

MODERATING EFFECT OF SACCO SIZE ON THE NEXUS BETWEEN GOVERNANCE COSTS AND FINANCIAL SOUNDNESS OF DEPOSIT TAKING SACCOS IN NAIROBI CITY COUNTY, KENYA

Justus Nderitu MAINA, PhD *

Peter Musangi NDWIGA, Msc**

Dickson Kamau KINYARIRO, PhD***

Abstract

In an effort to reduce agency problems the members of Deposit Taking Savings and Credit Co-operatives elect board of directors to offer governance in attaining their economic, social and cultural needs. Nevertheless, governance costs have increased by 36 percent since 2014 to 2019 leading to reduction in surpluses which have rendered an aggregate of 47.32 percent of the Deposit Taking Savings and Credit Co-operatives financially unsound, thus putting 341-billion-member savings at risk. This necessitated the assessment of the moderating effect of SACCO size on governance costs and financial soundness. A descriptive cross-sectional survey design was adopted where data collection sheet was used in secondary data collection. A binary logistic regression results established that with presence of a moderator in the nexus between predictor and response variable, the strength of relationship between variables registered a significant change (15.6 percent to 18.3 percent) as well as with introduction of interaction term (15.6 percent to 19.3 percent). The study concluded that SACCO size portrayed a statistically significant moderating effect between predictor variable and response variable. The study recommends that small size

** Lecturer, Department of Business and Economics, School of Business, Karatina University, Karatina, Kenya.*

*** Tutorial Fellow, Co-operative and Agribusiness Management Department, School of Business & Economics, The Co-operative University of Kenya, Nairobi, Kenya.*

**** Lecturer, Accounting and Finance Department, School of Business & Economics, The Co-operative University of Kenya, Nairobi, Kenya.*

Deposit Taking Savings and Credit Co-operatives should merge with other Deposit Taking Savings and Credit Co-operatives who are of a similar common bond or interest to form larger Deposit Taking Savings and Credit Co-operatives in term of Size so as to achieve financial soundness.

Keywords: governance costs, SACCO size, stewardship theory, deposit taking savings and credit co-operatives

JEL Classification: G21; G32; G33

1. Introduction

A Deposit Taking SACCO (DTS) is a financial co-operative enterprise offering financial intermediation on behalf of members so as to attain their common financial, social and cultural needs in line with the international co-operative principles (SACCO Societies Regulatory Authority [SASRA], 2018). A board of directors who have managerial skills and technical knowledge is elected by the members during the annual general meeting to reduce the complexity of managing the DTS and the agency problem between management and members. They are entitled with monitoring the operations of the enterprise (FinAccess, 2019). Globally the Deposit Taking SACCOs are required to have directors consisting of an odd number of not less than five and not more than nine members. All costs incurred by directors in their position of offering governance is borne by the DTS (Niederkoher & Ikeda, 2005). However, the directors are opportunistic and pursue to engage in more expeditious activities that favour them (Desrochers & Fischer, 2003). Governance expenses are exaggerated mostly by board of directors that consist of lower income level professionals who earn less than the managerial remunerations. Where the internal controls are weak, the board may request for compensation for expenses incurred on personal matters (Westley & Branch, 2000).

In Africa the board of directors are made of volunteers who possess their selfish agenda at heart. The financial soundness of the DTS has been affected when the volunteer board of directors are entitled to making decisions such as expenditures determination, directing managers and approving loans rather than offering governance expertise (Allen & Maghimbi, 2009). They tend to attend more unnecessary training and unprecedented meeting in expense for governance allowances in addition to issuing themselves loans and

friends even if they are not credit worthy (Njekang & Afuge, 2017). In Kenya Deposit Taking SACCOs have been offered a cost friendly good governance guideline by their supervisory body though this is not the means to an end as board of directors have the responsibility of formulating governance procedures and policies for their enterprises. Directors do not receive remuneration though for any cost incurred when rendering services to the SACCO they are reimbursed (SASRA, 2015). This cost has increased by 36 percent thereby affecting the financial soundness of an aggregate of 47.32 percent of Deposit Taking SACCOs as it consumes more of the income earned (SASRA, 2018). Members expect board of directors to offer sufficient returns in their investment thus, in case there is no returns they consider directors as liabilities to them (Onyim, et al., 2017).

In an effort to reduce agency problems the members of Deposit Taking SACCOs elect board of directors to offer governance in attaining their economic, social and cultural needs (FinAccess, 2019). However, governance costs have increased by 36% since 2014 to 2019, leading to reduction in surpluses which have rendered an aggregate of 47.32% of the Deposit Taking SACCOs financially unsound, thus putting 341-billion-member savings at risk. This is even after SASRA issuing a cost friendly good governance practice guideline to assist Deposit Taking SACCOs remain financially sound (SASRA, 2018). Thus, the governance costs incurred has not reduced the threats of achieving a going concern that offer valuable and less expensive financial services to the members in enhancing their living standards. Moreover, the aim of sustainable development goal of collaborating with financial institutions to industrialize economies faces a challenge as it is a major financier of start-up businesses and their expansion. A continued deregistration of the Deposit Taking SACCOs will affect the 5.8% GDP inversely due to reduction in inventions and increase in unemployment (CBK, 2016).

Deposit Taking SACCOs incur governance costs that does not yield to financial soundness even after the SACCO regulator i.e. SASRA issuing a cost friendly good governance practice guideline. Thus, a solution is of necessity since members will incur more governance costs and end up losing their deposits as they do not have deposit protection facility to insure them. In addition, even during poor economic times SACCOs have to maintain an external borrowing to total assets ratio of not more than 25% (SASRA, 2018). Elucidation to this puzzle will assist Deposit Taking SACCOs members examine cost

and benefits of incurring governance costs in an effort to maintain a financially sound SACCO. The study therefore will assist SACCO members and SASRA management in setting appropriate governance costs that can advance financial soundness and thus reduce the license revocation rate. Consequently, a study needs to be carried out to enjoy the proceeds of financially sound Deposit Taking SACCO. Since, lack of seeking a solution may lead to members incurring more governance costs and end up being liquidated. Henceforth, the study intended to pursue a solution of shaping-up the tendency. However, research existing globally are in disagreement in their findings on the relationship between governance costs and financial soundness. For example, Gurbuz et al. (2016), Abdulrahman (2014) and Gul, et al. (2012) found that there exists a negative relationship between governance costs and financial performance, while Njenga (2012) was in contrast. Hence the need to carry out the research. Nevertheless, large size SACCOs governance costs have been lower than the small size, owing to the economies of scale enjoyed. Hence, the objective of the study is to determine the moderating effect of SACCO size on the nexus between governance costs and financial soundness of Deposit Taking SACCOs.

2. Literature review

Stewardship theory was developed by Donaldson and Davis (1991) who contends that individuals are inherently driven to successfully perform a delegated task that they have been entrusted. It assumes that individuals are collectively minded and pro-organisational and therefore aims at attaining societal goals since by so doing it gives them higher level of satisfaction. The stewards thus need to be individuals who have reached the self-actualization level of Maslow hierarchy of needs. It also holds that there is no agency problem between the owners and individuals delegated to perform. The principal-steward relationship is necessary in presence of lower requirement for incentives and monitoring. Furthermore, the stewards are selected to a position based on their expertise so as to add value to an enterprise (Danaldson, 2008). Thus, stewards will better their services so as to make an enterprise financially sound in expectation of sharing returns with the owners. Schillemans & Bjurstrom (2020) argued that stewardship theory creates a harmonious structure between stewards and owners offering unified direction and durable

command. Moreover, the executive is motivated to offer efficient and effective service as their roles are clear and not hampered. Stewardship theory is thus applicable in studying governance of autonomous enterprises such as Deposit Taking SACCOs.

The theory however faces objections in that it is not empirically grounded on nature of individuals and what motivates them in real enterprises. This requires an appropriate alignment of organizational and social interests so as to merge organizational goals with morals of the stewards. Moreover, the theory is static in the fact that when the steward interacts with agents, they may end up taking an agent position due to betrayal feelings (VanSlyke, 2006). Moreover, the theory strengthens the steward's egos and their roles are exaggerated and impractical (Cossin et al., 2015). Deposit Taking SACCOs principle of democratic member control negates the theory by giving any member right to be elected as representative irrespective of their profession. This makes the enterprise to incur more costs in training the board of directors on governance matters. They, thus spend more time in acquiring more knowledge rather than offering expertise on improving the financial soundness of their enterprise.

Empirical review concerning the study variables was carried out. Abdulrahman (2014) conducted a study on the nexus between the governance costs and Kenya listed firms' financial performances. The study was anchored on agency theory. A descriptive research design was applied where all the 52 listed firms participated. The collected secondary data was subjected to a multiple linear regression where the results indicated a positive relationship between the governance cost and financial performance. Thus, organisations were advised to consider the governance costs while making financial decisions as it affects the financial performance significantly. However, the study did not justify the choice of the study period of 2008 to 2012.

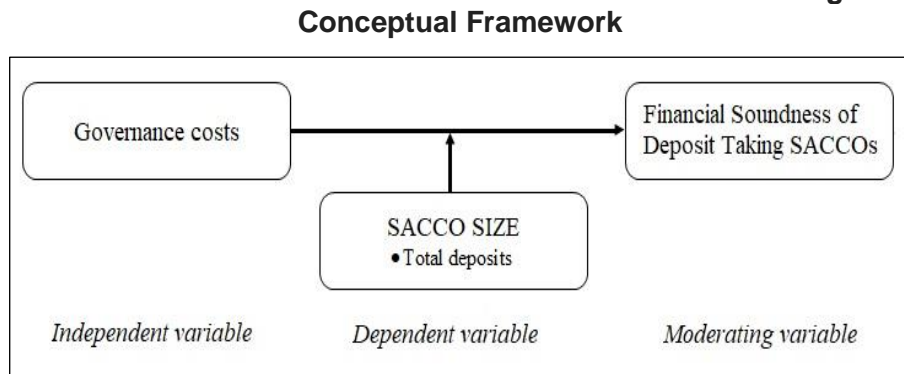
A descriptive research design was adopted by Njenga (2012) in the study on the nexus between agency costs and financial performance of Deposit Taking SACCOs in Githunguri district. The board of directors are entitled to monitor the SACCOs professionals who carry day to day activities. It leads to increased governance costs as they are paid hefty allowances. Regressed data revealed a non-significant nexus between governance costs and return on assets which was used as financial performance parameter. However, a significant relationship was evidenced with introduction of total deposits, total assets and gross loans as study moderators. On the

other hand, the scope of the study choice was not justified. Hence, the study cannot be used as a representative for Deposit Taking SACCOs in Kenya.

Gul, et al. (2012) indicated that increasing the remunerations of the board of directors would motivate them to monitor the Pakistan companies, but increase the governance costs. The study was carried out in the Karachi Stock Exchange for a period of 2003 to 2006. The regressed data indicated that governance costs influence the ownership structure significantly. The study was however limited for four years; thus, it is not representative of the periods beyond and is not anchored on any theory. Presence of board of directors carrying out monitoring duties in the enterprise do not diminish the governance costs. This improves the enterprise financial soundness (Hastori, et al., 2015).

The interaction of predictor variables of this study (governance costs) with financial soundness is portrayed in the conceptual framework under fig 1. It also depicts that SACCO size have a moderating influence on governance costs and financial soundness of Deposit Taking Saving and Credit Co-operative Societies in Kenya.

Figure 1



Source: Authors' illustration

3. Research methodology

The study adopted a descriptive cross-sectional survey research design to assess and analyse the moderating influence of the nexus between governance costs and financial soundness of Deposit Taking SACCOs in Nairobi City County. All the 42-Deposit Taking SACCOs in the County that are regulated by SASRA participated in

the study. The choice of the Nairobi City County was based on the fact that it is the County with the highest number of Deposit Taking SACCOs in Kenya and it encompasses all the five cluster of SACCOs in accordance with original field (Government based, Teachers based, Private based, Community based, and Farmers based). Secondary data was collected from annual report of the licensed Deposit Taking SACCOs for the years 2014 to 2018. Collected data was analysed using descriptive statistics. A hierarchical Binary logistic regression model was used to test the moderating effect of SACCO size on the nexus between governance costs and financial soundness as is shown in equations below:

$$\text{Logit } [p] = \beta_0 + \beta_1 gc + \varepsilon \quad (1)$$

$$\text{Logit } [p] = \beta_0 + \beta_1 gc + \beta_2 SZ + \varepsilon \quad (2)$$

$$\text{Logit } [p] = \beta_0 + \beta_1 gc + \beta_2 SZ + \beta_3 gc * SZ + \varepsilon \quad (3)$$

Where: β_0 is a constant; β_1 , β_2 and β_3 are coefficients; P is the probability that a DT-SACCOs will be financially sound; gc – is the predictor variable (governance cost); SZ - SACCO Size; $gc * SZ$ = governance cost * SACCO Size.

Nagelkerke's R-Square change tested the strength of the association between predictor variable and response variable. Wald test was carried out to test the significance for individual predictor variable at 5% significance level for the P-values.

4. Results and discussions

4.1 Nairobi City County Deposit Taking SACCOs Characteristics

Deposit Taking Savings and Credit Co-operative Societies offer front office services activities, are licensed, and regulated by SACCO Societies Regulatory Authority and they have to be fully registered under the Cooperative Societies Act CAP 490 (SASRA, 2019). The study described the characteristics of the DTS in terms of field of membership and total deposits. The findings of the DTS characteristics that participated in the study are presented below:

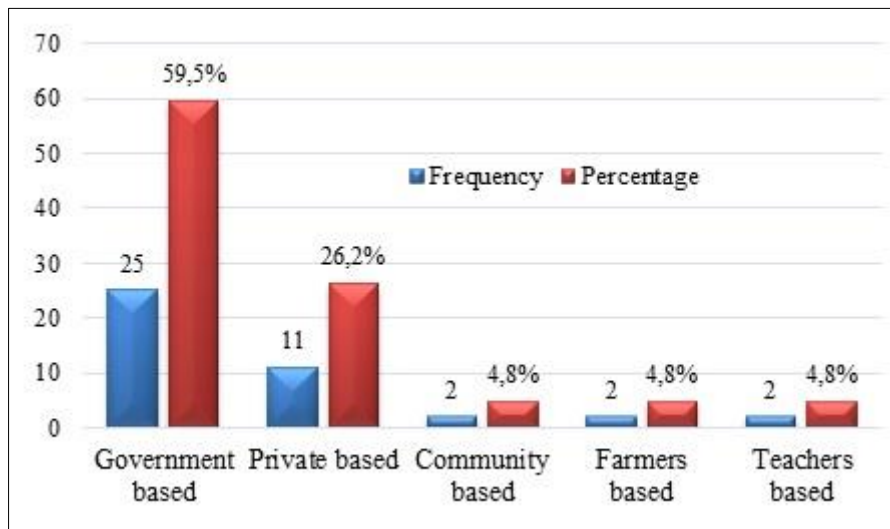
- **Deposit Taking SACCOs Field of Membership**

Deposit Taking Savings and Credit Co-operative Societies originated from a particular common bond linkage which form the basis for the field of membership. Despite the DTS having an original

common bond linkage it has been argued that they opened their common bond to attract more membership in the effort of maintaining a financially sound enterprise (Mumanyi, 2014). The DTS were formed based on the members occupations, operations, and associations. The DTS from which data was collected originated from the common bond of teachers based SACCOs, private based SACCOs, community based SACCOs, government based SACCOs and farmers based SACCOs. The government based SACCOs were 25, 11 private based SACCOs while famers based SACCOs, teachers based SACCOs, and community based SACCOs had 2 SACCOs each as shown in Figure 2. The results show a representation of DTS in all cluster per original common bond linkage of membership.

Figure 2

Deposit Taking SACCOs Field of Membership



Source: Data analysed by authors.

According to Figure 2, Deposit Taking Saving and Credit Co-operative Societies included in the study represented all original common bond. DTS in the government-based cluster had the highest representation followed by private based, teachers-based, farmers-based, and finally by the community based. The responses are a representation of the DTS population for all the five clusters since government-based cluster have the largest number of DTS, followed

by private-based, the farmers-based, teachers based and lastly the community-based cluster.

- **Deposit Taking SACCOs Total Deposits**

The Deposit Taking Saving and Credit Co-operative Societies that participated in the study were from the various field of membership. As shown in Table 1, the government based DTS had the highest share of 61 percent of the total deposit raised from members. They were followed by teachers based DTS which had 20.51 percent, private based DTS with 12.01 percent, farmers based DTS with 4.03 percent and community based DTS with 2.46 percent.

Table 1

Deposit Taking SACCOs Total Aggregated Deposit

Bond	Total Aggregated Deposits	Percent
Government based	118,254,781,926.46	61.00
Teachers based	39,752,723,291.25	20.51
Private based	23,276,999,443.48	12.01
Farmers based	7,806,656,304.12	4.03
Community based	4,770,159,059.89	2.46
Total	193,861,320,025.20	100.00

Source: Data analysed by authors.

From Table 1, the Deposit Taking Saving and Credit Co-operative Societies that participated in the study represented all field of membership cluster. Members from all the DTS in Nairobi City County had saved more than 193 billion. Deposit Taking Saving and Credit Co-operative Societies members in the government-based cluster had the highest aggregated deposits, followed by teachers-based DTS, private based DTS, farmers-based DTS and community based DTS respectively. This shows that teachers-based DTS members had made more deposits than the private-based DTS despite being less in number.

4.2. Governance Costs, SACCO size and Financial Soundness

The study tested the null hypothesis that SACCO size has no significant nexus between governance costs and financial soundness of DT-SACCOs. Moderation effect of SACCO size results on independent variable and financial soundness are indicated in Table 2.

Table 2

Hierarchical Regression Results

Predictors	Model 1			Model 2			Model 3		
	Beta ^a	Wald	P	Beta ^a	Wald	P	Beta ^a	Wald	P
(Constant)	5.182	3.558	.128	10.888	2.211	.137	46.537	.475	.491
gc	-.938	2.315	.059	-.884	2.995	.084	-5.932	.394	.530
SZ				-.661	.824	.364	-4.511	.384	.535
gc*SZ							.544	.287	.592
Nagelkerke R ²			.156			.183			.193

Source: Data analysed by authors.

As shown in Table 2, the binary logistic regression model for the study; Logit of (Financial soundness) = 5.182 – 0.938 governance cost. The log of odds of a DT-SACCO being financially sound was negatively related to governance costs. Thus, an increase in one unit of governance cost will lead to a decrease in financial soundness by its coefficient. The study further established that governance cost was not statistically significant in prediction of DT-SACCOs financial soundness (Wald statistic value = 2.315, a P value of 0.059 and an odd ratio of 0.391). This is in agreement with the studies carried out by Abdulrahman (2014) and Gul et al. (2012) who established that governance costs have no significant relationship with financial soundness. This is in contrary to the study conducted by Njenga (2012).

The addition of a moderator in Model 2 resulted to a significant change in Nagelkerke R square (from 15.6 percent to 18.3 percent). Thus, the moderating effect of SACCO size did explain extra variation in predictor variable and financial soundness. Additionally, with introduction of interaction term, Nagelkerke R Square changed from 15.6 percent to 19.3 percent. This means that there was significant increase in the variations which was determined by the study variable. Therefore, from the study results it is evident that the relationship improved as interactions effects were introduced in the models. The increased strength in the relationship between predictor and response variable due to introduction of a moderator variable, indicates the significance of the moderator in the study (O'Connell, 2006). The study therefore rejects the null hypothesis that, SACCO size is not statistically significant in moderating governance costs and financial

soundness of DT-SACCOs in Nairobi City County. This in agreement with Njenga (2012) who observed that SACCO size have a significant moderation effect on the predictor variable and response variable.

5. Conclusion and recommendation

The study assessed the moderating effect of SACCO size on the nexus between governance costs and financial soundness of DT-SACCOs in Nairobi City County. The SACCO size was evaluated through total deposits. The study concluded that SACCO size portrayed a statistically significant moderating effect on the nexus between independent variable and dependent variable. Several recommendations were further made by the study:

In an effort to enhance confidence in the sub-sector, the DTS members should elect members with financial knowledge to the position of board of directors. This would reduce the cost incurred in training them on financial matters to enable them carry out their governance role. The training institutions can also offer a cheaper training workshop and seminars to enlighten them on co-operative governance matters.

The DTS in collaboration with SASRA should set a maximum amount that can be incurred by the board of directors. This can be facilitated by setting enterprise policies that limit the board of directors from going beyond their budgeted amount. This would reduce the governance costs in an effort to improve the financial soundness of the enterprises.

There should be a limit to the number of meetings held by the board of directors in a year. Holding of many meetings by the board of directors is a cost to the DTS since they are reimbursed any cost incurred in their supervisory and monitoring role. This can be pegged on the level of amount of deposits a DTS has.

The SACCO size has been found to have a moderating effect on the nexus between governance cost and financial soundness of DT-SACCOS. Thus, small size SACCOs may not have a future. Hence, they should merge with other SACCOs who are of a similar common bond or interest to form larger SACCOs in term of Size so as to achieve financial soundness.

References

1. Allen, E. and Maghimbi, S. (2009). African Cooperatives and the Financial Crisis, *Coop Africa Working Paper No.3*, International Labour Organization.
2. CBK (2016). Bank Supervision Annual Report, Central Bank of Kenya.
3. Cossin, D., Ong, B.H., Coughlan, S. (2015). A Practical Perspective: Stewardship. Fostering Responsible Long-term Wealth Creation, *IMD*, Lausanne.
4. Donaldson, L. (2008). Ethics Problems and Problems with Ethics: Toward a Pro-Management, *Journal of Business Ethics*, Volume 78, pp. 299-311.
5. Desrochers, M. and Fischer, K.P. (2003). Theory and Test on the Corporate Governance of Financial Co-operative Systems: Merger vs. Networks, *Cahiers de recherche 0334*, CIRPEE.
6. Donaldson, L. and Davis, J.H. (1991). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns, *Australian Journal of Management*, 16(1), pp. 49-65.
7. FinAccess (2019). FinAccess Household Survey, Nairobi: FinAccess.
8. Gul, S., Sajid, M., Razzaq, N., Afzal, F. (2012). Agency Cost, Corporate Governance and Ownership Structure (The Case of Pakistan). *International Journal of Business and Social Science*, 3(9), pp. 268-277.
9. Gurbuz, A.O., Aybars, A., Yesilyurt, S. (2016). The Role of Agency Costs in Explaining Financial Performance Differences: An Empirical Analysis on Selected Public Firms in BRIC Countries. *Marmara Üniversitesi Öneri Dergisi*, 12(45), pp. 187-210.
10. Hastori, H., Siregar, H., Sembel, R., Maulana, N. (2015). Agency Costs, Corporate Governance and Ownership Concentration: The Case of Agro-industrial Companies in Indonesia. *Asian Social Science*, 11(18), pp. 311-319.
11. Mumanyi, E.A.L. (2014). Challenges and Opportunities Facing Saccos in the Current Devolved System of Government of Kenya: A Case Study of Mombasa County. *International Journal of Social Sciences and Entrepreneurship*, 1(9), pp. 288-314.
12. Niederkohr, K.C. and Ikeda, J. (2005). Credit Union Governance, *White paper*, World Council of Credit Unions (WOCCU).
13. Njekang, D.N. and Afuge, J.A. (2017). The impact of corporate governance on the financial performance of credit unions: The case of CamCCUL network. *International Journal of Multidisciplinary Research and Development*, 4(6), pp. 223-243.
14. Njenga, M.K. (2012). The Relationship between Agency Costs and Financial Performance of SACCOS with FOSSA in Githunguri District, *University of Nairobi Research Archive*. Retrieved at: <http://erepository.uonbi.ac.ke/handle/11295/95657>

15. O'Connell, A.A. (2006). Logistic Regression Models for Ordinal Response Variables. *SAGE Publications, Inc.* <https://www.doi.org/10.4135/9781412984812>
16. Onyim, C., Wanjare, M., Ooko, J., Oluoch, M.F. (2017). Corporate Governance Practices and Financial Performance of Deposit Taking Saccos in Western Kenya. *Scholars Journal of Economics, Business and Management*, 4(3), pp. 195-212.
17. Salim, M.A. (2014). The Relationship Between Agency Costs and Financial Performance of Firms Listed in Nairobi Securities Exchange, *University of Nairobi Research Archive*. Retrieved at: repository.uonbi.ac.ke/handle/11295/75712
18. SASRA (2018). The SACCO Supervision Annual Report, Nairobi: SACCO Societies Regulatory Authority (SASRA).
19. SASRA (2016). The SACCO supervision annual report, Nairobi-Kenya: SASRA: The SACCO Societies Regulatory Authority.
20. SASRA (2015). Guidelines on Good Governance Practices for Deposit Taking Sacco Societies, Nairobi: The SACCO Societies Regulatory Authority (SASRA).
21. Schillemans, T. and Bjurstrom, K.H. (2020). Trust and verification: balancing agency and stewardship theory in the governance of agencies. *International Public Management Journal*, 23:5, pp. 650-676. DOI: 10.1080/10967494.2018.1553807
22. VanSlyke, M. (2006). Agents or Stewards: Using Theory to Understand the Government Nonprofit Social Service Contracting Relationship. *Journal of Public Administration Research*, Volume 17, pp. 157-187.
23. Westley, G.D. and Branch, B. (2000). Safe money: building effective credit unions in Latin America, *Inter-American Development Bank*, Washington, D.C.