

Effect of risk retention techniques on theft in SACCOs in Embu County, Kenya

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ABSTRACT

Majority of Kenyans receive financial services from SACCO's. As a result, there is a need then to ensure that personal and SACCO properties are fully protected from theft. To guarantee this protection, SACCO's have adopted risk retention techniques aimed at reducing the severity of theft incidences. Unfortunately theft in SACCO's has become a common problem with statistics showing that theft stands at 61% compared to other crimes in Kenya. The study sought to determine the effect of risk retention techniques on theft in SACCO's in Embu County, Kenya. The study adopted a descriptive research design. The target population of the study comprised of the 65 SACCOs in Embu County, Kenya that were operationally active. Data was collected using questionnaires. Validity of the research instruments was ensured through opinions and expert judgments. A pre-test study was done in Sacco's operating in Tharaka Nithi County and reliability of the instruments tested using split half technique. The pre-test results yielded a correlation coefficient of 0.766 implying the instrument was good. Data was analyzed using frequencies and percentages and the results presented in cross tabulations. Chi-square was used to test the hypothesis. The results revealed that most SACCO's had adopted various techniques aimed at reducing theft severity. The results further revealed that there was a significant association of risk retention technique with theft in SACCO's since results obtained had a p-value of $0.046 < 0.05$ and chi-square value of 20.00 at 5% significance level. The study forms a basis of policy formulation on risk retention and theft matters in SACCO's in Kenya and provides a basis for further research in the field of retention techniques on theft in SACCO's cooperatives.

Keywords: Risk, Loss, Risk Retention, Captive, Risk Transfer

INTRODUCTION

Theft is a worldwide phenomenon that appears to have defied efforts to contain it across the globe. Theft causes damage and fear that affects the life and well-being of people. Theft in Sacco's is common with property and patients falling victim. The scale of theft to personal possessions and property going missing in Sacco's is depressing, and losses run into millions every year (Ministry of Health Report, 2014). When theft occurs it disrupts co-existence and results to poor delivery of health services (Kimama, 2011). Theft is a threat to people's health, government budget, revenues and competition within legal industries (Lindstrom, 2007). Ignoring theft will not make the risk to

go away but limits institutions from achieving their set objectives. Risk retention techniques are recommended by Fischer & Green (2004) as the preferred risk financing method when the loss values are relatively low. This implies that the consequences of a loss will be borne by the party exposed to the chance of loss, often a deliberate risk management decision (Dorfman, 2005).

Organizations assume risk when loss costs are small and can be funded from the current cash flow. Loss exposures are retained and funded with a cash reserve. An important advantage of using retention is that it encourages institutions to adopt loss prevention projects, thus reducing the total cost of risk. It's important to note that risk retention techniques ensure there is continuity in organization operations. Kallman (2009) observes that to set up a reserve, institutions place an appropriate amount usually the expected value of loss plus a certain multiple of the standard deviation on the right-hand side of the managerial balance sheet. With an unfunded reserve the claim can be paid for by liquidating any of its assets. Many institutions also have a special fund set aside to pay for small cost or claims (current expense funds). The expense of these losses is taken as a tax-deductible expense on the income statement and the system is known as current expensing (Peshawar, 2014). Other retention techniques utilized to cope with risk include borrowing and maintaining captives.

The story of the savings and credit co-operative movement in Kenya is of unique social and economic interest. It has at its core, the message of inspiration and emancipation of the individual economic wellbeing, community development and strengthening the fundamental economic foundations of the country Kobia (2001). While most of the principles, ideas and values of the co-operative enterprise have remained unchanged over the decades, new technological and corporate challenges are demanding a paradigm shift out of sheer necessity. The co-operative business model and structure has not changed much, but the content and social dynamics are changing fast. The Kenyan SACCO experience is marching towards maturing, calling for any urgent need to provide the literate and development to reflect this growth and aspirations. In Kenya, different types of co-operative societies are in existence. They are categorized as follows, agricultural and marketing co-operatives, consumer co-operatives, housing co-operatives, savings and credit co-operatives, service co-operatives and multipurpose co-operatives Ouma (1987).

A SACCO is a co-operative society, whose objective is to encourage its members to save, thereby creating or accumulating capital, which can then be lent to members at a reasonable rate of interest Davis and Donaldson (1998). As a source of credit facilities, these co-operatives have generally achieved their objectives. Access to credit is undoubtedly a major incentive to save. The introduction of thrift and savings co-operatives, were initiated late in the 1950's and a few such co-operatives were then formed. Since the introduction of SACCOs based on employment as a common bond and allowing for a check off systems, SACCOs have made a breakthrough and succeeded in a big way. It is in this way (check off) that regular savings are accumulated and it is from this that loans are given. The Motto for success in SACCOs is "save regularly, borrow wisely and repay promptly".

The government of Kenya recognized the growing threat of theft in SACCOs in early 2014 after a national wide information report by the Kenya police which stated that 73% of theft incidents were reported institutions, followed by city street theft at 20%. Although adoption of risk retention techniques is on the rise, institutions are experiencing complex theft risks with leading to loss of millions and this is threatening the safety environment in those institutions. The risk retention techniques are designed to detect, prevent, and identify theft thereby minimizing the risk and loss to an organization. They are expected to offer a safe environment for employees, customers, visitors and property. However risk retention tools can be in an organization but be not effective when they are not properly developed and administered. For this reason, the researcher therefore sought to evaluate the effect of risk retention techniques on theft in Saccos.

Specific objective of the study

To establish the association of risk retention techniques with theft in SACCOs in Embu County,

Hypothesis of the study

The study was guided by the following hypothesis which was tested at 0.05 level of significance.

H₀1: Risk retention techniques have no significant association with theft in SACCOs in Embu County.

Assumptions of the Study

This study assumed that the respondents were open and sincere with the information they gave and that the information was correct and free of bias. The study also assumed that all the sampled Sacco's had adopted similar risk retention techniques.

METHODS

Research Design

Research design refers to a set of decisions that make up the master plan indicating methods and procedures for collecting and analyzing needed information (Kothari, 2004). This study employed a descriptive research design that described the state of affairs at the time of data collection. It involved assessing attitudes or opinions and thoughts about effectiveness of risk control techniques on theft severity and frequency. The research design was able to reveal and measure the strength of the target group's opinion, attitude, and behavior with regards to theft in Saccos.

Location of the Study

This study was carried out in Embu County which is on the eastern slopes of Mount Kenya. The choice of Embu County was because its easily accessible to the researcher and that the researcher is able to create rapport with the respondents. An ideal location of any study should be easily accessible to the researcher and should be that which permits rapport with the informants (Singleton, 2003).

Population of the Study

All items of interest in an inquiry constitute a population (Kothari, 2004). This study targets a population of 65 Sacco's in Embu County. A complete census was done on the entire population

Data Collection

An introduction letter and research permit were obtained from the National commission for science, technology and innovation to enable the researcher disclose his motives. The researcher explained the nature of the study to the respondents and will point out what was expected of them. The researcher assured them of the confidentiality in handling the information provided. Primary data was collected through questionnaires which were distributed to the respondents by the researcher and filled questionnaires were collected two weeks after. Data was collected from the senior staff who were believed to be policy makers and from junior staff who implemented those policies.

Data Analysis and Presentation

Data analysis is the process of systematically arranging filed notes, data and other materials obtained from the field with the aim of increasing one's own understanding and to enable one to present them to others (Orodho, 2013). Data was cleaned by being checked for logical consistency and any unnecessary data removed. It was then refined and processed using statistical package for social sciences (SPSS) version 23 for windows. Martin and Acuna (2002) observe, SPSS is able to handle large amount of data given its wide spectrum of statistical procedures purposefully designed for social sciences, it is also quite efficient. Quantitative analysis that entailed analyzing numbers about a situation by choosing specific aspects of that situation was used. The results of data analysis have been presented in frequency tables and percentages. Chi-square test was used to show the association between variables and test hypothesis. A 5% level of significance was considered.

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RESULTS AND DISCUSSION

Adoption of Risk Retention Techniques by Sacco's

The risk control techniques in a sacco are responsible for protection against all manner of risk through reducing the risk frequency and its severity if it occurs. Thus, they are responsible for ensuring a safe environment to the sacco and the people. This study sought to find out the risk retention techniques adopted by Sacco's in Embu County. Descriptive statistics of frequencies and percentages were used to analyse the data.

Adoption of risk control techniques	Fully adopted		Partially adopted		Not adopted		Mean	Standard deviation
	F	%	F	%	F	%		
Reserves	30	20.3	81	54.7	37	25.0	2.0473	.67345
Captives	15	10.1	17	11.5	116	78.4	2.6824	.64983

Current expensing	44	29.7	84	56.8	20	13.5	1.8378	.63945
Borrowing	40	27.0	94	63.0	14	9.5	1.4595	.66372

Table 1: Senior staff response on adoption of risk retention techniques

The results further indicated that risk retention techniques were partially adopted with majority of the senior staffs (66.7%) current expensing and (82.4%) reserves indicating that minor losses could not be taken care by the Sacco’s independently.

Table 2: Junior staff response on adoption of risk retention techniques

The junior staff indicated that risk retention techniques were partially adopted represented by a majority (63.0%) borrowing, (56.8%) current expensing and (54.7%) reserves. Senior staff response on adoption of the risk control techniques was similar to that of the junior staff hence these results indicated a true account of risk control techniques adoption in Sacco’s .

Employment of Risk Control Techniques by Sacco’s

The possibility and outcome of any theft incident is highly dependent on the nature of risk control techniques present in an institution. The 2004 edition of American national standards report indicates that effective employment of risk prevention; retention and transfer techniques will address the protection, mitigation, preparedness, response and recovery from theft incidents. This study therefore sought to find out the level of employment of risk retention techniques by Sacco’s. Data gathered was analysed using percentages and the results presented in closed tabulations by table 3 for junior staff and table 4 for senior staff.

Adoption of risk retention technique	Fully adopted		Partially adopted		Not Adopted		Mean	Standard deviation
	F	%	F	%	F	%		
Reserves	10	19.6	32	62.7	9	17.6	1.9804	.6161
Captives	12	23.5	10	19.6	29	56.9	2.3725	.7990
Current expensing	14	27.5	34	66.7	3	5.9	1.7843	.5408
Borrowing	15	29.4	29	56.9	7	13.7	1.8431	.6441

Table 3: Junior staff response on level of employment of risk retention techniques

Employment risk retention technique	Very low	Moderate	high	very high	mean	standard deviation
	Low	high				
	%	%	%	%	%	
Reserves	21.6	31.1	25.0	20.3	2.0	2.5608
Captives	54.1	16.2	12.1	11.5	6.1	1.9932
Current expensing	27.0	44.6	18.9	8.1	1.4	1.9932
Borrowing	18.9	28.4	25.7	24.3	2.7	2.4730

Most of the junior staff indicated that risk retention techniques were also not fully employed indicated by a majority (31.1%) reserves, (44.6%) current expensing and (28.4%) borrowing. Captives were rated very low by a majority 54.1% of the junior staffs.

Table 4: Senior staff response on level of employment of risk retention techniques

Employment of risk retention techniques	Very low	moderate	high	very high	mean	standard deviation
	Low			high		
	%	%	%	%	%	
Reserves	9.8	27.5	23.5	31.4	7.8	2.4706
Captives	23.5	31.4	17.6	13.7	13.7	2.8235
Current expensing	31.4	19.6	13.7	15.7	19.6	3.0784
Borrowing	13.7	43.1	3.9	33.3	5.9	3.2353

Majority of the senior staff also indicated that Sacco's lacked the capacity to retain theft risks indicated by majority (43.1%) borrowing and (31.4%) current expensing who felt Sacco's had low employment of risk retention techniques. The senior staff responses were similar to those of the junior staff.

Effectiveness of Risk Retention Techniques

Young (2014) in his research on security risk noted that most organizations including Sacco's already have risk retention techniques that aim to minimize the destruction of property and loss of life. However, these risk retention techniques can be in an organization but also may not be effective. It's for this reason that this study sought to find the effectiveness of risk control techniques in reducing theft frequency and severity. Descriptive statistics of frequencies and percentages were used to analyse the data collected and the results presented in tables 5 for senior staff and table 6 for junior staffs.

Table 5: Senior staff response on effectiveness of risk retention techniques

Effectiveness of risk retention techniques	Very effective		Fairly effective		Not effective		Mean	Standard deviation
	F	%	F	%	F	%		
Reserves	9	17.6	14	27.5	28	54.9	1.6275	.7735
Captives	12	23.5	14	27.5	25	49.0	2.2549	.8208
Current expensing	11	21.6	12	23.5	28	54.9	2.2549	.8208
Borrowing	28	54.9	12	23.5	11	21.6	1.6667	.8165

Risk retention techniques were also rated not effective by a majority (54.9%) current expensing, (54.9%) reserves and a 49.0% captives. Borrowing was considered to be the most effective risk retention technique in reducing theft severity by a majority 54.9 %. Responses from the senior staffs were considered to be more reliable therefore it was concluded that risk retention techniques

were not effective in reducing theft severity therefore the working environment was not conducive for coexistence.

Table 6: Junior staff response on effectiveness of risk retention techniques

Effectiveness of risk retention technique	very effective		Fairly effective		Not effective		Mean	Standard deviation
	F	%	F	%	F	%		
Reserves	28	18.9	48	32.4	72	48.6	2.2973	.7689
Captives	8	5.4	20	13.5	120	81.1	2.7568	.5423
Current expensing	32	21.6	49	33.1	67	45.3	2.2365	.7856
Borrowing	30	20.3	40	27.0	78	52.7	2.3243	.7929

Risk retention techniques were rated not effective in minimizing theft severity as indicated by majority (48.6%) reserves, (81.1%) captives and (52.7%) borrowing. Findings from the junior staff were similar when compared to those of senior staff indicating Sacco's need to review their implementation levels if effectiveness of risk retention techniques has to be improved.

Severity of Theft in Sacco's

Most Sacco's learn how to respond to theft incidents only after suffering severe attacks that result to significant losses. Risk retention and risk transfer techniques are meant to reduce severity of losses. When theft severity is high, risk retention and transfer techniques are considered not effective and vice versa is true. This study therefore sought to determine the severity of theft incidents in Sacco's. Descriptive statistics of frequencies and percentages were used to analyse the data and results presented in table 7 for senior staff and table 8 for junior staff

Table 7: Senior staff responses on theft severity

Theft Severity	very severe		Severe		not severe		No incident		Mean	Standard deviation
	F	%	F	%	F	%	F	%		
Burglary	12	23.5	24	47.1	10	19.6	5	9.8	1.9216	1.0362
Larceny	18	35.3	19	37.1	11	21.6	3	5.9	2.2549	.8681
Shoplifting	3	5.9	20	39.2	26	51.0	2	3.9	1.6275	.7735
Medical identity theft	18	25.3	22	43.1	10	19.6	1	2.0	1.8824	.7911
Robbery	12	23.5	28	54.9	8	15.7	3	5.9	1.7255	.9397

From the findings in table 15, theft severity was rated to be highly severe. This is because most of the senior staff (47.1%) burglary, (37.1%) larceny, (43.1%) medical identity theft and robbery (54.9%) indicated that when theft occurred it resulted to severe losses. Severity of shoplifting was classified not severe by a majority 51.0%.

Table 8: Junior staff response on theft severity

Theft severity	very severe		Severe		not severe		no incident		Mean	Standard deviation
	F	%	F	%	F	%	F	%		
Burglary	56	37.8	64	43.2	23	15.5	5	3.4	1.7905	.82687
Larceny	24	16.2	88	59.5	30	20.3	6	4.1	1.6892	.93205
Shoplifting	28	18.9	36	24.3	74	50.0	10	6.8	2.4459	.87508
Medical identity theft	48	32.4	74	50.0	23	15.5	3	2.0	1.8716	.74029
Robbery	33	22.3	99	66.9	15	10.1	1	.7	1.4459	.70261

Results presented in table 16 shows that majority of the junior staff (43.2%) burglary,(59.5%)larceny,(50.0%) medical identity theft and (66.9%) robbery indicated that theft incidents were severe when they occurred. Half of the junior staff (50.0%) indicated that shoplifting incidences were not severe. These results were similar with those of the senior staffs. This implied that risk transfer and risk retention were not effective in reducing theft severity in Sacco's. Sacco's should therefore focus on employment levels of these techniques if they are to be effective in reducing theft severity. These results on theft frequency and severity were consistent with Henrich triangle that puts forth if the frequency of theft incident is high, the severity is low and vice versa is true (Dorfman, 2005).

Association of Risk Retention Technique with Theft Severity.

Risk retention techniques are designed to lessen the severity of theft incidents once they occur. This study sought to find out the association of risk retention techniques with theft severity . To measure the association of risk retention techniques with theft severity a retention index (RI) was computed. The retention index comprised of four (4) variables representing the four most adopted retention techniques as given by (Dorfman, 2005). The variables were borrowing, current expensing, captives and reserving. These variables were scored on a likert scale of 1-4 with 4 representing the highest scores implying theft had never occurred and 1 representing the lowest score meaning theft losses were very severe.

$$RI= \frac{BT+CT+CET+RT}{4}$$

4

With BT= borrowing technique, CT= captives technique, CET= current expensing techniques and RT= reserve technique. The results were presented in Table 9

Theft Severity					
	very severe	Severe	Not severe	No incident	Totals
Not sure	2.01%	4.02%	0.50%	0%	6.53%
Not effective	16.08%	35.68%	2.01%	0%	53.77%
Moderate effective	3.52%	25.13%	3.52%	0%	32.16%
Effective	2.01%	2.51%	2.01%	0%	6.53%
Very effective	0%	1.00%	0%	0%	1.00%

Table 9: Association of risk retention techniques with theft severity

	23.62%	68.34%	8.04%	0%	100%
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Chisquare =11.932, df =12, p=0.167

The findings in table 19 presents that majority (53.77%) indicated that risk retention techniques were not effective in reducing theft severity. Among them majority (35.68%) indicated that theft was severe when retention techniques were not effective. 16.08% rated theft to be very severe when risk control techniques were not effective. Those respondents who indicated that theft in Sacco's was severe (25.13%) also indicated that retention techniques were moderately effective. It's worth noting that none of the respondents indicated that theft had never occurred in the Sacco's .Only (1.00%) of the respondents indicated that risk prevention techniques were very effective when theft was severe.

These findings were further statistically tested for significance using chi-square test at 5% significant level. The computed chi-square value of11.932 and a p value= 0.167implied that risk retention techniques had no significant association with theft severity in Sacco's. This study thus failed to reject the null hypothesis (ho₃) which stated that there was no significant association of risk retention techniques with theft in Sacco's in Embu County.

This study therefore concluded that risk retention techniques were not effective in reducing theft severity in Sacco's. The findings were consistent with Mwenda (2015) findings that risk control techniques may be in a SACCOs and be not effective when matters of theft are taken casually.

CONCLUSION

This study evaluated the effect of risk retention techniques on theft in Sacco's in Embu County. The main focus of this study was on Reserves, Captives, Current expensing, Borrowing and their effect on theft severity.

Results on risk retention techniques studied revealed that borrowing, reserves, and current expensing were adopted by the Sacco's. It emerged that captive were not adopted by the Sacco's. Further the findings revealed that employment of risk retention techniques by SACCOs was very low. Risk retention techniques were also found not to be effective in reducing theft severity. When tested for significance through a chi-square test at a 5% level of significance, the results revealed that risk retention techniques had no significant association with theft in Sacco's with a chi-square value of 11.932 and a p-value of $0.167 > 0.05$.

The study therefore concluded that risk retention techniques had no significant association with theft in Sacco's therefore this study failed to reject at a 5% level of significance the null hypothesis that risk retention techniques had no significant association with theft in Sacco's. It was therefore concluded that Sacco's that had not adopted and fully employed risk retention techniques were vulnerable to high levels of theft severity.

The study recommended that Sacco's should also adopt and fully employ risk retention techniques like captives, borrowing, current expensing and maintaining reserves thus minor losses resulting from theft can be borne by the Sacco's without having to interrupt the daily activities. This will therefore reduce the severity of theft in Sacco's

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