

EFFECT OF COST PUSH INFLATION ON FINANCIAL PERFORMANCE OF SACCOS IN ELDAMA RAVINE SUB COUNTY, KENYA

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ABSTRACT: The purpose of the study was to assess the effect of cost push inflation on financial performance of SACCOS in Eldama Ravine Sub County, Kenya. The study was based on a descriptive design. Data was collected by a structured questionnaire and analyzed using descriptive and inferential statistics with the aid of SPSS version 21. The target population of the study comprised 150 Board members, the SACCOS' unionizable staff and management staff. Stratified random sampling was used to obtain a sample size of 107 respondents. From the analysis, the study found that cost push inflation had an influence on the financial performance of SACCOS. However, there was a weak relationship between financial performance of SACCOS and cost push inflation. The study revealed that a unit increase in cost push inflation would lead to a slight increase in financial performance indicating that there was a positive weak relationship between financial performance of SACCOS and cost push inflation.

Key Words: Cost Push Inflation, Financial Performance, SACCOS, Eldama Ravine Sub-County, Kenya

1.1 Introduction

The cooperative movement traces its origin to the Rockdale Society of Equitable Pioneers, founded in 1844(SASRA, 2012). In Kenya, the history of cooperatives dates back to 1908 when the first Co-operative Society was established in Lumbwa area in the current Kipkelion Sub County (SASRA, 2012). According to International Co-operative Alliance, Kenya Co-operative movement is currently ranked 1st in Africa and 7th internationally. In July 2013 WOCCU recognized Kenya SACCOS as the fastest growing subsector in the World having generated employment opportunities for over 500,000 people and indirectly for 2 million. Kenyan SACCOS had mobilized savings to the tune of Ksh.380 billion and an asset base of 493 billion as at 31st December 2012. Savings mobilization in the SACCO subsector has been growing at the average rate of 30% per annum (SASRA, 2012).

The establishment of SACCO Societies Act 2008 places the licensing, supervision and regulation of deposit taking under the armpit of the SACCO Societies Regulatory Authority (SASRA). Through this new legal framework, prudential regulations have been introduced to guide SACCO's growth and development. The Financial SACCOS constitutes over 45% of

the total number of co-operatives in Kenya and have become a major player in the financial sector (SASRA, 2012). The financial SACCOs in Kenya comprises both deposit taking and non-deposit taking SACCOs. There were 6,007 registered SACCOs in Kenya as at December 2010 of which 2,959 were active. Of the active SACCOs 218 were deposit taking while 2,011 SACCOs were non-deposit taking (SASRA, 2012). From estimation by Kenya Credit Providers Association in 2011, SACCOs controlled 1,875,000 loan accounts which are 39% of total loan accounts.

A recent study by Financial Sector Deepening (FSD) (2009) however, revealed that SACCOs are facing severe liquidity problems and majorities are unable to meet the demands of their clients for loans and withdrawal of savings. Given this situation, clients are getting anxious about the future of the SACCOs. According to Olaka and Ochieng (2014) inflation is one of the contributing factors to this anxiety. A sustained increase in the general price level of goods and services in an economy over a period of time reflects a reduction in the purchasing power per unit of money leading to loss of real value in the medium of exchange and unit of account within the economy. In Kenya borrowers are known to take loans from several financiers without disclosing this information to lenders. Cross borrowing is also a phenomenon in SACCOs. Most SACCOs have had their profits diluted by non performing loans whose cause is attributed to cost push inflation. In spite of this background, cost inflation and its influence on financial performance of SACCOs have not been well studied and documented in the Kenyan SACCO context. The study attempted to bridge this knowledge gap and proposed ways of managing loans for sustainability of the SACCO sector.

1.2 Statement of the Problem

Lending is the main business of financial institutions and loans is generally the main source of revenue for SACCOs (Kwambai & Wandera, 2013). With savings of Ksh 380 billion and asset base of Ksh 493 billion, SACCOs control 39% of total loan accounts in Kenya (SASRA, 2012). However, many SACCOs have collapsed in Kenya since 1986 due to non performing loans. Non performing loans have resulted from national economic downturn, failure by loan applicants to disclose vital information during loan processing and lack of an aggressive debt collection policy (Waweru & Kalani, 2009). For example, members of Kihiihi SACCO in Uganda borrowed in various institutions resulting into the collapse of the SACCO. In Kenya, Tena and Ulinzi SACCOS are under liquidation due to bad governance

(SASRA 2012). Recently, SASRA revoked business licenses and directed the immediate closure of Isiolo Teachers SACCO and Ogembo Tea SACCO due to non compliance with regulatory requirements (The Kenya Gazette, 2015). KUSCCO (2009) indicates that many SACCOs are unable to meet the demands of their clients for loans and withdrawal of savings and some have gone for external funding at exorbitant interest rates so as to bridge the gap. The consequence of cross borrowing is that some SACCOs have increased provisions for cost push inflation which has influenced the SACCOs' financial performance. This forms the basis of the study because cost push inflation results in nonperforming loans which leads to huge funds diverted to loan loss provisioning and interest inflation rate.

1.3 Specific Objective

1. To establish the effect of cost push inflation on financial performance of SACCOs in Eldama Ravine Sub county, Kenya.

2.1 Theoretical Review

This section discusses the theories that guided the study. These theories were Utility Theory, Asymmetric Information Theory and Keynesian Theory of Inflation. These theories are related to the independent variables of the study.

2.1.1 Utility Theory

In this study, utility theory explains why people engage in cross-borrowing. It is a behavioral economic theory that describes the way people choose between probabilistic alternatives that involve risk, where the probabilities of outcomes are known. The theory states that people make decisions based on the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using certain heuristics (Kahneman & Tversky, 1979). It asserts that decisions are based on judgment, where it is difficult to foresee the consequences or outcomes of events such as the effects of cost pus inflation with clarity. Utility theory directly addresses how choices are framed and evaluated in the decision making process. The model is descriptive in that it tries to model real-life choices, rather than optimal decisions. The theory describes such decision processes as consisting of two stages, editing and evaluation. In the first, possible outcomes of the decision are ordered following some heuristic. In particular, people decide which outcomes they see as basically identical and they set a reference point and consider lower outcomes as losses and larger as gains. In evaluation phase, people behave as if they would compute a value, based on the potential

outcomes and their respective probabilities and then choose the alternative having a higher utility.

2.1.2 Asymmetric Information Theory

Information asymmetry refers to a situation where an individual knows more about the prospects for and risks facing them than do lenders (Eppy, 2005). It describes a condition where all parties involved in an undertaking do not know relevant information. In a debt market, information asymmetry arises when a borrower who takes a loan usually has better information about the potential risks and returns associated with investment projects for which the funds are earmarked. The financier on the other hand does not have sufficient information concerning the borrower (Edwards & Turnbull, 1994). Binks et al (1992) posited that perceived information asymmetry poses two problems to financiers, moral hazard and adverse selection. Financiers find it difficult to overcome these problems because it is not economical to devote resources to appraisal and monitoring where lending is for relatively small amounts because data needed to screen credit applications and to monitor borrowers are not freely available. Financiers face a situation of information asymmetry when assessing lending applications (Binks & Ennew, 1997). The information required to assess the competence and commitment of the entrepreneur, and the prospects of the business is either not available, uneconomic to obtain or difficult to interpret creating risks for the financier (Deakins, 1999).

2.1.3 Keynesian Theory of Inflation

Keynesian economic theory holds that changes in money supply do not have a direct effect on prices, and that noticeable inflation is the consequence of pressure in the economy expressing itself in prices. Gordon (1988) posited that there are three major types of inflation. Demand-pull theory states that the rate of inflation accelerates whenever aggregate demand is increased beyond the ability of the economy to produce. Thus, any factor that increases aggregate demand can cause inflation. O'Sullivan and Sheffrin (2003) hold that in the long run, aggregate demand can be held above productive capacity only by increasing the quantity of money in circulation faster than the real growth rate of the economy. Gordon (1988) observes that demand inflation is beneficial to a rapidly growing economy due to the fact that the excess demand and favorable market conditions will stimulate investment and expansion. Cost-push inflation is a consequence of a drop in aggregate supply. This may be because of natural disasters, or increased prices of inputs. For example, a sudden decrease in the supply

of oil, leading to increased oil prices, can cause cost-push inflation. Producers who use oil as part of their costs could then pass this on to consumers in the form of increased prices (Gordon, 1988). Built-in inflation is induced by adaptive expectations and is often linked to the price/wage spiral. Gordon (1988) has it that it involves workers trying to keep their wages up with prices and firms passing these higher labour costs on to their customers as higher prices, leading to a vicious circle. He argues that built-in inflation reflects events in the past thus might be seen as hangover inflation. The effect of money supply on inflation is more obvious when governments finance spending in a crisis, such as a civil war, by printing money excessively. This sometimes leads to hyperinflation, a condition where prices can double in a short period. According to O'Sullivan and Sheffrin (2003), money supply play a major role in determining moderate levels of inflation, although there are variation of opinion on the importance of this. For example, Monetarist economists believe that the link is very strong; Keynesian economists, by contrast, emphasize the role of aggregate demand in the economy rather than the money supply in determining inflation. For Keynesians, the money supply is only one factor of aggregate demand and some Keynesian economists also disagree with the notion that central banks fully control the monetary policy, arguing that central banks have little control, since the money supply adapts to the demand for bank credit issued by commercial banks. This is the theory of endogenous money, and has been advocated strongly by post-Keynesians. This position is not universally accepted since banks create money by making loans, but the aggregate volume of these loans diminishes as real interest rates increase. Thus, central banks can influence the money supply by making money cheaper or more expensive, thus increasing or decreasing its production (O'Sullivan & Sheffrin, 2003).

2.2 Effect of Cost Push Inflation on Financial Performance

Inflation is a sustained increase in the general price level of goods and services in an economy over a period of time. It can be defined as too much money chasing too few goods. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation reflects a reduction in the purchasing power per unit of money leading to loss of real value in the medium of exchange and unit of account within the economy. A chief measure of price inflation is the inflation rate, the annualized percentage change in a general price index (normally the Consumer Price Index) over time (Mankiw, 2002). The number of items included in a price index varies depending on the objective of the index. Government agencies periodically report three kinds of price indexes, each having

their particular advantages and uses. The first index is called the Consumer Price Index (CPI); it measures the average retail prices paid by consumers for goods and services bought by them. A couple thousand items, typically bought by average households, are included in this index. A second price index used to measure the inflation rate is called the Producer Price Index (PPI). It is a much broader measure than the consumer price index. The PPI measures the wholesale prices of approximately 3,000 items. The items included in this index are those that are typically used by producers and thus include many raw materials and semi finished goods. The third measure of inflation is the called the Implicit Gross Domestic Product Price Deflator. This index measures the prices of all goods and services included in the calculation of the current GDP. It is the broadest measure of price level (Andrew, 2011). The three measures of the inflation rate are most likely to move in the same direction, even though not to the same extent. Differences can arise due to the differing number of goods and services included in compiling the three indexes. In general, if one hears about the inflation rate in the popular media, it is most likely to be the one based on the CPI. Inflation's effects on an economy are various and can be simultaneously positive and negative. Negative effects of inflation include an increase in the opportunity cost of holding money, uncertainty over future inflation which may discourage investment and savings, and if inflation were rapid enough, shortages of goods as consumers begin hoarding out of concern that prices will increase in the future. Positive effects include ensuring that central banks can adjust real interest rates and encouraging investment in non-monetary capital projects (Mankiw, 2002).

Economists generally believe that high rates of inflation and hyperinflation are caused by an excessive growth of the supply. Some economists maintain that under the conditions of a liquidity trap, large monetary injections are like "pushing on a string". Views on which factors determine low to moderate rates of inflation are more varied. Low or moderate inflation may be attributed to fluctuations in real demand for goods and services, or changes in available supplies such as during scarcities, as well as to changes in the velocity of money supply measures. However, the consensus view is that a long sustained period of inflation is caused by money supply growing faster than the rate of economic growth (Bernanke, 2005). Today, most economists favor a low and steady rate of inflation. Low inflation reduces the severity of economic recessions by enabling the labor market to adjust more quickly in a downturn, and reduces the risk that a liquidity trap prevents monetary policy from stabilizing the economy. Zero percent inflation may appear ideal, but it is neither practical nor desirable. A moderate rate of inflation of about two percent is considered desirable by a vast majority of

economists. An inflation rate of up to five percent is tolerable. Double-digit inflation rates, however, are definitely considered undesirable by most economists (Philip, 1999). The task of keeping the rate of inflation low and stable is usually given to monetary authorities. Generally, these monetary authorities are the central banks that control monetary policy through the setting of interest rates, through open market operations, and through the setting of banking reserve requirements.

2.3 Financial Performance Indicators in Financial Institutions

The concept of financial performance and research into its measurement is well advanced within finance and management fields. Nimalathasan (2008) poses a well-judged technique named CAMELS rating which is widely used for evaluating performance of financial institutions, especially banks. In Bangladesh, the Central bank, which is regulatory body, has been calculating this rating till now. Performance of the banking sector under CAMELS frame work involves analysis and evaluation of the six crucial dimensions of banking operations. Thus CAMELS consists of a set of performance measures that give a comprehensive view of the banks based on Capital adequacy, Asset quality, Management soundness, Earnings and profitability, Liquidity, and Sensitivity to market risk hence the acronym CAMELS. Capital Adequacy focuses on the total position of bank capital and protects the depositors from the potential shocks of losses that banks incur (Adrew, 2011). Asset quality shows the concentration of loans and advances in total assets. The high concentration of loans and advances indicates vulnerability of assets to credit risk, especially since the portion of non-performing assets is significant. Sound management is the most important pre-requisite for the strength and growth of any financial institution. Strong earnings and profitability profile of a bank reflect its ability to support present and future operations. It determines the capacity to absorb losses by building an adequate capital base, finance its expansion and pay adequate dividends to its shareholders. Liquidity indicators are measured as percentage of demand and time liabilities of the banks. To assess the degree to which a bank might be exposed to adverse financial market conditions, the Bangladesh Bank added a new Characteristic named as “Sensitivity to Market risk” to what was previously referred to as the CAMEL rating.

The financial performance of banks and other financial institutions has also been measured using a combination of financial ratios analysis, benchmarking, and measuring performance against budget or a mix of these methodologies (Avkiran, 1995). Chien and Danw (2004)

showed in their study that most previous studies concerning company performance evaluation focused merely on operational efficiency and operational effectiveness, which might directly influence the survival of a company.

According to the Kenya's Financial Sector Stability Report (2011), SACCOs have not been subjected to prudential regulation and supervision like commercial banks and deposit taking microfinance institutions. This makes it difficult to objectively analyze their financial statements using CAMEL rating, key indicators of financial soundness and stability. In Kenya, the development of Risk Evaluation Parameters also called CAMELS in the SACCO sector is at an advanced stage (SASRA 2012). The SACCO Societies Financial Soundness Indicators covers Capital adequacy, Asset quality, Earnings and Profitability, and Liquidity. In this study financial performance was measured in terms of earnings and profitability.

3.0 Methodology

The study adopted a descriptive survey design to assess the effect of cost push inflation on financial performance of SACCOs in Eldama Ravine Sub County, Kenya. This design was deemed appropriate because it guaranteed a breadth of information and accurate descriptive analyses of characteristics of a sample which was used made about the population. The study population consisted of board members, SACCOs' unionizable and management staff in Eldama Ravine Sub-County. Due to the large size of the population and the scattering over a wide geographical area, samples were drawn from an accessible population of approximately 150 respondents which comprised of SACCO management and unionizable staff and board members of various SACCOs in Eldama Ravine Sub-County. Stratified random sampling was then employed in sample size selection. The study used questionnaires to collect primary data. Data cleaning was done where the questionnaires were examined to ensure that they were dully filled. Data was coded and entered into a Statistical Package for Social Sciences (SPSS version 21) for both descriptive statistics and regression analysis. Quantitative data was analyzed using descriptive statistics such as mean, standard deviation, percentages and frequencies. A multiple linear regression was used to establish the influence of cost push inflation on financial performance of SACCOs in Eldama Ravine Sub County, Kenya.

4.0 Findings and Discussion

4.1 Cost Push Inflation in SACCOs in Eldama Ravine Sub County

The study sought to establish the extent to which the respondents agreed or disagreed with the statements relating to cost push inflation. The findings are presented in Table 1.

Table 1: Cost Push Inflation in SACCOs

Cost Push Inflation Indicators	n	Mean	Std. Dev
Cost push inflation distorts incentive to save and encourages withdrawals which affects liquidity	107	4.30	.464
Inflation puts upward pressure on interest rates for term deposits hence increasing financial costs	107	4.21	.412
Inflation affects investments decisions by adding uncertainty to the future affecting investment returns	107	4.47	.604
Inflation contracts and delay loan disbursement resulting into a decrease in earning assets	107	4.32	.736
Inflation forced you to change from fixed interest rate to variable interest rate hence improving financial performance	107	3.73	.781
Inflation leads to increase in wage bill because trade unions negotiate for salary increase to protect workers against inflations	107	4.03	.834
Due to inflationary expectations money demand continued to be high forcing the SACCO to seek external funds at the exorbitant interest rates	107	4.25	.991
Inflation leads to an adverse spread between interest on external borrowing and lending rates to members	107	4.25	.728

From the findings majority of the respondents agreed that cost push inflation distorted incentive to save and encouraged withdrawals which affected liquidity as shown by a mean of 4.30. Others agreed that cost push inflation pressurized interest rates on term deposits to go up thus increasing financial cost as shown by a mean of 4.21. It is also evident that cost push inflation affected investment decisions by adding greater uncertainty as shown by a mean of 4.47. Cost push inflation also contracted loans disbursement decreasing earning assets hence low profitability as shown by a mean of 4.32. Reaction on the role of cost push inflation in changing interest rate from fixed to variable was slightly above neutral as shown by mean of 3.73. Cost push inflation and wage bill increased as trade unions negotiate for salary increase thus increasing expenditure shows a mean response of 4.04. Due to inflationary expectation, respondents agreed that money demand continued to be high forcing the SACCOs to seek external funds at exorbitant interest affecting performance as shown by mean of 4.25. The

spread between interest on external borrowing and lending rates to members was agreed by majority as caused by cost push inflation which in turn affects financial performance as shown by mean of 4.252. Based on standard deviations, distortion of incentive to save due to inflation varied by .464, upward pressure on interest rates due to inflation .412, inflation and investment decision .604, inflation and contraction of loan disbursement .736, change from fixed to variable interest rate .781, inflation and increased wage bill .834, inflationary expectation and money demand .991, while inflation and adverse spread in interest .728. Clearly, majority of respondents agreed on the effect of inflation on incentive to save, upward pressure on interest rates, and investment decisions as shown by respective minimal deviations from mean. There was however variation on responses relating to contraction and loan disbursement delay, floating interest rate, increase in wage bill, inflationary expectation and adverse spread in interest rate as depicted by increasing deviations from respective mean.

4.2 Cost Push Inflation and Financial Performance

The study sought to establish the level at which respondents agreed with the statements relating to cost push inflation and financial performance indicators in SACCOs collectively.

Table 2: Effects of Cost push Inflation on SACCO Financial Performance

Factor	N	Mean	Standard Dev.
Capital adequacy	107	4.018	1.018
Asset quality	107	4.084	.982
Earning & profitability	107	4.383	.593
Liquidity	107	4.579	.599
Investment returns	107	3.990	.806

From the findings, the study established that majority of the respondents agreed that cost push inflation affects capital adequacy, asset quality, earnings and profitability, liquidity and investment returns as shown by means of 4.018, 4.084, 4.383, 4.579 and 3.990 respectively. However, standard deviations reveal that agreements on liquidity, earnings and profitability were concentrated around respective means implying unison in agreeing to their effects. Standard deviations for capital adequacy, asset quality, and investment returns are dispersed far from respective means implying lack of universal agreements on their effects.

4.3 Inferential Results

As shown in table 3, the study used Karl Pearson Correlation to establish the significance of the relationship between cost push inflation and the indicators of financial performance. It is evident that asset quality was negatively significant as shown by r-value of -.301 and p-value of .002 which is less than 0.05. Capital adequacy, earnings and profitability and investment returns were positively insignificant and unrelated as shown by r-values .103, .123 .and .176 respectively. Their respective p-values of .293, .208 and .070 are above 0.05 implying that cost push inflation does not affect capital adequacy, earnings and profitability and investment returns. On cost push inflation and liquidity the r value is -.089 and the p value is .363 showing that there is no significant relationship.

Table 3: Inferential statistics

		Cost push inflation
Capital adequacy	Pearson Correlation	.103
	Sig. (2-tailed)	.293
Asset quality	Pearson Correlation	-.301**
	Sig. (2-tailed)	.002
Earnings and profitability	Pearson Correlation	.123
	Sig. (2-tailed)	.208
Liquidity	Pearson Correlation	-.089
	Sig. (2-tailed)	.363
Investment returns	Pearson Correlation	.176
	Sig. (2-tailed)	.070
N		107

4.4 Regression Equation

From the data in table 4 the established regression equation was $Y = 2.511 + 0.011X_3$. From this regression equation it was revealed that holding all the independent variables to a constant zero, financial performance of SACCOs would be 2.511; and a unit increase in cost push inflation would lead to increase in financial performance of SACCOs in Eldama Ravine Sub County, Kenya by a factor of 0.011. The study also found that the p-values for cost push inflation was more than 0.05 thus this variable was statistically insignificant in influencing financial performance of SACCOs in Eldama Ravine Sub county, Kenya.

Table 4: Regression Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	2.511	.632		3.974	.000
	Cost push inflation	.011	.150	.008	.074	.941

Adjusted R squared is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings the value of adjusted R squared was 0.11, an indication that there was variation of 11% on financial performance of SACCOs due to changes in cost push inflation at 95% confidence level. This shows that 11% of the changes in financial performance of SACCOs in Eldama Ravine Sub County were accounted for by cost push inflation and other study variables.

5.0 Conclusions and Recommendations

5.1 Conclusions

From the findings, the study established that there was a weak relationship between financial performance of SACCOs and cost push inflation. The study revealed that a unit increase in cost push inflation would lead to a slight increase in financial performance. This is an indication that there was a positive weak relationship between financial performance of SACCOs and cost push inflation. Thus it is concluded that cost push inflation slightly influenced financial performance of SACCOs in Eldama Ravine Sub County, Kenya.

5.2 Recommendations

The study recommends that SACCOs should enhance their strategies to mitigate risk associated with cost push inflation since this is unsystematic risk which cannot be eliminated by individual SACCO. This will help in improving their financial performance. The researcher also recommends further studies on other factors affecting financial performance since cost push inflation accounts for only 11%.

6.0 References

- Adrew, G. (2011). *Foundations of Economics*. New York: Oxford University Press.
- Avkiran, N. (1995). Developing an Instrument to measure Customer Service Quality in Branch Banking. *International Journal of Banks Marketing*, 2 (6), 10-18.
- Bernanke, B. (2005). *Microeconomics*. Pearson Prentice Hall Publishers.
- Binks, M., & Ennew, T. (1997). Small Business and Relationship Banking: the impact of participative behavior, entrepreneurship; *Theory and Practice*, 21(4), 83-92.

- Binks, M. R. & Ennew, C.T. (1992). Information asymmetries and the provision of finance to small firms. *International Small Business Journal* 11, (1), 35-46.
- Bullivant, G. (2010). *Credit Management*. Gower Publishing Ltd.
- Burki, H. (2010). Microcredit Utilization: Shifting from Production to Consumption. Pakistan Microfinance Network.
- Central Bank of Kenya (1999). Reforming Kenya Financial Sector, *Monthly Economic Review*, Nairobi.
- Chien, T. & Dawn, S. (2004). Performance Measurement of Taiwan Commercial Banks. *International Journal of Productivity and Performance Management*, 53 (5), 425-434.
- Cooper, D. & Schindler, P. (1999). *Business Research Methods*. Tata McGraw Hill.
- Edwards, P. & Turnbull, (1994). Finance for Small and Medium Sized Enterprises, Information and the Income gearing Challenge. *International Journal of Marketing*, 12 (6), 3-9.
- Eppy, I. (2005). Perceived Information Asymmetry, Bank Lending Approaches and Bank Credit Accessibility by SMEs in Uganda. Makerere University.
- FSD Kenya. (2010). Automation of SACCOs. Journal on Assessment of Potential Solutions , Available internet: www.fsdkenya.org.
- Institute of Credit Management (2012). Guide to a Credit Policy. Nairobi: ICM Credit Management Supplement.
- Kahneman, D. & Tversky, A. (1979). Prospect Theory: An analysis of decision under risk. *Econometrica*, 47 (2), 263-291.
- Kenya Credit Providers Association. (2010). Roadmap 2010-2015. Nairobi: Available internet: www.fsdkenya.org.
- Kenya Financial Regulators. (2011). Kenya's Annual Financial Sector Stability Report. Nairobi:
- Kenya Union of Savings and Credit Cooperatives. (2009). *Challenges Facing SACCOs*. Nairobi.
- Kwambai, K. & Wandera, M. (2013). Effects of Credit Information Sharing on Nonperforming Loans. *European Scientific Journal*, 9 (13), 1857-7431.
- Mankiw, N. G. (2002). *Macroeconomics*. Worth Publishers.
- Nimalathasan, B. (2008). A Comparative Study of Financial Performance of Banking Sector- A application of CAMELS rating. *Economic and Administrative Series*, 2(2008), 141-152.
- Olaka, H. & Ochieng, B. (2014). Multiple Borrowers Threats to Banks. *First KBA Conference*. Nairobi: Kenya Bankers Association.
- Philip, H. (1999). *An Introduction to Modern Economics*. New york: Prentice Hall.

SASRA. (2012). *Supervision Reports*. Nairobi: SACCO Societies Regulatory Authority.

Sullivan, A., & Steven, M. (2003). *Economics: Principles in Action*. New Jersey: Pearson Prentice Hall.

Waweru, M. N. & Kalani, M. (2009). Commercial Banking Crisis in Kenya: Causes and Remedies. *Global Journal of Finance and Banking*, 3(3), 2009.

World Council of Credit Unions (2009). Statistical Report.

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