Moral Hazard Related Determinants of Bad Debts in Deposit Taking Saccos in Nairobi County

Zipporah Wanjiru Muiruri, Dr James Ndegwa
& Dr Moses Gweyi

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[1*]**Zipporah Wanjiru Muiruri**

Student, The Cooperative University of Kenya

[*]**Corresponding Author's Email: zipporahwanjiru9@gmail.com**

[2]**Dr James Ndegwa**

Lecturer, The Cooperative University of Kenya

Corresponding Author's Email: jndegwa@cuk.ac.ke

[3]**Dr Moses Gweyi**

Lecturer, The Cooperative University of Kenya

Corresponding Author's Email: mgewyi@cuk.ac.ke

ABSTRACT

The purpose of this study was to assess the moral hazard related determinants of bad debts in DT SACCOs in Nairobi County**.** The researcher used a descriptive cross-sectional research design in highlighting the determinants of the level of bad debts of SACCOs in Nairobi County. The study used census technique which involves studying the entire population. All the 43 deposit taking SACCOs licensed by SASRA were selected as sampling units. The data was analyzed using quantitative techniques guided by SPSS system of analysis. The presentation of analyzed data was in form of tables, graph and charts. The regression model was used in analyzing the moral hazard related determinants of bad debts in deposit taking SACCO's in Kenya. The results revealed that moral hazard related determinants and level of bad debts have a positive and significant relationship. The study recommended that the SACCOs should discourage their borrowers from diverting their loans from its original use that they have agreed. This can be done by making follow up of the borrowers and how they are using the loans. This will minimize the number of bad debts in the deposit taking SACCOs. The SACCOs should also have favorable terms of giving loans to their customers so that the customers can be willing to repay back the loans. The Sacco employees should also ensure they have collected all the relevant information from the borrowers so as to avoid false from the borrowers. False information causes increase in bad debts in the long run.

Keywords: *Moral Hazard, Bad debts, Deposit Taking SACCOS.*

1.0 INTRODUCTION

Moral hazard is the risk that one party has not entered into the contract in good faith or has provided false details about its assets, liabilities, or credit capacity (Prescott & Townsend, 2014). Moral hazard occurs when a party that has agreed to a transaction provides misleading information or changes their behavior because they believe that they won't have to face any consequences for their actions. In addition, moral hazard may also mean a party has an incentive to take unusual risks in a desperate attempt to earn a profit before the contract settles (Banks & Sundaram, 2013).

It is now common knowledge that, moral hazard, coupled with the lack of collateral by the poor is the key reason why credit markets fail for them. The problem of moral hazard may arise when individuals engage in risk sharing under conditions such that their privately taken actions affect the probability distribution of the outcome. It occurs in a principal-agent relationship when actions taken by an agent are not pareto-optimal (Kilonzi, 2012).

SACCO managers have the incentives to undertake risky decisions because they stand to gain a large portion of upside risk (profits, bonuses, market share) and a small portion of downside risk on their part, but high downside risk to depositors and shareholders (Thuo, 2016). Equally, SACCO managers facing capital pressure (undercapitalized banks) tend to react to moral hazard incentives by underwriting high-risk loans at a high interest rate with the assumption that high interest rate will boost profits and capital base. To the contrary, high-risk loans result in higher levels of NPLs, as high interest rates may have similar adverse incentive to borrowers. Moral hazard is normally linked to SACCO management behavior through balance sheet items such as bank size, loan growth, asset growth, deposit growth and capital adequacy ratio as, changes in all these items is associated with decisions made SACCO management.

In Kenya, moral hazard is common occurrence among SACCOS. Njoroge and Rotich (2016) note that peer monitoring rarely occurs in SACCOs from Kenya and that when it occurs it does not lead to improvements in repayment because the main reason for default in the SACCOs is the unwillingness to repay (moral hazard) and not the inability to repay. The unwillingness to repay was found to be the first cause of default among the SACCOs. It accounted for 25 percent of all defaults in the SACCOs.

According to Bwana (2013), 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. Ancient records show that the Babylonians practiced Cooperative farming and that the Chinese developed saving and loans 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, with the IMF estimates that across all banking sector assets in developing countries, the market share of Co-operative finance was equivalent to 14 percent in 2004 (Hesse & Cihak, 2007).

Previous research on cooperative finance during crisis indicates that they tended to fairly better than investor-owned savings and loans institutions, as they pursue more conservative investment policies (Malamsha & Kayunze, 2014)). 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 & 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 (WOCCU, 2009).

The SACCO sub-sector is part of the larger cooperative movement in Kenya. There are two broad categories of co-operatives: Financial co-operatives (Savings & Credit Co-operative Societies-SACCOs) and Non-financial cooperatives (includes farm produce and other commodities marketing cooperatives, housing, transport and investment co-operatives). In the recent past Savings and Credit Co-operatives (SACCOs) have witnessed faster growth than other co-operatives. 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 (Barrales, 2012). The SACCO sub sector comprises both deposit taking and non-deposit taking SACCOs.

Deposits taking SACCOs are licensed and regulated by SASRA while non-deposit taking SACCOs are supervised by the Commissioner for Cooperatives. SASRA licenses SACCOs that have been duly registered under the Cooperative Societies Act CAP 490 (SASRA, 2014). As at January 2015 a total of 181 DT-SACCOs were registered by SASRA under its regulatory framework. However, towards the end of the year, five (5) DTSACCOs could not maintain the prescribed minimum standards and had their licenses revoked. Only one (1) new application for deposit-taking license was successfully processed, and a license to conduct deposit-taking business granted in the year. This brought to a total of 177 DT-SACCOs under the Authority's supervisory purview at the close of the year 2015 (SASRA 2015).

SACCOs in Kenya are gradually responding to the fast changes in the financial environment and adopting new approaches to the SACCO model. A good example is the FOSA concept and the development of products that are not tied to the traditional SACCO model, which relies on the tied shares deposits. However, Co-operative Societies need to keep up with changing demands. For instance, members want quick and easy access to financial services. If their SACCO cannot provide the loan when it is needed, then it is not meeting its members' needs. In this regard, SACCOs need to provide efficient services and remain liquid at all times (WOCCU, 2007).

With the cut-throat competition witnessed in the last few years, SACCOs are marketing themselves more aggressively than before development. SACCOs with and without FOSAs offer loans as per their loan policies which are expected to give a return to the SACCOs for survival and sustainability therefore, this study seeks to investigate the determinants of the level of bad debts to enlighten the SACCOs on the importance of proper lending procedures.

1.2 Statement of the Problem

The overall performance of Deposit Taking SACCO in Kenya has been declining drastically as a result of rise in burden of high levels of bad debts in these SACCOs. According to the SACCO Supervision Report (2016) bad debts increased from 5.12 percent in 2015 to 6.23 percent in 2016. The bad debts further increased to 6.45 percent in the year 2017 indicating elevated credit risk. These bad debts may eventually have to be written off which will lead to increased expenses and losses or even bankruptcy. For example, in Nairobi County some DT-SACCOs were closed down since they went bankrupt. According to SASRA report (2016) the major reason of bankruptcy was increased level of bad debts.

Gwey (2018) conducted a study on influence of financial risk on financial performance of Deposit Taking Savings and Credit Co-operatives in Kenya. The study found that there has been poor performance of Deposit Taking SACCOs due to rise in the level of bad debts. Muriithi (2013) conducted a study on the causes of non-performing loans in SACCOS in Kenya. The finding of the study showed that loan size is positively related to NPLs. These findings were consistent with that of Essendi (2013) conducted a study on the effect of credit risk management on loans portfolio among SACCOs in Kenya. The study found out that loan size is positively related to NPLs. Gatuhu (2013) conducted a study on the effect of credit appraisal techniques on the financial performance of microfinance institutions in Kenya. The study found out that credit appraisal techniques are negatively correlated to NPLs. However, Arsyad (2015) conducted a study on an Assessment of Microfinance Institution Performance. The study found out that credit appraisal methods are positively and significant to NPLs.

It therefore evident from these studies, most studies focused on non-performing loans and not bad debts. Other studies focused on commercial banks and not DT SACCOs There is therefore need to focus on DT SACCOs. In addition, it's evident that there have been bad debt problems in the DT SACCOs. Therefore, the current study sought to establish the moral hazard related determinants of bad debts in DT SACCOs in Nairobi County

1.3 Objective of the Study

The study sought to assess the moral hazard related determinants of bad debts in DT SACCOs in Nairobi County.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

This study was based on two theories; information asymmetry theory and Keynes' Liquidity Preference Theory.

2.1.1 Information Asymmetry Theory

Information asymmetry theory was developed by Rothschild and Stiglitz in 1975.According to this theory, firms prioritize their sources from the study of decisions in transactions where one party has more or better information than the other. This asymmetry creates an imbalance of power in transactions, which can sometimes cause the transactions to go astray. The asymmetry theory simply points at the order in which a company can finance itself. According to this theory, the first preference for a company source of financing is internal financing through retained earnings. In

the event that this option is inadequate, the company will opt to borrow from a financial institution and as a last resort, if debt is not adequate, a company should finance itself through the issuing of new equity.

Asymmetry theory has been considered important in that it informs the public on how the firm is performing. If a company finances itself internally, this is taken to mean that the company is liquid enough, can meet obligations when they fall due and therefore not facing the threat of liquidation. If the company chooses to finance itself through debt acquisition, the assumption is that the company is in a position to meet the monthly loan repayments. If a company finances itself through issuing new stock, it is normally a negative signal, as the company thinks its stock is overvalued and it seeks to make money prior to its share price falling.

According to the theory, from the point of view of an outsider investor, equity is strictly riskier than debt. Both have an adverse selection risk premium but that premium is large on equity. Therefore, an outside investor will demand a higher rate of return on equity than on the debt.

The basic idea behind the asymmetry theory is the idea that the owner or the manager of the firm knows the true value of the firm's assets and growth capabilities of the firm. Outside investors cannot tell the true value even where financial documents are available as there is certain information known only to the business owners. In a case where the firm decides to sell equity, then the outside investor must raise speculations and must be interested to know why the management is willing to do so. In summary, the manager of an overvalued firm will be happy to sell equity, while the managers of an undervalued firm will not (Cadsby *et al.,* 1990).

The asymmetry theory has been used to explain the performance of many firms and specifically the capital budgeting decisions facing the firm. Although this theory relates to big companies and decisions they make when going through financial problems, it can also be used to describe the behavior of micro and small enterprises.

In most cases, owners of micro and small enterprises face shortage of resources needed to start and operate a business. They rely on personal savings, donations from friends and relatives and in rare cases loans from banks and other financial institutions. The owner evaluates these sources and makes a decision based on the perceived risk of each source. In many instances, own savings and donations from friends are most preferred as they don't involve monthly payments which has been identified as the greatest fear of most business operators.

This theory was deemed relevant to thus study since it informs the dependent variable which is level of bad debts. This is because from the perspective of those inside the firm, retained earnings are a better source of funds for the firm than the debt while debt is a better source than equity financing. This argument therefore points to the fact that a firm will finance all its projects through retained earnings if possible.

2.1.2 Keynes' Liquidity Preference Theory

The liquidity theory was formulated by Keynes' in the years 1936. According to this theory, it is believed there were three motives to holding money; transactions motive, precautionary motive and speculative motive. Under the speculative motive, money demand is negatively related to the interest rate. Holding money is perceived as one way of guarding against uncertainty. In this regard, the theory, determines the equilibrium interest rate in terms of supply and demand for

money. The model was developed based on two main reasons; that money pays no interest and that there are only two kinds of assets for storing wealth i.e., money and bonds. As such, total wealth in the economy is equal to the total quantity of bonds plus money in the economy, which is equivalent to the quantity of bonds supplied plus the quantity of money supplied. The quantity of bonds and money that people demand is also equal to the total amount of wealth, equivalent to what the available resources can allow.

In its applicability, the liquidity preference theory asserts that economic units have a preference for liquidity over investing (Boehm & Schlottmann, 2007). Applying this theory explains the premium offered in forward rates in comparison to expected future spot rates. This premium is used as payment for the use of scarce liquid resources. The preference for liquidity can be accounted for by the fact that economic units need to hold certain levels of liquid assets for purchase of goods and services and the fact that these near-term future expenditures can be difficult to predict. Liquidity theory is limited by its short-term nature, the assumptions that income remains stable, and, like classical theory, only supply and demand for money are considered (Boehm & Schlottmann, 2007). This theory is deemed relevant on this study since it informs the moral hazard determinants of bad debts

2.2 Empirical Review

Simtowe, Zeller and Phiri (2006) conducted a study on determinants of moral hazard in microfinance: Empirical evidence from joint liability lending programs in Malawi. The study examined the extent of occurrence of moral hazard and investigates its determinants of occurrence among joint liability lending programs from Malawi, using group level data from 99 farm and non-farm credit groups. Results revealed that peer selection, peer monitoring, peer pressure, dynamic incentives and variables.

Cincinelli and Piatti (2017) conducted a study on Non-Performing Loans, Moral Hazard & Supervisory Authority: The Italian Banking System. The study also empirically tested the hypothesis that the supervisory activity of the Italian banking authority through credit risk sanctions was effective in providing incentives for banks to limit their risky lending strategy. Banks, with significant previous losses and significant levels of gross non-performing loans, can reduce the NPLs ratio temporarily by making additional loans due to the dilution effect. However, bank managers may have to accept riskier positions to obtain additional loans potentially generating higher future losses. The empirical results show that banks may be affected by moral hazard problems, but we find no effect of the enforcement action on reducing it. To account for endogeneity, robustness tests are also conducted as part of the study.

Kiyai (2003) conducted a study on bad debts restructuring techniques and non-performing loans of commercial banks in Kenya. The study aimed at finding out the techniques used by the commercial banks in Kenya to entice defaulting borrowers to resume servicing their obligations. It also aimed at identifying their importance and preference and whether there is a relationship between the restructuring techniques and the level of non-performing loans. The general conclusion drawn is that banks use a combination of techniques ranging from lowering interest rates and charges to providing addition loan facilities to distressed borrowers (in special and rare circumstances). The study also found that banks are placing increasing emphasis on restructuring of bad debts and that there is no significant difference between the techniques used by the various categories of banks

Owino and Otieno (2013) conducted a study on the effect of the lending policies on the levels of non-performing loans (NPLS) of commercial banks in Kenya. A descriptive survey was employed in this study with the population of interest of being the forty-three (43) commercial banks in Kenya. A questionnaire was used to gather the primary information. The questionnaires were self-administered and drop-and-pick later method was adopted. Descriptive statistics was used to summarize the data and findings presented using tables and other graphical presentations as appropriate for ease of understanding and analysis. The study found that lending policies and non-performing loans are indeed related. Lending policies helps the banks lend prudently and lowers the risk level to the banks, and strict adherence to lending policies therefore has led to reduced non-performing loans.

Viswanadham and Nahid (2015) conducted a study on determinants of Non-Performing Loans in Commercial Banks in Tanzania. This study adopted causality research design, using panel data (2007 to 2015) of 16 commercial banks in Tanzania. The study found that asset growth, higher capital ratio and loan-to-asset ratio are negatively associated with the occurrence of non-performing loans, whereas cost inefficiency is positively associated with the occurrence of non-performing loans in Commercial Banks in Tanzania.

According to King'ori, Kioko and Shikumo (2017) financial institutions lending policy affects the financial performance of that institution. The credit policy of an institution affects the capital adequacy, asset quality, management quality, earnings and liquidity of a financial institution either positively or negatively depending on how well the policy are made and implemented. Ntiamoah, Diana and Kwamega (2014) carried out a study on assessment of the relationship between credit management practices and loan performance using some selected microfinance institutions in the Greater Accra region of Ghana as a case study. Results of the study indicated that there was high positive correlation between the credit terms and policy, lending, credit analysis and appraisal, and credit risk control and loan performance.

Ayodele, Thomas, Raphael and Ajayi (2014) carried out a study on impact of credit policy on the performance of Nigerian Commercial Banks using Zenith Bank Plc as case study. Primary data was collected through questionnaires served on sixty (60) respondents of the bank. The findings from the study showed that having good lending procedures in place goes a long way in minimizing the level of bad debts.

Byusa and Nkusi (2012) investigated effects of credit policy on bank performance in selected Rwandan Commercial banks. The aim of this study was to investigate the effects of credit policy on bank performance using data on selected Commercial Banks. The results obtained indicated that the Rwanda's commercial banks increased their accounts, customer base and improved their financial indices, thereby maximizing their profits. However, inadequate competition in the banking system led to high spreads. Banks have unusually high and increasing average interest rate spreads and interest rate margins showing both highly poor competition and inefficiency.

Kargi (2011) evaluated the impact of credit risk on the profitability of Nigerian banks. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. Al-Khouri (2011) assessed the impact of bank's specific risk characteristics, and the overall banking environment on the performance of 43 commercial banks operating in 6 of the Gulf Cooperation Council (GCC) countries over the period 1998-2008. The results showed that credit

risk, liquidity risk and capital risk are the major factors that affect bank performance when profitability is measured by return on assets.

3.0 METHODOLOGY

The researcher used a descriptive cross-sectional research design in highlighting the determinants of the level of Bad debts of SACCOs in Nairobi County. The study used census technique which involves studying the entire population. All the 43deposit taking SACCOs licensed by SASRA were selected as sampling units. After all the necessary data has been collected; editing, coding and tabulation were carried out. The data was analyzed using quantitative techniques guided by SPSS system of analysis. The presentation of analyzed data was in form of tables, graph and charts. The regression model was used in analyzing the moral hazard related determinants of bad debts in deposit taking SACCO's in Kenya.

4.0 FINDINGS AND DISCUSSIONS

4.1 Descriptive Analysis

The study used descriptive statistics to summarize the data collected on moral hazard determinants

Table 1 presents the moral hazard determinants results.

Table 1: Moral hazard related determinants

	N	Minimum	Maximum	Mean	Std. Dev
Amount of account receivable	37	157896	700000	393029.62	145882
Amount of defaulted willfully	37	0	5400	2591.1351	1610.03
Loans diverted from its original use	37	10000	170100	106679.89	41367.1

The results revealed that the average amount of account receivable in the deposit taking SACCOs in 2018 was393029.62. The minimum debt collection period was 157896 while maximum was 700000. The standard deviation was 393029.62 which depicts that the responses were varied with a great variance. The results revealed that the average amount of loans defaulted willfully in the deposit taking SACCOs in 2018 was 2591.1351. The minimum amount of loans defaulted willfully in the SACCO was 0 while maximum was 5400. The standard deviation was 1610.03 which depicts that the responses were varied with a great variance.

The results further revealed that the average amount of loans diverted from its original use by the members of the deposit taking SACCOs in 2018 was 106679.89. The minimum amount of loans diverted from its original use was 10000while maximum was 170100. The standard deviation was 41367.1 which depicts that the responses were varied with a great variance.

Table 2 presents results on the descriptive statistics for the statements regarding moral hazard determinants.

Table 2: Descriptive for moral hazard determinant

Statement	Mean	Std.Dev
Unwillingness of the borrowers to repay loans has led to bad debt	3.56	1.32
Diversion of loans from the original use by our borrowers has led to bad debt	3.52	1.25
Our employees are able to collect all the relevant information from our borrowers	4.03	0.80
Trainings are held often in our SACCO on how to get accurate employees from our borrowers	3.70	1.18
The cases of false information from borrowers has reduced in the last five years in our SACCO	3.62	1.57

The results revealed that majority of the respondents agreed with the statement that unwillingness of the borrowers to repay loans has led to bad debt. This was reflected by a mean of 3.56. The standard deviation of 1.32 show that the responses were varied but the variance was small. The results further revealed that majority of the respondents indicated that diversion of loans from the original use by our borrowers has led to bad debt. This was reflected by a mean of 3.52. The standard deviation of 1.25 show that the responses were varied but the variance was small. The results further showed that majority of the respondents agreed with the statement that employees are able to collect all the relevant information from our borrowers. This was reflected by a mean of 4.03. The standard deviation of 0.80 show that the responses were varied but the variance was small. The results further showed that majority of the respondents agreed with the statement that trainings are held often in our SACCO on how to get accurate employees from our borrowers. This was reflected by a mean of 3.70. The standard deviation of 1.18 show that the responses were varied but the variance was small. The results further showed that majority of the respondents agreed with the statement that the cases of false information from borrowers have reduced in the last five years in their SACCO. This was reflected by a mean of 3.62. The standard deviation of 1.57 show that the responses were varied but the variance was small. The findings agreed with that of Wakuloba (2008) who found that credit appraisal methods caused high and rising default rates over the period.

The descriptive statistics for the level of bad debts were also presented in Table 3.

Table 3: Level of Bad Debt

Statement	Mean	Std.Dev
The amount of bad debt has been increasing in our SACCO in the past five years	3.86	0.95
Our SACCO performance has been declining in the past five years	3.86	0.75
The SACCO expenses have been increasing in the past five years	3.49	1.28
The amount of loan default has been increasing in the last five years	3.84	0.96
Chances of bankruptcy of our SACCO are high	3.51	1.41

The results revealed that majority of the respondents agreed with the statement that the amount of bad debt has been increasing in our SACCO in the past five years. This was reflected by a mean of 3.86. The standard deviation of 0.95 show that the responses were varied but the variance was

small. The results also showed that majority of the respondents agreed with the statement that their SACCO performance has been declining in the past five years. This was reflected by a mean of 3.86. The standard deviation of 0.75 show that the responses were varied but the variance was small.

In addition, the results showed that majority of the respondents agreed with the statement that the SACCO expenses has been increasing in the past five years. This was reflected by a mean of 3.49. The standard deviation of 1.28 show that the responses were varied but the variance was small. The results also showed that majority of the respondents agreed with the statement that the amount of loan default has been increasing in the last five years. This was reflected by a mean of 3.84. The standard deviation of 0.96 show that the responses were varied but the variance was small. The results also showed that majority of the respondents agreed with the statement that chances of bankruptcy of our SACCO are high. This was reflected by a mean of 3.51. The standard deviation of 1.41 show that the responses were varied but the variance was small. Results also revealed that bad debts for the year 2018 averaged at 12018 with a minimum of 5000 and a maximum of 18572.

4.2 Inferential Statistics

4.2.1 Correlation Analysis

The study conducted correlation between moral hazard related determinants and level of bad debts in deposit taking SACCOs. Results were presented in Table 4.

Table 4: Correlation Matrix

	Moral hazard related determinants	Level of bad debt
Moral hazard related determinants	1	
Level of bad debt	0.78655	1

The results revealed that moral hazard related determinants and level of bad debts have a positive correlation (r=0.787). These findings agreed with that of Berndta and Gupta (2009) who established that moral hazard to be significant factors for bank loans.

4.2.2 Regression Analysis

Regression analysis was done to determine the relationship between moral hazard related determinants and level of bad debts.

Table 5: Model Summary

Regression Statistics	
Multiple R	0.787
R Square	0.619
Adjusted R Square	0.596
Standard Error	0.445
Observations	37

Moral hazard related determinants were found to be satisfactory variable in explaining level of bad debt. This is supported by coefficient of determination also known as the R square of 61.9%. This means that Moral hazard related determinants explain 61.9% of the variations in the dependent variable which is level of bad debt. This also implies that 29.1% of the variation in the dependent variable is attributed to other variables not captured in the model.

Table 6: ANOVA

	Df	SS	MS	F	Significance P
Regression	2	10.917	5.459	27.592	0.000
Residual	34	6.726	0.198		
Total	36	17.643			

Table 6 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant as supported by a p value of 0.000 which is lesser than the critical p value of 0.05. This was supported by an F statistic of 27.592 which imply that Moral hazard related determinants is a good predictor of level of bad debt.

Table 7: Regression of Coefficients

	Coefficients	Std Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.373	0.678	0.550	0.586	-1.005	1.752	-1.005	1.752
Moral hazard related determinants	0.910	0.125	7.264	0.000	0.656	1.165	0.656	1.165

The results revealed that moral hazard related determinants and level of bad debts have a positive and significant relationship (β=0.910, p=0.000). The findings agreed with that of Wakuloba (2008) who found that credit appraisal methods caused high and rising default rates over the period.

$$Y = 0.373 + 0.910X$$

Where Y is Level of bad debt

X is moral hazard related determinants

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The study found that most of the respondents indicated that their SACCO expenses have been increasing in the past five years. Results also showed that the amount of loans defaulted had also been increasing in the SACCOs in the past five years.

The results further showed that majority of the respondents indicated that amount of loans diverted from the originally agreed usage with the lender by the borrowers had been on the rise in their SACCOs. In addition, moral hazard related determinants had a positive correlation on level of Bad debts in the deposit taking SACCOs. Regression results further showed that moral hazard related determinants and level of bad debts in the deposit taking SACCOs had a positive and insignificant

relationship. These findings disagreed with that of Berndta and Gupta (2009) who established that moral hazard to be significant factors for bank loans.

5.2 Conclusions

From the research findings the study concluded that the level of bad debts had been increasing in most SACCOs. In addition, the SACCOs have been declining in performance while their expenses have been increasing continually. The amounts of loans defaulted and written off have also been increasing in most of the SACCOs.

The study also concluded that there has been an increase in the number of willful defaults by borrowers in the deposit taking SACCOs. In addition, the amount of loans diverted from the originally agreed usage with the lender by the borrowers had been on the rise in their SACCOs. In addition, moral hazard related determinants had a positive relationship on level of Bad debts in the deposit taking SACCOs.

5.3 Recommendations

The SACCOs should also discourage their borrowers from diverting their loans from its original use that they have agreed. This can be done by making follow up of the borrowers and how they are using the loans. This will minimize the number of bad debts in the deposit taking SACCOs.

The SACCOs should also have favorable terms of giving loans to their customers so that the customers can be willing to repay back the loans. The Sacco employees should also ensure they have collected all the relevant information from the borrowers so as to avoid false from the borrowers. False information causes increase in bad debts in the long run.

5.4 Areas for Further Study

Further study should focus on the research gaps identified in this study. The current study focused on determinants of level of bad debts in the deposit taking SACCOs in Nairobi County. Further study should focus on level of bad debts in the deposit taking SACCOs in other counties in Kenya for purposes of making comparisons.

Since the R squared was not 100% it seems there are other determinants of bad debts that were not addressed by the study. Other studies should therefore focus on other determinants of level of bad debts.

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