

## Economic Benefits and Constraints in Management of Thrift Co-operatives in Public Organizations.

Donatus .E. Onwuegbuchunam<sup>1</sup>, Glory .N. Onwuegbuchunam<sup>2</sup> & Emmanuel .A. Eboh<sup>3</sup>.

<sup>1</sup>Department of Maritime Management Technology, School of Management Technology

<sup>1</sup>Federal University of Technology, Owerri,

<sup>2</sup>Registry Department, Federal University of Technology Owerri

<sup>3</sup>Department of Sociology, Faculty of Social Sciences, Imo State University, Owerri.

### Abstract

The purpose of this study was to evaluate the contribution of thrift cooperatives in poverty reduction and grassroots micro-credit empowerment of its members. Five research questions framed the study viz, what is: the level of marketing facilities offered to thrift cooperatives members, the ease of accessibility and repayment terms of loans obtained. Others include ascertaining regularity in payment of thrifts and dividends to co-operators (at the specified periods) and the challenges (or problems) facing management of cooperatives in public organizations? Copies of five point Likert scaled research questionnaire highlighting clusters of questions were administered to a random sample of respondents. Qualitative data collected were based on the respondents' ratings on the following clusters: Regularity in Thrift Payments, Marketing Facilities Granted to Members, Loan Accessibility by Members, Ease of Loan Repayment, Level of Dividend Payments, and Challenges Facing Management of Societies. Applying a Factor Analysis technique in analysing the sample data, we found that: provision of consumer goods at affordable prices, capital formation opportunities in form of thrifts, loans, shares and dividend payments attract and sustain membership of thrift societies. However, lack of: trust, transparent and innovative management techniques challenge administration of these societies in public organizations. Policy implications of the findings were discussed.

**Keywords:** Thrift, credit, loan, co-operative, micro-finance, welfare, factor analysis,

### 1.0 Introduction

Grassroots development and poverty reduction programmes through micro credit finance and empowerment frequently receive the attention of national government and international organizations. Extant literature shows that access to and efficient provision of microcredit can enable the poor smooth consumption, better manage risks, gradually build assets, develop micro enterprises, enhance their income earning capacity, and enjoy an improved quality of life (Bakhtiari, 2006). At the national level, microfinance services can also contribute to the improvement of resource allocation, promotion of markets, and adoption of better technology. Thus, microfinance helps to promote economic growth and development. Besides, the achievement of the United Nations' Millennium Development Goals (MDGs) and (more recently) global Sustainable Development Goals (SDG) are closely tied to positive outcomes of microfinance especially through mobilizing resources to persons who cannot access credit from the formal financial sector. Cooperative societies constitute one of the micro finance platforms through which grassroots financial empowerment and development can be achieved.

Co-operatives are defined by the International Cooperative Alliance's Statement on the Cooperative identity as autonomous associations of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through jointly owned and democratically controlled enterprises. Kareem et al., (2012), provide a description of types of cooperatives; namely producers, consumers, marketing, thrift/credit and farming cooperatives. Others are: housing, insurance, transport storage and labour cooperatives. Thus as the name suggests, each type caters for the welfare of their respective members. The credit cooperatives for example, provide loans for members at low interest rates. The simplest and most basic benefit of thrift/credit cooperative societies is the creation of an avenue for members to borrow money and obtain loans with minimal interest to meet their business (Otto and Ukpere, 2011) and social needs and serves as an avenue for savings. Cooperatives are an important tool for increasing the incomes of their members (Simmon & Birchall, 2008), generating employment (Merrett et al., 2001), and economic and social development of people living in rural areas (Toksoy, 2005). It has also been found that cooperatives are the basis for food security and poverty reduction (Maghsoudi, 2006 & Peng, 2007), for rural development and structural transformation of the agriculture industry in European Union, India, Malaysia and others third-world countries (Bibby and Shaw, 2005, Gijselinckx and Develtere, 2008), and empowerment of poor people and protection of environmental degradation (Atmis et al., 2009, He, 2010 and Özdemir, 2005). Thus, despite much empirical evidence linking activities of cooperative societies to employment generation, expansion of locally based businesses, women empowerment and market stabilization; few papers assessed economic benefits accruable to members of thrift cooperatives and constraints facing

management of such societies.

### **1.1 Research Objectives**

The central objective of this study is to empirically assess the significant economic benefits and managerial problems facing thrift cooperatives operating in public institutions. Specifically, the following research questions are addressed in this study viz:

- (i) what is the level of marketing facilities offered to cooperatives members,
- (ii) what is the ease of accessibility and repayment terms of loans obtained by co-operators.
- (iii) what is the level of regularity in payment of thrifts and
- (iv) what is the level of regularity in payment of dividends to co-operators (at the specified periods)
- (v) what are the constraints (or problems) facing management of cooperatives in public institutions?

This study is intended to cover management and operations of a cross section of thrift, credit and marketing cooperative societies in public institutions in Imo State. The public institutions examined included both state owned and federal government owned parastatals. Anecdotal evidence suggests that majority of thrift and credit societies are prevalent in public institutions and possess elements of clear structure in terms of organization and operations.

## **2.0: Review of Related Literature**

### **2.1: Relevance of Co-operatives**

According to Godwin (2011), the origin of cooperative societies in Nigeria can be traced to the traditional thrift collection. Cooperative societies are now prevalent in public and private organizations in Nigeria particularly government establishments. As privately managed organization, transactions of money are carried out in conjunction with the organization and employed personnel of the societies. Co-operators' savings (or check-off dues) in thrift co-operatives are deducted at source (salary) and repayment of loans taken is done through deductions from staff salaries as requested by the operators of the societies (Godwin, 2011). Their capital base runs into several millions of naira. Due also to the multipurpose nature of these societies, they are often engaged in selling of shares; purchase of agro-allied products and consumer goods which are sold to members sometimes at competitive prices.

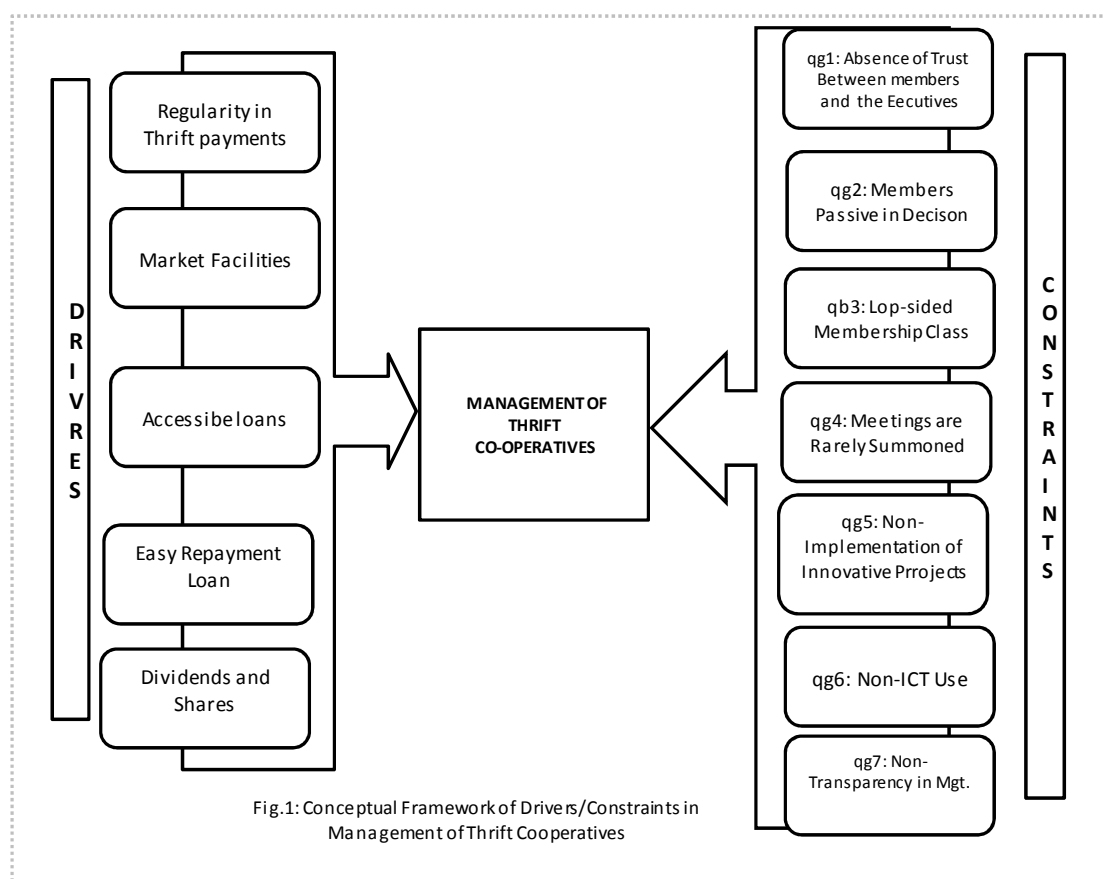
Cooperatives, as economic enterprises and as self-help organizations, play a meaningful role in uplifting the socio-economic conditions of their members and their local communities. Over the years, cooperative enterprises have successfully operated locally owned people-centred businesses while also serving as catalysts for social organization and cohesion. The cooperative enterprise is also relevant in addressing the problem of food insecurity. The World Bank estimates that food demand will double by the year 2030 as the world's population increases by another two billion people. Hence there is an urgent need for developing countries to increase the output of food yet, as the World Bank's 2008 World Development Report on Agriculture for Development has shown; the rural economy has been badly neglected. One solution is to encourage farmers to mobilise collectively in agricultural and marketing cooperatives that engage in the production, processing and marketing of agricultural products and gives them access to markets. According to Birchall (2004), cooperatives can contribute to the achievement of the MDGs by the year 2015 because of their inherent characteristics. Because cooperatives are economic associations, they provide the opportunity for poor people to raise their incomes. Because they are democracies with each member having one vote, they empower people, and because they pool risks at the level of the enterprise and offer micro-insurance, they increase security. In addition, there is increasing evidence indicating that cooperatives also contribute directly and indirectly to meeting several of the other MDGs (Birchall, 2004), such as primary education for children, gender equality and reducing child mortality. As the uneven effects of globalisation have led to a rise in the unregulated informal economy, workers in the informal sector have formed shared service cooperatives and associations to assist in their self-employment (Smith and Ross (2006)). In rural areas, savings and credit cooperatives provide access to banking services which are lacking in many communities. Credit cooperatives also play an important role in the formation of small and micro businesses. They can engender the kind of financial 'deepening' that the World Bank envisages, as they consistently reach the poor in a sustainable way. They provide a unique tool for achieving one or more economic goals in an increasingly competitive global economy (Bello, 2005). As governments around the world cut services and withdraw from regulating markets, cooperatives are being considered useful mechanisms to manage risk for members in Agricultural or other similar cooperatives, help salary/wage earners save for the future through monthly contribution that is deducted from source, strengthen the communities in which they operate through job provision and payment of local taxes (Bello, 2005).

According to Taimni (1997), combating exploitation, reducing disparities, improving social conditions and gender sensitivity, and helping to create a more just society with pronounced concern for environmental protection and sustainable processes of development all tend to make a cooperative a preferred and more socially desirable form of organization. Coon and Leistriz (2001), found that cooperatives have provided 9,078 direct jobs and 42,290 secondary (induced) jobs in Minnesota. Merrett et al., (2001) also found that cooperatives have significantly induced the expansion of locally based businesses, which are generated huge job opportunities for the local communities. Based on a randomly selected sample of 24 types of cooperatives, Groves (1985) studied the role of cooperatives on market stabilization in Madison city, USA. The finding indicate that cooperatives have considerably stabilized the local markets through distributing inputs to farmers and outputs to customers at reasonable prices, and providing economic agents with timely and relevant market information. Keeber (2005), also found that cooperative institutions have played significant roles in empowering poor women in developing countries who have limited access to productive resources. Pichiavaram (2003), made a comparative study between state and cooperative farming system contribution to Gross Domestic Product in India using panel data from 1994 to 2002. The findings indicate that agricultural cooperatives have produced more output with higher productivity than state owned agriculture, with an average annual growth rate was 5% higher than the state owned. A similar study was carried out in the Sudan about the roles of agricultural cooperatives in the national economy using four consecutive years' panel data (2000-2003). Ninety-seven (97) sample cooperative societies were selected for the study. The result showed that these cooperatives have contributed on average about 23% of the Gross National Product. The study concluded that agricultural cooperatives are important for expanding household income and expenditure (Dayandiach, 2004). Cooperatives are thought to represent an effective institution for solving the problems that small farmers face in developing countries (ILO et al., 2008). Farmers join efforts and pool their resources; in turn, cooperatives provide various services to their members. Cooperatives may undertake marketing, which let the farmers achieve higher prices as compared to a situation of intermediaries with quasi-monopsonistic powers (Chirwa et al., 2005; Hussi & Murphy, 1993). They may also provide access to inputs and capital, means of risk reduction and sharing, and an institutionalised framework of knowledge sharing. Overall, the formation of cooperatives in the area of agriculture brings about economies of scale that farmers are not able to realise individually.

Fairbairn (1999), analysed the effect of cooperative societies on the economic growth in Canada using eight years panel data covering 270 different cooperative societies. The result indicates that agricultural cooperatives have contributed 27% of the gross agricultural output and 2.5% of the national GDP. The annual income and expenditure of members have increased by 5%. Consequently, governmental and other organizations have provided substantial support for this sub sector to facilitate the growth rate of the economy. The study concluded that expansion of agricultural cooperatives is a good means of achieving food self-sufficiency at a household level (Fairbairn, 1999). Smeeding et al. (1990), find that the government of Israel achieved average for 25% of the total agricultural output and 3.9 % of its national gross domestic product by empowering state owned and private agricultural cooperatives. They conclude that cooperatives play a significant role in addressing food security.

## **2.2: Constraints Facing Thrift Cooperative Societies.**

Some existing literature shows a positive and significant effect of cooperative societies on poverty reduction through employment generation, women empowerment and market stabilization. Notable studies include: Nugusse et al., (2013), Nyele (2011), Groves (1985); Fairbairn (1999); Coon & Leistriz (2001); Merrett & Walzer (2001), Keeber (2005), Baviah (2006) and Sobrado (2000). Others include: Glasbergen (2000), Hallett (2001), Pichiavaram (2003) and Dayandiach (2004). However, challenges facing co-operatives include limited product diversity, governance and management, inadequate ICT system and staff capacities (Makordi et al., 2013). Others include: heterogeneous membership, passive participation (Flannery (1994) cited by Hussain, 2014). The research framework based on literature review and our postulated hypotheses can be captured in figure 1. Thus, few papers evaluated benefits and challenges in management of thrift societies in public organizations in Nigeria. Anecdotal evidence suggests that poor management, passive participation, absence of trust among members, equal-sharing of dividend regardless the level of participation are some of the challenges facing thrifts societies in public institutions.



### 3.0 Methodology

The population of this study includes thrift/credit societies operated in public institutions in Imo state. We discovered during the pilot study that cooperative societies in these institutions are multipurpose in nature. They are operated as credit, thrift and loan societies. To the extent that they exhibit the attributes of our unit of analysis i.e. thrift societies, they were considered as the relevant population of this study. The public institutions include all government establishments (Federal and State owned) in Imo state. These were particularly considered based on the assumption that members are homogenous in structure (all are civil servants), have guaranteed monthly income (salary) and as such would present an organized structure necessary for empirical observation.

### 3.1 Sampling Design and Procedure

The list of all registered credit, thrift and loan societies were obtained from the Cooperative Department of Imo State Ministry of Commerce and industry. During initial verification of operational status of the registered societies, it was found that two out the twelve registered societies were no longer operational. Thus, the sampling frame of the study consists of ten (10) credits, thrift and loan societies out of which 7 are domiciled in Federal government parastatals while the remaining 3 are domiciled in state owned parastatals. The sample size of the population under study was determined using Yamane's (1967) formular and is 389. It was made up of thrift cooperative members drawn from seven (7) Federal and two (3) state parastatals in Imo state, see table 1. However, the numerical disparity in favour of federal parastatals was taken care of in the sampling design that involves simple random sample technique with proportional allocation. Copies of research questionnaire were administered to the sample and follow up calls were made to those who provided their telephone numbers. This helped to achieve complete rating response.

**Table 1 : Distribution of Organisations Housing the Sampled Cooperative Societies**

Name of Institution	Type of Institution	Type of Cooperative	Sample Size
Phuto	Federal	MCS	71
POLY	Federal	CTLS	86
ECN	Federal	CTLS	23
GPress	State	CTLS	21
IMPoly	State	CTLS	19
AIFC	Federal	CTLS	60
MPF	Federal	CTLS	53
MMPC	Federal	CTLS	3
FNC	Federal	CTLS	40
Min_Justice,	State	CTLS	13
<b>TOTAL</b>			<b>389</b>

Source: Author's own elaboration

### 3.2: Methods of Data Analysis

Two methods of data analyses shall be employed in this research. They are: Frequency Distribution and Exploratory Factor Analysis. The essence of using frequency distribution is to have a general idea of the distribution of the responses on the various items of the questionnaire.

According to Decoster (1998), Factor Analysis is collection of methods used to examine how underlying constructs influence the responses on a number of measured variables. There are basically two types of Factor analysis; exploratory and confirmatory. Exploratory Factor analysis (EFA) attempts to discover the nature of the constructs influencing a set of responses while Confirmatory Factor analysis (CFA) tests whether a specified set of constructs is influencing responses in a predictive way.

Suppose the observed variables:  $Y_1, Y_2, \dots, Y_n$  are linearly related to a smaller number of factors:

$F_1, F_2, \dots, F_k$ . In our study, we postulate that the observed variables represented by the cluster variables: Thrift\_pay., Market facil., loan\_access, loan\_terms, dividends and managerial constraints are related to extracted factors (from factor analysis model) according to the following equations:

$$\begin{aligned}
 Y_{thrift\_pay} &= \beta_{10} + \beta_{11}F_1 + \beta_{12}F_2 + e_1 \\
 &\cdot \\
 &\cdot \\
 Y_n &= \beta_{n,0} + \sum_{n=1}^n \sum_{k=1}^{\infty} \beta_{i,k} F_k + e_n
 \end{aligned}$$

The error terms  $e_1, e_2, \dots, e_n$ , serve to indicate that the hypothesized relationships are not exact. The parameters  $\beta_{i,k}$  are referred to as loadings. For example,  $\beta_{12}$  is called the loading of variable thrift\_pay on factor  $F_2$ . Thus, variables that 'load' in a similar pattern and significantly may be referring to some latent variables. Applying this technique, we identify the significant variables representing benefits of thrift societies as well as their managerial constraints.

### 4.0: Results and Findings

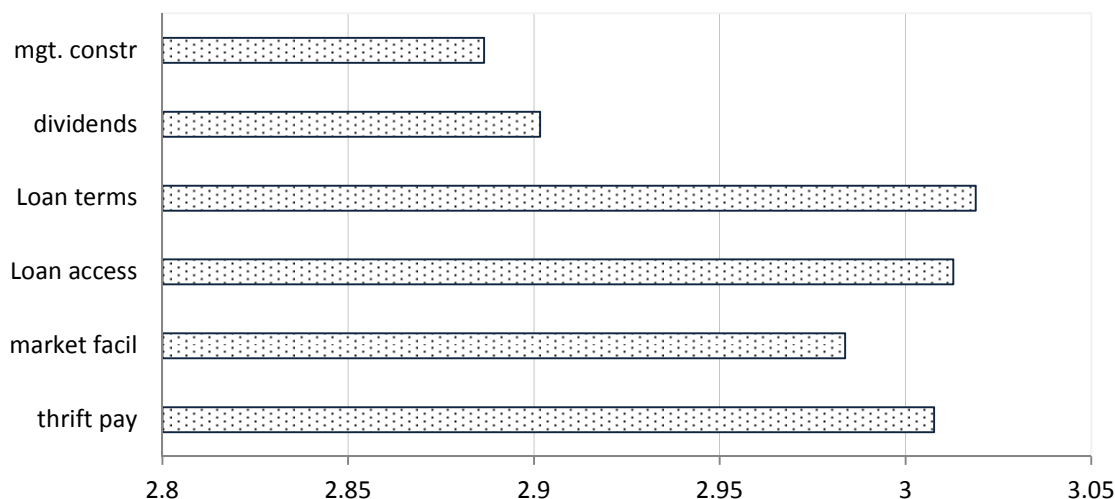
Table 2.0 shows the distribution of the respondents sampled, by type of public institution. Thus, it is shown in the table that out of three hundred and eighty-nine (389) respondents examined, three hundred and thirty-six (336) came from Federal parastatals while fifty-three (53) are under the employ of state government organizations. Steady salary may account for the prevalence of thrift societies in Federal than in state parastatals.

**Table 2.0: Characteristics of Co-operatives Members Sampled**

Type of Institution	Freq.	Percent	Cum.
Federal	336	86.38	86.38
State	53	13.62	100.00
<b>Membership Class</b>			
Executive	80	20.57	20.57
Non-Executive	309	79.43	100.00
<b>Duration of Membership</b>			
< 5yrs	104	26.74	26.74
5 -10yrs	141	36.25	62.98
> 10yrs	144	37.02	100.00

Source: Author. No of Obs.: 389

The table also indicates that about 79% of the respondents are non-executive members of the society while about 21% of the respondents hold decision making positions within the society. Since ten (10) institutions were sampled, it means that we have an average of 10 co-operators in the executive arm in each society per institution studied. We can infer from table 2.0 that about 73% (36.25 + 37.02) of those sampled have been co-operators for more than 5 years. Therefore, it can be accepted that they are well informed about the activities of their societies and hence in position to participate in this study. In figure 2.0, we present the summary of rating response of the respondents according to the questions framed in the questionnaire. The figure provides a snap shot of the distribution of scores (mean) as rated by the respondents. Figure 2.0 also shows the cluster or grouping variable constructs that represents the observed variables (questions posed in the questionnaire). These are: Thrift payment. (regularity in thrift payment), market facil. (market facilities offered), loan access (ease of accessing loans), loan terms (ease of repaying loans), dividends payments and managerial constraints. These represent the benefits and constraints facing thrift societies. It appears from the figure that on average, loan repayment terms, loan accessibility, market facilities and thrift payment were among the observed variables much rated (by the respondents on a scale of 1 to 5). These variables (observed) will be subjected to factor analysis technique to determine the underlying latent variables which they measure.



**Fig. 2: Mean Distribution of Rating Response Scores on Benefits/Constraints of Thrift Societies**

The results of factor analyses (using Principal Factoring technique) are presented in table 3.0 and 4.0. In table 3.0 only two factors were extracted. The factors accounts for 44.38% of the explained variation in the data set. Therefore, it seems reasonable given the size of the sample, to make inferences based on the extracted factors. The five grouping constructs: thrift\_pay, market\_facil, loan\_access, loan\_terms, and dividends 'loaded' reasonable well on these extracted factors. For example, thrift payment and market facilities benefits 'loaded' significantly (correlation coefficients  $\geq 0.4$ ) on **factor 2**. The cut-off value for factor loadings according to

Hulland, (1999) is 0.4. These seem to be measuring a latent variable economic benefit. However, the other constructs: loan\_access, loan\_terms and dividends ‘loaded’ more on **factor 1**. They seem to be measuring capital empowerment/formation. The latent variables therefore explain the underlying benefits that drive membership of thrift societies.

**Table 3.0 :Benefits Derived by The Thrift Societies**

Variable	Factor1	Factor2	Uniqueness
Thrift_pay.	-0.5481	0.4436	0.5028
Market facil.		<b>0.8106</b>	0.3428
Loan_access	<b>0.6399</b>		0.5814
Loan_terms	0.4634	0.4537	0.5794
Dividends	0.4739		0.7748
Number of obs.		= 389	
Retained factors		= 2	
Number of params.		= 9	
Cumulative Variance Explained		= 0.4438	

Source: Author

Similarly, in terms of challenges faced by thrift societies, we note in table 4.0 that three factors were extracted from factor analysis technique. Variables qg1 denoting the statement “There is Absence of Trust between Members and the Executives” and qg5 “Management Are Often Constrained in Introducing Innovative Projects” loaded significantly on factor1. These variables seem to be measuring the latent variable “Lack of thrust” since lack of trust may hinder management from freely initiating innovative managerial techniques. Applying the same methods, we identify the other latent variables namely: Absence of innovative management, and absence of transparent management. The extracted factors account for 48.16% of explained variation in the data set. The estimated factor analysis models in both cases possess reasonable explanatory powers to be adopted for addressing the research questions that govern this study. Thus, based on the results obtained as shown in tables 3.0 and 4.0, we conclude that thrift societies empower their members economically (in terms of affordable consumer goods, regularity in thrift payment), as well as providing them capital (loans, shares and dividends) for investment.

**Table 4.0: Rotated Factor Solution: Managerial Constraints Identified**

Variables/Constructs	Factor1	Factor2	Factor3
qg1: There is Lack of Trust Between Members and the Executives	<b>0.7256</b>		
qg2: Members are Often Passive in Decisions and Activities of the Society			<b>0.7299</b>
qg3: Membership is Dominated by Junior Staff Members and This Affects the Management of the Society		<b>0.5807</b>	
qg4: Meetings are Rarely Summoned		<b>0.4446</b>	
qg5: Management Are Often Constrained in Introducing Innovative Projects	<b>0.7642</b>		
qg6: Activities of the Society are not fully Computerised and This Affects Operation of The Society		<b>0.7323</b>	
qg7: Management Team are not Transparent in Their Activities			<b>0.647</b>
Number of obs.		= 389	
Retained factors		= 3	
Cumulative Variance Explained		= 0.4816	

#### 4.1. Summary of Major Findings

Based on analyses of data obtained in the study, the following summary can be made:

- i. Thrift cooperative members contribute and receive thrift which empowers them economically.
- ii. Members benefit from marketing facilities offered by their societies. For example, consumer goods are sold to them at lower than market prices and this in turn improves their standard of living.
- iii. Accessible loans are made available to members and which can be invested on personal projects.
- iv. There is ease in repayment terms for loans granted to co-operators in thrift societies.
- v. Dividends (based on shares bought) are paid to thrift society members and these represent additional sources of income.

The above represents economic benefits derivable by members of thrift societies. However, the challenges facing the management of these societies are summarized as shown below:

- vi. Membership is dominated by a particular class of workers (i.e. junior staff) and this disparity may affect decisions as contribution of ideas may be biased.
- vii. There is a lack of application information and communication technology facilities in the operation of societies.
- viii. The executives are often restrained from venturing into innovative projects that may bring about additional financial benefits to the societies.
- ix. Members often participate passively and as such do not fully contribute to the management of the societies.
- x. Meetings, it was found out, are not regularly summoned to discuss the affairs of the societies.
- xi. The management team are sometimes not transparent in their activities.
- xii. There is perceived absence of trust between the management team and the ordinary members.

### **5.1 Implications to Research and Practice**

Thrift societies represent a veritable source of economic empowerment to civil servants who are members. Members of thrift societies realise savings plus dividends at the end of a specified period (yearly) and this could be invested in economic venture or other personal projects. Apart from individual members' benefits, thrift societies can be seen as micro-credit agencies at the grassroots level which ultimately contribute to economic development of the nation. Thrift cooperatives also may play an important role in the formation of small and micro businesses since additional income received can be re-invested by members. The challenges facing thrift societies studied are typical of corporate organizations. Lack of deployment of ICT facilities is implicated and this can negatively impact on managerial productivity. The lack of transparency in management breeds distrusts among non-executive members and this may explain why management is restrained from embarking on innovative projects. Passive participation of members may also be as a result of lack of distrust on the management.

### **5.2 Conclusion**

Public institutions should encourage cooperative societies through providing technical support to their executives especially in the area of human capacity building. Thus, the resulting managerial skills will enhance their productivity and ultimately improve members' welfare. The executives of cooperative societies should regularly summon meetings to brief the non-executive members on their activities as this would provide transparency and boost trust within the societies. ICT facilities should be adopted in management of thrift societies to enhance managerial productivity.

### **5.4 Further Research**

The present paper explored the significance of thrift cooperatives in economic empowerment and capital formation opportunities for its members in public institutions where there is assured source of income. Further research should extend this study to thrifts societies in private sector. This future effort would present the total picture of how cooperatives particularly thrift societies contribute to poverty reduction and development at the grassroots.

### **References**

- Atmis, E., Günşen, B., Lise, B. & Lise, W. (2009). Factors affecting forest cooperative's participation in forestry in Turkey. *Forest Policy and Economics*, 11(2), 102-108.
- Bakhtiari, S (2006) Microfinance and Poverty Reduction: Some International Evidence. *International Business & Economics Research* Vol. (5), No. (12).
- Baviah, M. (2006). Microfinance for women empowerment and gender Equality: Experiences of some Asian countries and lessons for Ethiopia. Biannual Conference of the Association of Ethiopian Microfinance Institutions (AEMFI) Hosted by Dedebit Credit and Saving Institutions (DECSI), Mekelle, Ethiopia.
- Bello D.A (2005). The Role of Cooperative Societies in Economic Development, Munich Personal RePEc Archive Online at <http://mpira.ub.uni-muenchen.de/23161/>
- Bibby A. & Shaw, L. (2005). *Making a difference: Cooperatives solutions to global poverty*, Manchester: Cooperative College.
- Birchall, J. (2004) *Cooperatives and the millennium development goals: Impacts and challenges*. Geneva, Switzerland, ILO Press. Retrieved from: <http://www.copac.coop>



- Coon, C. and Leistritz, L. (2001). Economic contribution of North Dakota cooperatives make to the state economy. AE20011 Department of Agricultural Economics, North Dakota State University.
- Dayandiach, W. (2004) Cooperatives and rural development: Success, failures and prospects of cooperatives experiences from the rural areas of the Republic of the Sudan, Presented in the Annual Conference of Cooperative Societies in Ethiopia, Selam Publishing Private Limited, Addis Ababa, Ethiopia.
- DeCoster, J (1998), Overview of Factor Analysis. <http://www.stathelp.com/notes.html>. Retrieved 12/11/09
- Fairbairn, B. (1999). Cooperative development and the state: Case studies and analysis. Research report to the cooperatives secretariat, Government of Canada.
- Flannery, M. J. (1994). An Economic Evaluation of credit unions in the United States. Federal Reserve Bank of Boston. Research Report No.54.
- Gijssels, C. & Develtere, P. (2008) The cooperative Trilemma: Cooperatives between market, state and civil society, Working Papers on Social and Cooperative Entrepreneurship WP-SCE 08-01.
- Glasbergen, P. (2000) The environmental cooperative: Self-governance in sustainable rural development, *Journal of Environment and Development*, 9 (3).
- Godwin, S. (2011) Poverty Reduction Through the use of Cooperative Societies. Kaduna: Nuhu- Bamalli Polytechnic International Cooperative Alliance (ICA) (1995). Review of International Cooperatives, 4: 85 – 86.
- Groves, F. (1985) What is cooperation? The philosophy of cooperation and its relationship to cooperative structure and operations. UCC Occasional Paper, No. 6, University of Wisconsin Center for Cooperatives.
- Hallett, P. (2001) The car sharing cooperative of Edmonton: Paving the way to a greener future, *Synergy*, 10 (1).
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research, A review of four recent studies, *Strategic Management Journal*, 20(2), 195–204.
- ICA (2005). Cooperative and development: International Cooperative Alliance, Annual Report, Retrieved from: <http://www.ica.coop>
- ILO, Develtere, P., Pollet, I., & Wanyama, F. O. (2008). Cooperating out of Poverty. Geneva: International Labour Office.
- Maghsoudi, A. (2006). The role of cooperatives in developing and sustaining local and regional communities. *Review of International Cooperation*, 99(1), 70-76.
- Maghsoudi, A. (2006). The role of cooperatives in developing and sustaining local and regional communities. *Review of International Cooperation*, 99(1), 70-76.
- Makori, J, Munene, C. and Muturi, W. (2013), The Challenges Facing Deposit-Taking Savings and Credit Cooperative Societies' Regulatory Compliance in Kenya. A Case of the Gusii Region. *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 4, No. 12
- Merrett, C., Walzer, N., Holmes, M. & Roger, B. (2001). New generation cooperatives: Alternative measures of success. Illinois institute for rural affairs presentation at Madison, WI, Value-Added Conference.
- Nugusse, W.Z; Huylbroeck, G.V and Buysse, J. (2013). Household Food Security through Cooperatives in Northern Ethiopia, *International Journal of Cooperative Studies* Vol. 2, No.1, 34-44 DOI: 10.11634/216826311302358
- Nyele, E. (2011). Micro Credit Scheme and Poverty Reduction in Nigeria. Unpublished M.Sc Project, Department of Economics, University of Port Harcourt, Nigeria.
- Otto, G. and Ukpere, W. (2011). Credit and thrift co-operatives in Nigeria: A potential source of capital formation and employment *African Journal of Business Management* Vol. 5(14), pp. 5675-5680, 18 July, 2011 Available online at <http://www.academicjournals.org/AJBM> DOI: 10.5897/AJBM10.1477
- Özdemir, G. (2005). Cooperative-shareholder relations in agricultural cooperatives in Turkey. *Journal of Asian Economics*, 16, 315-325.
- Peng, K. (2007). Singapore-the host for the international cooperative, Alliance General Assembly 2007. *Review of International Cooperation*, 100(1), 24-32.
- Pichiavaram, D. (2003). Cooperative practice in welfare improvement of poor rural members: Irrigation and multipurpose cooperatives, New Delhi, India.
- Smeeding, M., Michael, O. & Lee, R. (1990). Poverty, inequality and income distribution in comparative perspective, Urban Institute Press.
- Smith, S and Ross, C (2006). Organising out of Poverty: how the Syndicoop approach has worked in East Africa
- Sobrado, M. (2000). From navies to entrepreneurs: The OW in Costa Rica. In a Future for the Excluded. Edited by Raff Carmen and Miquel Sobrado, Zed Books, London.
- Yamane, T. (1967). Statistics, An Introductory Analysis, 2nd Ed., New York: Harper and Row.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

### CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

### MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

