organizations should be geared towards bringing new financial products for both the existing and expected customers since this would in turn affect the financial performance of the Sacco. The organizations should also allocate adequate resources in new product innovations.

The Sacco's should offer good interest rates for the new customers intending to open new bank accounts to motivate them to save more. They should in extension avail debit cards and credit card to the customers cheaply to encourage them to withdraw and spend more. This would in turn generate more revenues for the charges of using these products.

Institutional innovation was found to have statistically significant and therefore it was recommended that managers should be keen on the institutional innovations changes taking place. The government should enhance and finance activities that are meant to bring institutional innovation in the Sacco's industry. The government should also strengthen oversight bodies such as SASRA to make sure that the Sacco's adhere to the set regulations and rule to prevent the collapse of the young industry.

Technological innovation was found to be statistically significant; it was recommended that managers should be keen on the technological innovations in their Sacco's. The management of these organizations should be geared towards bringing new technologies for both the existing and expected customers since this would in turn influence the financial performance of the Sacco. The organizations should also allocate adequate resources in new technological innovations. Sacco's should invest in improving Office Automation since this measure was found to contribute to the financial performance. Office Automation encourages the sharing of financial information and thus enhances the first transactions.

The use of ATMs was also found to be of great influence on the financial performance of Sacco's. Thus Sacco's should teach their customers the importance of using this facility and encourage its use.

Suggestions for Further Research:

The present study should be replicated to include rural Sacco in other regions of the country to find out whether the same results will be obtained. The sample size should also be increased to get a more representative sample and make better conclusions.

The study should include other variables that may influence the financial performance of the Sacco's such as the influence of competition from commercial banks, internal political influence and investment policies.

The scope of the study may also be extended to cover the influence of innovation on financial performance on other financial institutions in future researches.

REFERENCES

- [1] Akello, M. J. (2011). Determinants of financial innovation and its impact on financial performance of microfinance institutions in Kenya. Unpublished MBA project, University of Nairobi.
- [2] Ahmad, H. K., Raza, A., Amjad, W. & Akram, M. (2011). Financial Performance of Finance Companies in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 2 (12), 732-744.
- [3] Akhatar, M. (1984). "Financial Innovations and Monetary Policy. A Framework for Analysis" *Bis Economic Papers*, Pp3-25. An Examination of the Adoption of Small Business Create Scoring Banking Organization, Unpublished Manuscript, Federal Reserve Bank of Atlanta, April 2001.
- [4] Ben-Horim., & Silbers, W. (1997). Financial Innovation. *a linear Programming Approaching Journal of Banking and Financial* 1, 277-296.
- [5] Bessant, J., & Francis, D. (1999). "Developing Strategic Continuous Improvement Capability" *International Journal of Operations and Production Management*
- [6] Batiz-Lazo. B. and Woldesenbet. K. (2006). "The dynamics of product and process innovation in UK banking". *International Journal of Financial Services Management*, 1(4), pp. 400-421.
- [7] Caballero. R. J. (2010). *Macroeconomics after the Crisis*. Working paper no 16429
- [8] Cooper, P. & Ian, M. (1986). *Innovations New Market Investment*. Oxford Review of Economic Policy, 2, 1-17.
- [9] Cooper, D. R & Schindler, P. S. (2003). *Business Research Methods*, (8th edn). New York: McGraw-Hill.
- [10] Davis, F. D. (1986). *A technology acceptance model for empirically testing new end user information systems: (Theory and results)*. Doctoral dissertation, Cambridge, MA: MIT Sloan School of Management.
- [11] Francesca, A., & Claeys, P. (2010). *Innovation and performance of European banks adopting internet*. University of Milan and Cass business School, City University London and University of Barcelona Centre for Banking Research Cass Business School, City University London. Working Paper Series, WP 04/10.
- [12] Githakwa, P. W. (2011). The relationship between financial innovation and profitability of commercial banks in Kenya. Unpublished MBA project, University of Nairobi.
- [13] Goodhue, D. L., & Thompson, R. L. (1995). *Task-technology fit and individual performance*. *MIS Quarterly*, 19(2) 213-236.
- [14] Heffernan et al (2008), *Financial Innovation in the UK*. Working paper no.4
- [15] Jayawardhena, C., & Foley, P. (2000). *Changes in the banking sector*. The case of internet banking in the UK. *Internet Research: Electronic Networking Applications and policy*, 10(1), 19-30.
- [16] J. Tabas, M. Beranova, D. Martinovičova (2012). *Influence of product innovations on financial performance of small and medium-sized enterprises in the Czech Republic*. *Acta univ. agric. et silvic. Mendel. Brun.* 2012, LX, No. 7, pp. 409-414

- [17] Jepkorir,S.,(2011) Challenges of implementing Financial Innovation by Commercial Banks In Kenya. Unpublished MBA project UoN.
- [18] Klimek ,P.,(2012) *Empirical Confirmation of Creative Destruction from World Trade Data*, The Free Press.
- [19] Mbogo, M. and Ashika C. (2010). *Factors Influencing Product Innovation in Micro Finance Institutions in Kenya: A Case Study of MFIs Registered With the Association of Microfinance Institutions*.
- [20] Mwangi, G. N. (2013) Determinants of efficiency of Savings and Credit Co-operative Societies in Nairobi County. Unpublished MBA Project, University of Nairobi.
- [21] Mugane, C. (2015) *The Effect of Financial Innovations on the Financial Performance of Commercial Banks in Kenya*.
- [22] Mugenda, O. M., & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative approaches*. Nairobi, Acts Press.
- [23] Mugo, J. G. (2012). The Effect of Financial Innovation on The Growth of Micro-Finance Institutions in Kenya. Unpublished MBA project: University of Nairobi.
- [24] Nyathira, N. C. (2012). Financial innovation and its effect on the performance of commercial banks in Kenya. Unpublished Master of Business Administration Project, University of Nairobi. Nairobi.
- [25] Olando, C.O., Jagongo, A. &Mbewa, M.O. (2013). The contribution of Sacco financial stewardship to growth of SACCOS in Kenya. *International Journal of Humanities and Social Science*, 3(17) 130-132.
- [26] Prager, R. (2001). *The effect of ATM surcharges on small banking organizations*. Review of Industrial Organizations 18, 161-173.
- [27] Rogers, E.M. (1995). *Diffusion of information*, New York, The Free Press, 4th Edition.
- [28] SASRA .(2012). *SACCO Supervision Annual Report 2012 (Deposit Taking)*. SASRA Regulatory Authority.
- [29] SASRA .(2013). *SACCO Supervision Annual Report 2013 (Deposit Taking)*. SASRA Regulatory Authority.
- [30] SASRA .(2014). *SACCO Supervision Annual Report 2014 (Deposit Taking)*. SASRA Regulatory Authority.
- [31] SASRA .(2015). *SACCO Supervision Annual Report 2015 (Deposit Taking)*. SASRA Regulatory Authority.
- [32] Scylla R. (1982). Monetary Innovation in American. *Journal of Economic History*,42 (1):21 -30
- [33] Shu,W., & Strassman, P.A. (2005). *Does information technology provide banks with profit?* Information and Management, 42(5), 781-787.
- [34] Siegel. D. (1990), *Innovation and Technology in the Markets: A Reordering of the World's Capital Market System*. Chicago: Probus.
- [35] Silber, W. (1983). *The Process of Financial Innovation*. American Economic Review, vol.73 (2):89-95.
- [36] Sullivan, R. J. (2000), "How Has the Adoption of Internet Banking Affected Performance and Risk in Banks?" Financial Industry Perspectives, Federal Reserve Bank of Kansas City
- [37] Suzuki, (1986). "A Comparative Study of Financial Innovations. Deregulation Reform in Japan and US." Bank of Japan. Monetary Economic Series 4(10).
- [38] Tufano. P. (1989). "Financial Innovation and First Mover Advantages," *Journal of Financial Economics*, 25, 213-240.32.
- [39] Tufano, P. (1995). "Securities Innovations: A Historical and Functional Perspective," *Journal of WOCCU*. (2014a).
- [40] Zahra, S.A., Siddhartha, R.D., (1993). *Innovation strategy and financial performance in manufacturing companies: An empirical analysis*. Production and Operations Management 2 (1), 15-37