
**EFFECTS OF FINANCIAL PRODUCT INNOVATIONS ON THE
FINANCIAL PERFORMANCE OF SAVINGS AND CREDIT CO-
OPERATIVE SOCIETIES**

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Abstract

Financial institutions world over continue to make huge investments in innovations and training of manpower to handle new technologies. The fast-changing competitive environment, globalization, economic changes, regulation, privatization and the likes demand that these institutions be run efficiently and effectively by continuously engaging in innovations and SACCOs are no exception. This necessitates that the relationship between the growing product innovations in SACCOs and SACCO financial performance be studied. The main objective of the study was to establish the effect of financial product innovations on financial performance of SACCO with the specific objectives of the paper being to; find out the impact of mobile banking on financial performance of commercial banks, to examine the effect of agent banking on financial performance of SACCOs, to find out the effect of internet banking on financial performance of SACCOs, to determine the effects of agency banking innovation on financial performance of SACCOs and to investigate the effects of banc assurance on financial performance of SACCOs. Guided by Rogers's Innovation Diffusion Theory, Transaction Cost Innovation Theory and Schumpeter Theory of Innovation as the theoretical frameworks, the study employed a historical research design that was used to synthesize evidence from the past to establish facts. Secondary data was collected, analysed, edited and summarized. The paper found out that money banking, internet banking, agency banking and banc assurance contributed to the increase in SACCOs revenue and other financial indicators. The study recommends that for SACCOs to remain competitive in financial intermediation then they should continuously innovate.

Keywords (3-10): Cooperative Societies, SACCOs, financial product innovations, financial performance, agency banking, internet banking, mobile banking

Introduction

Financial innovation is among the emerging issues seen as an essential component of competitiveness, enshrined in the organizational structures, processes, products and services within a firm (RoK, 2013). Financial innovations refer to development of new products, creation of new institutions, accepting new technology and other forms that show newness in the financial institutions and markets (Schumpeter, 2008). Strategic decision making, system realignment, institutional setting, injecting new management, expanding to new markets are some of the activities through which financial innovation manifest in an institution. Financial innovation fosters faster dissemination of information and its more rapid incorporation into financial market prices (Mosongo, 2013). Financial innovations also refer to development of new products like

telephone banking, formation of new services like internet banking, new production process like electronic record keeping (EFT) or new organizational forms (Frame & White, 2004).

Literature review

Theoretical Framework

A theory is a reasoned statement or group of statements, which are supported by evidence meant to explain some phenomena. A theory is a systematic explanation of the relationship among phenomena. Theories provide a generalized explanation to an occurrence. Therefore a researcher should be conversant with those theories applicable to his area of research (Kombo & Tromp, 2009, Smyth, 2004). According to Trochim (2006) Aguilar (2009), and Tormo (2006), a theoretical framework guides research, determining what variables to measure, and what statistical relationships to look for in the context of the problems under study. Thus, the theoretical literature helps the researcher see clearly the variables of the study; provides a general framework for data analysis; and helps in the selection of applicable research design.

Transaction Cost Innovation Theory

The transaction cost innovation theory's main pioneers are Hicks and Niehans 1983 (as cited by Njeri 2013). They thought that the dominant factor of financial innovation is the reduction of transaction cost, and in fact, financial innovation is the response of the advance in technology which caused the transaction cost to reduce. The reduction of transaction cost can stimulate financial innovation and improve on financial service. This theory studied the financial innovation from the perspective of microscopic economic structure change. Saccos just like other organizations are faced with challenges of ever escalating transaction costs that threaten sustainability. As a result, they have embarked on invention of methods for cutting down transaction costs.

This theory was therefore important to this study since it helped the researcher to articulate the significance of financial innovations on the financial performance of Saccos as a result of transaction cost cutting measures

The theory of Rogers Innovation Diffusion

Rogers (1995) outlining the diffusion of innovation theory explains how financial innovations (new) are accepted. This theory outlines five features that affect acceptance of an innovation to include; complexity, compatibility, testability, observability and relative advantage. Complexity refers to the innovation's comprehension hardness and its use (Greenhalgh, 2014). According to Dillon and Morris (1996); Rogers (1983 & 2003), the factors which influence the diffusion of an innovation include; relative advantage (the extent to which a technology offers improvements over currently available tools), compatibility (its consistency with social practices and norms among its users), complexity (its ease of use or learning), trialability (the opportunity to try an innovation before committing to use it), and observability (the extent to which the technology's outputs and its gains are clear to see). These elements are not mutually exclusive thus unable to predict either the extent or the rate of innovation diffusion. Moore and Benbasat (1991) built on the work of Roger (1983), amongst others Tornatsky and Klein (1982) and Brancheau and

Wetherbe (1990) and expanded the array of innovation characteristics to seven. Three of the seven innovation characteristics are directly borrowed from Rogers: relative advantage, compatibility, and trialability. The fourth characteristic, ease of use, is a close relative to Rogers' complexity. It is worth noting that both relative advantage and ease of use are subjective characteristics since they can be viewed differently depending on an individual's perceptions. Fishbein and Ajzen (1980) concur, attitudes towards an object and attitudes regarding a particular behaviour relating to that object can frequently differ. Moore and Benbasat (1991) also derived three further characteristics. While Rogers (1983) included image as an internal component of relative advantage, Moore and Benbasat (1991) found it to be an independent predictor of adoption. Image is the self-perception that adopting an innovation could result in enhanced social status.

The applicability of this theory in this study borrows from the fact that for SACCOs to come up with product innovation successfully, they should look inward at the factors which influence the diffusion of an innovation: relative advantage, compatibility, and trialability.

Theory of Innovation

Schumpeter (1928) argued that companies, who could be independent inventors or R&D engineers in large corporations, created the opportunity for new profits with their innovations. In turn, groups of imitators attracted by super-profits would start a wave of investment that would erode the profit margin for the innovation. However, before the economy could equilibrate a new innovation or set of innovations, conceptualized by Schumpeter as Kondratiev cycles, would emerge to begin the business cycle over again.

Schumpeter (1934) emphasized the role of companies and the seeking out of opportunities for novel value generating activities which would expand and transform the circular flow of income, but it did so with reference to a distinction between invention or discovery on the one hand and innovation, commercialization and entrepreneur on the other. This separation of invention and innovation marked out the typical nineteenth century institutional model of innovation, in which independent inventors typically fed discoveries as potential inputs to entrepreneurial firms. The author further saw innovations as perpetual gales of creative destruction that were essential forces driving growth rates in a capitalist system. Schumpeter's thinking evolved over his lifetime to the extent that some scholars have differentiated his early thinking where innovation was largely dependent on exceptional individuals/companies willing to take on exceptional hazards as an act of will. His later thinking recognized the role of large corporations in organizing and supporting innovation. This resulted in his emphasis on the role of oligopolies in innovation and which later was falsely viewed as the main contribution of his work (Freeman, 1994).

Schumpeter drew a clear distinction between the companies whose innovations create the conditions for profitable new enterprises and the bankers who create credit to finance the construction of the new ventures (Schumpeter, 1939). He emphasized heavily that the special role of credit-creation by bankers was 'the monetary complement of innovations' (Schumpeter, 1939). As independent agents who have no proprietary interest in the new enterprises they finance, bankers are the capitalists who bear all the risks (none is borne by the companies). That

requires having the special ability to judge the potential for success in financing entrepreneurial activities. Schumpeter emphasized that it is just as important to deny credit to those lacking that potential as it is to supply credit to those having it (Schumpeter, 1939).

Schumpeter's brief discussions of historical episodes of innovations in the field of banking might appear to suggest a positive role for financial innovations in financing the entrepreneurial ventures that produce the primary wave growth spurts. The spread of joint stock banking was cited as one of the most important innovations that occurred in the early 1800s (Schumpeter, 1939). Schumpeter (1939) propositions particularly interesting allusion to innovations in the banking sector is found in Schumpeter's discussion of the banking acts of the 1930s. He stated that the 1933 act introduced important reforms which included the strengthening the Federal Reserve's power to regulate member banks' extension of credit for speculative purposes and the separation of commercial banks and their security affiliates.

For all his insight on the role of innovation, Schumpeter still did not really explain the source of innovation. He was able to point to its importance and its role in timing economic cycles but did not address its source. This rather interestingly allowed Keynesian economics to argue that levels of investment were the cause of innovation. It was not until the 1960s that economists would begin again to search for the source of innovation. The importance of innovation was highlighted by researchers like Abramovitz (1956) and Solow (1957) who were able to demonstrate how little neo-classical economics was able to explain. Based on data on the United States economy from 1909-49, Solow showed that only 12.5 percent of the increase of per capita output could be traced to increased use of capital. This left a surprisingly large 87.5 percent residual that Solow attributed to technical change.

Schumpeter's assertions have been supported by Porter (1992) that innovation is vital for a country's long-run economic growth and competitive advantage. Porter (1992) argues that to compete effectively in international markets, a nation's businesses must continuously innovate and upgrade their competitive advantages. Innovation and upgrading come from sustained investment in physical as well as intangible assets. Financial markets play critical roles in mobilizing savings, evaluating projects, managing risk, monitoring managers, and facilitating transactions. This theory is vital to this finance seminar paper since for SACCOs to remain competitive in the ever changing financial institution dynamics and don't extinct from the industry, then continuous innovation is vital for them to continue to perform financially.

Methodology/Research methods

Systematic Quantitative Literature Review

Systematic quantitative literature review involves systematically identifying literature materials, entering information about each study into a personal database and then quantifying the literature through compiling tables that summarize the current status of the literature (Pickering Catherine, n.d). This method has the advantages of being fast and cost effective when compared to primary data collection methods such as interview and questionnaire administration.

Population and Sample Size

The research population included all literature materials discussing financial performance of SACCOs with connection to agency banking, internet banking, banc assurance and mobile banking.

Data Collection Procedure

The researcher used stakeholders' participation, monitoring and evaluation, impact and influence as keywords that guided the search for online literature using the Google Scholar database and search engine. The personal researcher database was structured using Microsoft Excel 2007 with author and publication details, geographical details, response variables and methods used as the categories and sub categories for the literature sources. Each row represented a single literature article.

Data Analysis

Content Analysis was used to extract key themes from each of the material studied. Those sources with repeating patterns over a particular theme were grouped together and summary notes made to reflect their conclusions. The results were reported in form of summary narrations.

Analysis and discussion of the results

Product Innovations and Financial Performance

This paper investigated the effect of product innovations on financial performance of SACCO. The product innovations that were studied were; Mobile banking (deposits, withdrawals, transfer, Loan processing), internet banking (deposits, withdrawals, transfer, Loan processing), agency banking (deposits and withdrawals) and banc assurance(education, investment, medic care, life). Financial performance indicators that were studied were; income, return on assets, profitability and customer deposits.

Evidence from previous studies (Saundres, Lewis and Thornbill (2007), Sekaran (2003)) on whether financial innovations influence performance showed that there were mixed results based on the operating environment and the level of adoption. In Kenya there is a high level of adoption of innovations in the banking sector and not in the SACCOs. However, the degree at which it influences the profitability of the financial institutions is uncertain. In this paper theoretical framework has been empirically tested identifying the relationship between mobile banking, internet banking, agency banking, banc assurance and SACCO financial performance.

Performance of commercial banks in Kenya grew impressively between years 2001 to 2010 where profit before tax grew from Kshs 2.7billion in 2001 to Kshs 74billion in 2010. During the same period total income grew from Kshs 61 billion to Kshs 178 billion while total assets grew from Kshs 425 billion to Kshs 1.7trillion (CBK, 2011). According to Central Bank Supervision Report (2013), the banking sector reflected solid performance in 2012. This performance can partly be attributed to improvement in the GDP growth which grew to 4.6% in 2012 compared to 4.4% in 2011. Total customer deposit base increased from Shs 1.488 trillion in 2011 to Shs 1.708 trillion in 2012, an increase of 14.8%. Total assets grew by 15.4% from Shs 2.021 trillion in 2011 to Shs 2.330 trillion in 2012. Net advances to customers increased from Shs 1.152 trillion

in 2011 to Shs 1.296 trillion in 2012, an increase of 12.5%. Profit before tax increased from Shs 89.5 billion in 2011 to Shs 107.9 billion in 2012, an increase of 20.5% (CBK, 2013).

The net interest income in 2012 increased by Shs 32.0 billion (24.2%) over the 2011 levels. The growth in other operating income in 2012 of Shs 5.4 billion is attributed to an increase over 2011 levels in fees and commission income of Shs 1.7 billion (3.7%), other income (which includes trading income from Government securities) of Shs 2.1 billion (20.2%) and foreign exchange trading income of Shs 1.6 billion (8.3%). Return on shareholders' equity for the sector in 2012 was 33.1% compared to 32.1% in 2011. The overall industry return on assets for 2012 was 5.0% (CBK, 2013).

SASRA reports (2008 to 2013) evaluate the performance of the Sacco subsector based on the financial data and information extracted from audited financial statements and reports for the period. It is a legal requirement that the audited financial statements of every Sacco society be registered with the Commissioner for Cooperatives Development before presentation to members at the annual general meeting (Cooperative Societies Act Cap 490, 1997). The total assets for the Sacco subsector grew by 14% to close to Ksh.335 billion in 2013 from Ksh.294 billion recorded in 2012. The growth in assets was funded mainly by member deposits for the sector that stood at Kshs.241 billion posting an increase of 8.4 % in 2013 from Kshs. 213 billion in 2012. The licensed deposit taking Saccos increased the gross outstanding loans by 17.4% to close at Kshs. 253 billion in December 2013 compared to Kshs. 221 billion in December 2012. (SASRA Report 2013).

Financial performance was measured by dividends payment to members of the SACCO. From the findings it can be concluded that on average the findings analysed agreed that the SACCOs have been paying dividends consistently, there had been a steady growth of dividend per share since 2009 and that the dividend per share was fairly satisfactory

Effects of Mobile Banking Innovations

From the literature review for better management of the financial performance of SACCOs financial mobile banking innovation is necessary, it provides customers flexibility and thus improves financial performance of the SACCOs. SACCOs should focus on expanding mobile banking innovation through establishment of accessibility of internet to ensure effective utilization of this channel of banking. Similar to the findings on mobile banking and bank profitability, Porteus (2006) asserts that in Uganda mobile banking has increased access to banking services and subsequently income and profits for the financial institutions. In Kenya, Ndung'u (2011) concurs that mobile banking has revolutionised the money transfer business and has created further innovations that have lowered the transaction costs for both the financial institutions such as SACCOs and customers. This transformation of money transfer business has translated to more incomes and profits to the financial institutions. This confirms why Kenya has appeared in the global map in the front of mobile money transfer services. Due to the potential in mobile banking, the model has been replicated in other countries and seems to be a threat to the traditional money transfers services like the EFT and cheque system. Many retail transactions in Kenya have moved to the mobile phone. Bank customers can move money from their bank accounts to their e-money accounts or from their e-money to their bank accounts. This

improvement of the mobile money services has increase the velocity and circulation of money in the country and has resulted to more profits for the financial institutions through commission incomes.

Majority of the research analysed showed that Mobile banking is effective in developing long term customer relationship, and can be used in planning new customer acquisition. Mobile banking enables SACCOs to employ up selling strategies for lifetime value customer, help financial institutions focus on customer loyalty program and offer a variety of services. Data analysed from secondary data showed that mobile banking had the potential to improve incomes of SACCOs. It had the ability to increased commission fee and thus improved the banks' income generating potential. In collaborating the evidence with a Kenyan study regarding mobile banking by Misati *et al.*, (2010) they revealed that mobile banking had expanded the range of services that a bank could offer and hence expanded incomes for financial institutions. Similar findings were shown in a study in Uganda by Porteus (2006) and another one in Tunisia by Mabrouk and Mamogholi (2010) who concluded that mobile banking helped to increase bank incomes and profitability. Kenya mobile payments have been growing at a high rate as witnessed by the growth from 17 million transactions worth 40 billion Kenya shillings in July 2009 to 52 million transactions worth 138 billion Kenya shillings in October 2012 (CBK, 2012). This growth in mobile payments supports the findings of this study and those of other corroborating studies.

Mobile banking has experienced high penetration levels in Kenya because it offers an alternative service delivery channel for financial institutions (especially banks but less utilized by SACCOs) which is both accessible and affordable to many customers. The ease and speed with which customers can transact on mobile phones has made mobile banking very popular to both the banks and the customers. Banks have managed to create collaborations with mobile telephony providers which have increased the type and number of transactions (deposits, withdrawals, money transfer and loan application and payment that banks and customers can conduct on the mobile phone and thus creating more opportunities for income generation for banks.

According to Aker and Mbiti (2010), there is a strong correlation between mobile phone coverage, the types of services offered, the price of such service, and firm performance. In markets with limited competition, profit-maximizing firms to offer more limited services at higher prices. Rayhan, Sohel, Islam, and Mahjabin (2012) in their study on mobile banking in Bangladesh concluded that, mobile phone banking offers the potential to extend low cost virtual bank accounts to a large number of currently un-banked individuals. Mobile phones enhance the ability of electronic banking solutions to offer customers an enhanced range of services at a low cost. Mobile banking is real time on-line banking, available anytime, anywhere throughout the country, it is convenient, affordable and secure and therefore it is much more effective in developing savings habits and hence leading to increase in bank deposits. Mobile phone also makes access to banking and advanced payment transactions at affordable cost. A positive aspect of mobile phones is that mobile networks can reach remote areas at low cost both to the consumer and the bank.

Internet banking

Some research showed that internet banking did not improved bank commission fee incomes. On whether internet banking improved the generally ability of a bank to make more incomes some previous research did not see a correlation between internet banking and income increase. Research indicated that internet banking did not lead to increased bank incomes. The findings of this study show that internet banking is used by bank as a convenience platform to enable customers to transact as opposed to it being an avenue for banks to make more revenue. These findings are inconsistent with previous studies done by Pooja and Singh (2009) and Molhotra and Singh (2009) in India, Simpson (2002) in USA, Sullivan (2000) in USA and Arnaboldi & Claeys (2008) in Finland, Spain, Italy and UK where they all concluded that internet banking improved bank incomes and profitability.

Internet is provided at a minimal charge by many internet service providers and hence making it available as a platform for banks to offer their services. This explains the reason why many banks in Kenya do not charge the access fees on a customer account through the internet and hence internet is not an avenue for banks to make money but it has become a value-add to customers. Charging bank customers for accessing their accounts through the internet will amount to a double charge by both the bank and the internet service providers. Therefore internet does not induce revenue motive among banks in Kenya. Some SACCOs have embrace internet banking but to a very limited degree

In other research Gitau (2011) found that online or internet based banking has become quite common. Banks have also realized the potential of internet banking and have recognized that it is necessary to integrate the customers' new lifestyle and web based activity preferences with their business models. Adoption of internet banking it was found that it leads to cost reduction and hence likely to increase banks' profitability. Introduction on internet banking has brought unprecedented speed in banking system and has been playing a major role in the globalization of banking system. As internet banking makes inroads to banking business, market participants have also started to use internet for security trading activities. Online trading has led to an upward trend in trading frequency, trading volume, and turnover ratio.

Daneshvar and Ramesh (2012) conducted a study on panel data of two public banks for the period 1998-2009 to examine impact of IT investments on profitability and productivity of Indian public sector banks. The study used two statistical tools in terms of correlation and regression analysis. The results indicated that investments on IT contributed to increased amount of deposits and return on assets (ROA) as profitability, assets ratio and staff cost. The study also showed that public banks tried to adopt cost reduction and assets quality strategies to compete in the Indian bank market. Ram *et al.*,(2008) examined the impact of online banking intensity on the financial performance of community banks. The actual impact of online banking on performance was measured by regressing the profit efficiency index against a number of correlates including online banking intensity measure. Their results indicated that the increasing use of internet as an additional channel of marketing banking services has significantly improved the financial performance of community banks.

Agency Banking

CGAP (2007) Argues that banking agents reach the unbanked, they increase the convenience of existing customers depositing and withdrawals as they are easily accessible to clients as even the remotest of clients are able to do banking transactions. As a result the improve branch productivity and efficiency by offering additional point of sale, expanding customer base outside the existing branch network as well as reducing upfront cost by leveraging existing infrastructure. Thus from the literature reviewed it was established by Chaia, (2011) that agent banking has become one of the most promising strategies for offering financial services in emerging markets. In this model, financial institutions work with networks of existing nonbank retail outlets such as convenience stores, gas stations, and post offices to deliver financial services. This approach can be especially powerful when serving the unbanked poor because of its ability to reduce banks costs and reach low income workers where they live. According to Chaia, (2011) agent banking has become one of the most promising strategies for offering financial services in emerging markets. In this model, financial institutions work with networks of existing nonbank retail outlets such as convenience stores, gas stations, and post offices to deliver financial services. This approach can be especially powerful when serving the unbanked poor because of its ability to reduce banks costs and reach low income workers where they live. Agent banking benefits arrange of stakeholders. The poor gain convenient access to financial services in their own communities. Financial institutions reach a vast new customer segment. Agents increase their sales volumes and have an opportunity to develop deeper relationships with the customer. However implementing correspondent strategies can be tough. It may be hard to build networks of partners that can fulfil the correspondent role. The economics are still uncertain for players that do not offer a range of services. And because the strategy is relatively new for financial service providers, it is difficult to know exactly what will work in each particular community.

Banc Assurance

From the analysis of the literature review the paper showed that adoption of banc assurance by SACCOs was influenced by the need for new revenue stream, diversification and economies of scope. There was a significant positive relationship between need for new revenue stream, business diversification, economies of scope and adoption of banc assurance by SACCOs as concluded by (Omondi, 2013). Nyakundi (2013) affirmed that SACCOs and Insurance Companies can mitigate some of the management problems such as high loan default leading to high credit risks, switching of customers due to dissatisfaction, declining profits, resistance to buy new insurance products hence minimum growth.

Jongeneel (2011) did a paper on Banc assurance: APan-European country analysis. In his study, the researcher sought to identify the critical driver s in Banc assurance as a distribution channel for insurers. A global comparison of Banc assurance was given through different business models and a descriptive design extended by an analysis of previous literature. Subsequently, a quantitative country-level assessment was performed. The researcher used examined factors such as market concentration, internet usage, and size of insurance market, level of deregulation and bank"s branch density to measure their impact on the proportional size of banc assurance. The

empirical results indicated that all the five variables affected Banc assurance although the size of the insurable market only held for nonlife sample.

According to Kemunto and Kibati (2016) Banc assurance has led to the sale of whole range of financial services (Life assurance, investment, medic care and educational policy), and work towards the provision of integrated financial service, enables bank to tap into a huge customer base. In addition, it has enabled bank to tap into a huge customer base and enabled customers to carry out many transactions under one roof. Evidence shows that this innovation has not been embraced by SACCOs

Conclusion(s)

Based on the findings of the study, it can be concluded that financial product innovations influence financial performance of financial institutions in Kenya positively. The adoption of innovations by commercial banks has a high potential of improving financial performance and hence better returns to the shareholders and hence SACCOs to remain competitive in the market they should not be left behind in product innovations. The versatility of innovations can make their adoption rate to be high among both the SACCOs and their customers. Financial institutions in Kenya have continued to perform well even when other sectors of the economy show lagged performance to the use of innovations which have enabled them to start making income away from traditional sources like interest, trade and asset financing. SACCOs will be able to make more commission income from transactions done on innovation channels like; mobile phones, internet banking, agency banking and banc assurance.

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