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Cash Flow Forecast and Its Effect on Financial Sustainability of Community Based Organizations in Kakamega County, Kenya

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Abstract:

Community-based organizations play a critical role in uplifting the livelihoods of thousands of Kenyans especially at the grassroots. Although the CBOs should have reliable funding or sources of income, this has not been the case. Rather, they have perennially been facing a shortfall of funding which has consequently compromised their operations or activities. The objective of this article was to evaluate the effect of cash flow forecast on financial sustainability of the CBOs. The agency cost and resource mobilization theories guided the article. A cross-sectional research design and quantitative approach were adopted. A sample of 213 CBOs' officials was drawn using simple random sampling technique from the CBOs operating in Kakamega County. A structured questionnaire was used to collect data. Descriptive and inferential statistics were used in the analysis which was facilitated by the Statistical Package for Social Sciences tool. The correlation results indicated a positive, moderately strong, and statistically significant relationship between cash flow forecast and financial sustainability of CBOs (r = 0.541; p = 0.000). Cash flow forecast was also found to explain 29.3% of variability in financial sustainability of these CBOs. Additionally, the effect of cash flow forecast on financial sustainability was revealed to be statistically significant (t = 7.025; p = 0.000). It was concluded that cash flow forecast was imperative in enhancing financial sustainability of the CBOs. Consequently, it was recommended that CBOs should assess how well their cash flows would ensure their financial sustainability.

Keywords: Cash flow forecast, cash flow management practices, community based organizations, financial sustainability, Kakamega County

1. Introduction

1.1. Background

Community-based organizations (CBOs) play a critical role in improving the livelihood of millions of the citizenry. Therefore, their sustainability, particularly financial sustainability is very crucial. More often than not, the aforesaid sustainability is contingent to cash flow within the organization. Cash flow is defined as a pool of funds that the company commits to its fixed assets, accounts receivables, marketable securities and inventories. It also represents all inputs and outputs in liquidities and cash equivalents in an organization. Cash flow is a key factor which enhances organizational operations and its performance (Efobi, 2008). A suitable and a well-developed cash flow mix ensures that shareholders value is maximized. Information regarding cash flow assist financial statement users to obtain relevant information on the use of all financial resources over a given period of time. Cash flows can be categorized as operating, investing and financing activities (Noor, Nour, Musa, & Zorqan, 2012).

Cash flow forecast is a projection of an organizations future financial position based on anticipated payments and receivables. It is one of the cash flow management practices. Cash flow forecasting is the process used to derive a cash flow forecast. Organization managers should develop both short term and long-term cash flow projections. Short term projections are normally prepared on a weekly or monthly basis and help in management of daily cash while long term projections are normally prepared on a period of 3 to 5 years and aid the management to develop the necessary capital strategy to meet their business needs(Penning & Fardon, 2010).

The value of a firm is determined by the present value of future cash flow that is predicted using specific information since it is difficult to predict precisely the future cash flow. Cash flow forecasting has become widely used through the aid of financial information services. Cash flow information enables practitioners to better understand the real operating performance and financial stability of a company especially when the earnings information is low quality. Cash

flow forecasts are less accurate when compared to earnings forecasts due to the volatile nature of cash flow (Yoo & Pae, 2011)

Financial sustainability is a measure of an organizations' ability to meet its financial obligations. It also refers to the ability of a firm to manage its financial resources and meet its present as well as its future spending commitments. For an organization to be sustainable it should independently cover its costs without aid from donors, government or external subsidies (Mutinda & Ngahu, 2016). In today's business environment financial sustainability is key since it ensures that an organization is able to achieve the intended objectives, and serve their stakeholders for a prolonged period of time (Wachira, 2018). According to Renz (2010) financial sustainability in CBOs refer to their ability to develop a diverse resource base in order to continue to serve its clients and maintain its institutional structure.

Globally, financial management of non-profit and profit organizations is similar but differ on the main goals since profit organizations focus on profit maximization while non-profit organizations focus on providing some socially desirable services. Non-governmental organizations in India are heavily reliant on unearned income which mainly comes from donations from the public, and businesses as well as grants from foundations and governmental agencies sustainability (Karanth, 2015)

In South Africa, the recent financial crisis has led to a sharp decline in donor funding, which has further resulted in severe financial challenges. The organizations encounter challenges as a result of reliance on external funding. Financial management is therefore, critical for economic sustainability of NPOs. Inventory management and accounts receivables management are less significant but the forecasting of future cash requirements and management is critical. It is reported that most NPOs in the country draw up cash budgets to compare the actual cash flows and the budgeted cash flows on a regular basis (Strydom & Stephen, 2014).

In Kenya, non-profit organizations' managers, employees, and board members are faced with perennial cash flow problems. The seasonal and cyclical fluctuations in funding impacts on the organization's cash inflows and outflows. Additionally, it is reported that non-profit organizations are involved in cash management and regularly produce cash flow statements to show their projected cash inflows and outflows. NPOs performance is affected by their budgeting practices, working capital management and inventory management (Kang'aru & Tirimba, 2018).

Financial sustainability has become critical to CBOs for stability and growth enhancement. The social and economic development services being provided by the organizations is largely dependent on donations and grants from western donors and the government with little interest capacity for development. As a result of donor fatigue, closure of donor funded projects in the country has led to disillusionment of both direct and indirect beneficiaries. It is therefore, necessary for the organizations to develop diversified resource source and implement strategic financial management practices. The CBOs depending on external funding are forced to review their structures and operations to comply with the grants agreements and conditions imposed by donors (Abong'o & Ombaba, 2018).

This article focuses on CBOs in Kakamega County. In Kakamega County, most people depend on rain-fed farming mainly maize, beans and potatoes. CBOs in the County are therefore, used to sensitize the locals to use the resources available to them to change their livelihoods. CBOs also help in poverty alleviation as well as training and empowerment programmes in different fields including those infected with HIV/AIDS. The organizations make use of Constituency Development Fund and Local Authority Transfer Fund. Most CBOs are composed of women (Kinyua, 2013).

1.2. Statement of the Problem

Community-based organizations play an important role in uplifting the livelihoods of thousands of ordinary citizens particularly at the grassroots. From agricultural projects to business enterprises to fight against diseases and poverty, CBOs have come in handy to address the living standards of people at community level. In order to successfully and sustainably cope with the ever-rising socio-economic needs of these people, financing is paramount. Ideally, therefore, CBOs are supposed to have continuous funding or reliable sources of finance for the foregoing to be achieved. Yet, this has not been the case. Reports indicate that compared to other African countries such as Nigeria and Zimbabwe, CBOs in Kenya receive comparatively lower funding from multinational organizations. A case in point is average annual funding of US\$ 10,000 to Kenyan CBOs relative to Nigeria and Zimbabwe whose CBOs received an average of US\$ 16,000 and US\$ 72,000 annual funding respectively towards the fight against HIV/AIDS in year 2012 (Krivelyova, et al., 2013). A local study further noted that inadequate finding was part of the problems that faced performance of CBOs in Kenya. This was in spite of the important role these organizations played in poverty alleviation as well as addressing youth unemployment and drug abuse particularly among the youth (Gikonyo, 2012). With reduced funding, the financial sustainability of CBOs is likely to be compromised unless there are other reliable sources of finance. Failure to address the financial sustainability of the CBOs is bound to have far-reaching ramifications especially on the ordinary citizens who are essentially the beneficiaries of the CBOs' activities. The related studies that have hitherto been conducted have not adequately addressed how cash flow forecast and financial sustainability of CBOs are linked. For instance, Gikonyo's study assessed performance of CBOs in Kenya without specifically addressing financial sustainability and how it is influenced by cash flow forecast. Another study examined funding for CBOs and found that training in resource mobilization, donor relationship, and knowledge of grant manager working with a funding organization were instrument in mobilization of funds (Hoerner, 2012). This notwithstanding, the study did not address financial sustainability of these CBOs nor did it link sustainability to cash flow forecast. This presents a research gap, which coupled with lack of financial sustainability of CBOs, prompted carrying out of this study.

1.3. Research Objective

The objective was to assess the effect of cash flow forecast on financial sustainability of CBOs in Kakamega County.

1.4. Research Hypothesis

• H₀: Cash flow forecast has no significant effect on financial sustainability of CBOs in Kakamega County.

2. Literature Review

2.1. Theoretical Framework

The study was guided by both the agency cost theory and resource dependency theory. These theories have been discussed in relation to cash flow forecast and financial sustainability of community-based organizations.

2.1.1. Agency Cost Theory

The germinal agency cost theory was proposed by Jensen and Meckling (1976). The theory analyses the conflict between shareholders and managers who act as agents of the principle. Conflict arises because shareholders need payouts for their investments which ultimately reduce the internal resources controlled by managers (Jensen, 1986). The desire for higher rewards makes managers to manipulate, underestimate, or overestimate indicators to make them more achievable at the detriment of the value of the firm. Managers are, for instance, likely to favour projects with low NPV value if they provide immediate profits (Dogan & Smyth, 2002).

The agency costs of separating ownership from control should not be excessive so long as factors such as incentive plans, executive labour market and competition are designed to reduce the self-interest of managers (Jensen & Meckling, 1976). The two aspects of the agency problem are adverse selection and moral hazard. Adverse selection refers to the misinterpretation of the agents' abilities while moral hazard refers to the agent not putting forth the agreed upon effort. Incentives and information affect the contractual relationship between principals and agents (Eisenhardt, 1989).

The prominence of the theory is influenced by its simple nature since it reduces a corporation to two participants that is the agent and the principal (Daily, Dalton, & Rajagopalan, 2003). The theory also holds that agent's opportunism can be curbed by incentive alignment and information systems which enable the principal to verify agent's behaviour. The theory further emphasizes the need for proper coordination and teamwork in order to maximize value of the firm and the wealth of both the principal and the agent (Fama & Jensen, 1983).

The theory examines the economic characteristics of organizations in relation to behavioral implications for governance and resource allocation mechanisms. The theory creates conceptual links between different governance procedures and the conditions that cause the agency problem (Kivisto, 2007). Moreover, the theory aids in implementing the various governance mechanisms to control the agent's actions in jointly held corporations. Furthermore, incentive-based contracts make agents act in favour of the principal (Panda & Leepsa, 2017).

The theory assumes bounded rationality which gives rise to information asymmetry between the parties. The theory also concentrated on the agent side of the agency problem, the realignment of both the parties' interests, and the agency costs and ignored agent's motivation, risk averseness, equitable compensation as well as the principals who deceive and exploit the agents (Perrow, 1986). The theory further assumes that contracting can eliminate the agency problem although it faces many challenges such as rationality, transaction cost, information asymmetry and rationality (Shleifer & Vishy, 1986).

The agency cost of companies in which free cash flow is high can be a lot, an issue that tends to decrease the value of the firm. Managers need to control the agency cost associated with free cash flow so as to ensure firm sustainability and survival. When organizations receive more cash flow than expected they tend to invest on projects with high net present value (Nozari, 2016). Community based organizations should employ cash flow management practices in order to ensure that the managers utilize the funds received in a transparent manner and on projects and programmes which are beneficial to the community. Essentially their self-interests should be subordinate to the overall interests of CBOs.

2.1.2. Resource Dependency Theory

The resource dependence theory was first introduced by Pfeffer and Salancik (1978). It focuses predominantly on power relationships within and among organizations. The theory holds that a corporation is an open system which is dependent on the contingencies in the external environment. The theory posits that to understand the behaviour of an organization it is important to know the ecology of the organization. Differences in behaviour of organizations can be traced back to differences in management decisions which are influenced by the internal and external agents controlling critical resources (Pfeffer & Salancik, 1978).

The environment in reference to the theory provides critical resources required by a firm hence in order to comprehend organizational behaviour it is necessary to identify the critical resources. It is further postulated that organizations strive to cease or reduce uncertainty. The theory assumes that all organizations depend on a flow of valuable resources like money, technology and skills in to the organization in order to continue functioning. The ability to exercise control over any of these valued resources provides an individual or group with an important source of power (Pfeffer, 1981).

The theory recognizes the influence of external factors on organizational behaviour. The theory further holds that managers although constrained by their context can act to reduce environmental uncertainty (Ulrich & Barney, 1984). The theory also has the power to explain how different organizational structures emerge like why and under which conditions mergers are formed. The theory emphasizes on the environment and the processes of gaining resources as opposed to most theories that concentrate on the internal processes of resource use (Pfeffer & Salancik, 2003).

The emphasis on power and the careful articulation of explicit range of tactics available to organizations is the hallmark of the theory which distinguishes it from other approaches. Prior theorists had propounded on the relevance of

inter-organizational power to strategy and structure, but Research Dependency Theory added an elaborate catalogue of organizational responses to interdependence (Davis & Cobb, 2010). Resource dependency theory focuses on the role the board of directors play in providing or securing essential resources of an organization through their linkage to the external environment and how the resources are utilized for maximum output (Hillman, Cannella, & Paetzold, 2000).

The theory makes assumptions about actors and their relation to the environment, rather, than proposing that the environment and dependency on critical resources directly influence organizational behaviour behind the back of actors involved. The theory assumes bounded rationality which takes in to account the limits in formulating and solving complex problems as well as in receiving, storing, retrieving and transmitting information. Moreover, organizations are viewed as political systems in search of power and disregards economic factors when explaining mergers (Donaldson, 1995).

According to research dependency theory, organizations need resources in order to survive hence they seek relationships with organizations that are endowed with the resources they require. This makes the organizations dependent on this source of resources. The dependability lowers their financial sustainability. As in the case of CBOs which are heavily reliant on donor funds, it is necessary to ensure that they set up effective cash flow management strategies such as budgeting, cash flow forecasting and planning to ensure the continuous flow of donor funds. There is also need for CBOs to diversify the sources of funding as well as engage in various income generating activities in order to enhance their financial sustainability. Conclusively, in line with the resource dependency theory, CBOs are likely to be better positioned when they create and maintain cordial relationships with donor agencies.

2.2. Conceptual Framework

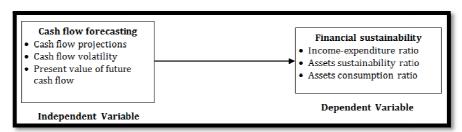


Figure 1: Conceptual Framework

As shown in Figure 1, the independent variable is cash flow forecasting while financial sustainability is the dependent variable. Cash flow projections, cash flow volatility, and present value of future cash flow operationalized cash flow forecasting. On the other hand, the indicators of financial sustainability included income-expenditure, assets sustainability, and assets consumption ratios. It was hypothesized that there existed a relationship between cash flow forecasting and financial sustainability of CBOs in Kakamega County. This hypothesis guided this article

2.3. Empirical Review

Past studies have been reviewed on cash flow forecasting and financial sustainability of CBOs and related organizations.

2.3.1. Cash Flow Forecasting

A number of studies conducted in the past in relation to cash flow forecast have been reviewed. A case in point is an empirical analysis of cash flow forecasts by DeFond and Hung (2001). The study, which was carried out in the United States, was based on an investigation of trend in analysts disseminating operating cash flow forecasts. There are a number of observations which the study made. It was revealed that analysts tended to forecast cash flows for firms with large accruals, high earnings volatility, poor financial health, high capital intensity, and more heterogeneous accounting choices in relation to their peers in the industry.

An empirical study on Ugandan NGOs was carried out by Silva and Burger (2015) with the primary of objective of determining financial vulnerability of the aforesaid organizations. The study adopted methodologies employed by similar previous studies. Data drawn from 295 NGOs in Uganda was used to evaluate the possible relationship between organizational characteristics and financial vulnerability. It was found that larger and community-funded NGOs were less likely to be financially vulnerable. Moreover, the study revealed that both revenue concentration and surplus margin were significant predictors (forecasters) of financial vulnerability. Predicting and forecasting are similar terms, whereas, financial vulnerability can be pegged on cash flow position. As such, it is factual to infer that revenue concentration, surplus margin and equity are variables that are crucial in forecasting cash flows of NGOs.

In a case of non-governmental organizations operating in Nairobi, Kenya, Kimonge (2011) examined the relationship between cash flow management and the organizations' financial performance. The study used secondary data obtained from the financial statements and the database of the NGOs Coordination Board. The foregoing was panel data for the years 2006 to 2010 which was subsequently analyzed using both simple and multiple regression analyses. Albeit the fact that the study observed that there existed no statistically significant relationship between cash flows management and financial performance, the results of the coefficient of determination provided a metric of how well future outcomes were likely to be predicted by the model adopted by the study.

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2.3.2. Financial Sustainability

Global, regional and local studies on financial sustainability of non-profit making organizations have been reviewed. A study analyzing the key determinants of non-governmental organizations financial sustainability was conducted by Paredes, Moreno and Santos (2019) in Spain. The purpose of the study was to map the determinant attributes which define and enable financial sustainability in Sport NGOs. An exploratory case study design was adopted for the study. The sample for the study consisted of 48 organizations. Semi-structured interviews were used in data collection. It was observed that the organizations financial sustainability was dependent on international aid agencies funds and corporate partnerships.

Regionally, a study examining the funding challenges and financial sustainability trends of non-profit organizations in South Africa was conducted by Maboya (2016). The study aimed at determining the factors which influenced the financial sustainability of non-profit organizations in the country. The study sample comprised of senior managers from the top ten non-profit organizations operating in the country. Semi-Structured interviews were used in data collection. The study found that the factors which influenced the organizations financial sustainability were donor relations, donor conditions as well the ability to identify new funding avenues.

Locally, a study assessing the financial sustainability of CBOs in Mt Elgon Sub-County was conducted by Cheptot, Iravo and Wandera (2016). The study adopted descriptive survey research design. A sample population of 110 registered and active CBOs was selected using simple random sampling. Data were collected using questionnaires and analyzed using descriptive, inferential and regression analysis. It was established that diversity of funding sources and sustainable financial management practices had significant effects on financial sustainability of CBOs. It was recommended that CBOs should engage in income generating activities.

3. Methodology

A research design is defined a roadmap which guides how a study is carried out (Kothari & Garg, 2015). Given that a cross-section of CBOs operating in Kakamega County were projected to take part in the study that was conducted over a relatively short and specified period of time, a descriptive survey design was adopted. Besides the aforesaid research design, quantitative approach was employed. The choice of this approach is founded on the fact that the current study sought to collect numerical (quantifiable) data from the members of a cross-section of CBOs in Kakamega County. In line with scholarly assertion, this approach facilitated collection of data that was not only easy to analyze and interpret in line with the study objectives, but also appropriate in drawing inferences guided by the stipulated hypotheses (Creswell, 2009).

The members of CBOs in Kenya comprised the target population. Due to the relatively large number of such staff, the study narrowed down to a smaller accessible population which was delimited to officials comprising chairpersons, secretaries and treasurers of CBOs in Kakamega County. According to the States Department for Social Protection under the Ministry of East African Community (EAC), Labour and Social Protection, the aforesaid personalities constitute the management committee of CBOs in Kenya (Republic of Kenya, 2016). There are 92 registered CBOs in the County. Therefore, the total number of officials totals 460.

A sample of 213 CBO officials was projected to participate in the study. These respondents were drawn from respective CBOs using simple random sampling technique. The choice of this technique was informed by the fact that it removes bias from the selection procedure since every projected respondent had an equal chance to participate in the study thus resulting in a more accurate representative sample (Gravetter & Forzano, 2011).

A structured questionnaire was employed in data collection. The choice of a research instrument was informed by the research design and approach, and also the scope of the study. Questionnaires are the most suitable tools for collecting data in survey studies (Mugenda & Mugenda, 2003) similar to the current study. Since the study adopted a quantitative approach, the questionnaire was structured to enable collection of numerical data pertinent to CBOs' demographics and research objectives. The questions or data items on the latter section were on a 5-point Likert scale. The questionnaire was pilot tested in order to assess its eligibility in facilitating collection of both valid and reliable data.

Data were collected from the respondents after obtaining the relevant consents, approval and research permit. The Statistical Package for Social Sciences (SPSS) was used to analyze data. Pearson's correlation and simple linear regression analysis were used to analyze data. The following model was adopted in the analysis.

 $Y = \beta_0 + \beta_1 X_1 + \varepsilon$

Where:

Y represents 'Financial Sustainability' X₁ represents 'Cash Flow Forecast' β₀ represents 'Regression Coefficient' ε represents 'Error Term'

4. Results

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4.1. Descriptive Statistics

The views of the officials working with CBOs in Kakamega County were sought in respect of both cash flow forecasting and financial sustainability. The results to this effect are presented in Table 1 and Table 2.

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Propositions		2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std Dev
Our CBO always keep records of anticipated payments		2.5	27	43.4	24.6	3.9	0.91
Our CBO always keep records of anticipated receivables		1.6	2.5	45.9	47.5	4.3	0.82
We often prepare short-term cash flow projections i.e. every week or at most every month		21.3	16.4	37.7	10.7	3.1	1.26
Our organization often makes long- term (3 to 5 years) cash flow projections		7.4	47.5	13.1	23.8	3.4	1.17
Our CBO always make a determination of present value of future cash flow	1.6	4.9	1.6	54.1	37.7	4.2	0.84
Over the past few years (5 years) our CBO has experienced volatile cash flows		3.3	27.9	20.5	45.9	4.0	1.05

Table 1: Descriptive Statistics for Cash Flow Forecast

According to the results shown in Table 1, it is apparent that majority of the surveyed officials admitted that the CBOs always kept records of anticipated payments (68.0%) and anticipated receivables (93.4%). Whereas a majority (48.4%) of the respondents concurred that they often prepared short-term cash flow projections, that is, on weekly basis or at most every month, a sizeable number (35.2%) disputed the assertion. Expectedly, the respondents were generally indifferent on this proposition (mean = 3.1; std dev = 1.26). On average, the respondents admitted that the CBOs always made a determination of the present value of future cash flow (mean = 4.2), and that the CBOs had experienced volatile cash flows over the preceding five years (mean = 4.0). On the latter assertion, the respondents held largely diverse opinions (std dev = 1.05). The participating staff generally neither agreed nor disagreed that the CBOs often made long term cash flow projections ranging from 3 to 5 years (mean = 3.4; std dev = 1.26). The results were in support of findings made by a study conducted byLi, Moutinho, Opong and Pang (2015). The study emphasized the importance of the information arguing that it enables forecasting which gives employees prediction on their job security as well as enabling the creditors to understand solvency issues of firms they transact with.

Statements		2	3	4	5	Mean	Std Dev
	(SD)	(D)	(N)	(A)	(SA)		
Income generating activities have significantly	8.0	1.6	23	60.7	13.9	3.9	0.70
contributed to our CBO's financial wellbeing.							
Donations make up a substantial proportion of our	1.6	2.5	12.3	55.7	27.9	4.1	0.81
CBO's finances.							
There has been a significant increment in the income-		4.1	28.9	62.8	3.3	3.6	0.66
expenditure ratio over the past one year.							
Our CBO significantly diversified its sources of revenue		3.3	23.1	19	48.8	4.0	1.18
enhancing financial sustainability							
Our CBO has reported positive operating surplus ratio.		14.8	16.4	23	38.5	3.7	1.32
Our CBO has reported positive net liabilities ratio.		4.9	19.7	25.4	42.6	3.9	1.22
Our CBO has reported positive interest cover ratio.		3.3	23	55.7	17.2	3.9	0.77
Our CBO has reported positive asset sustainability ratio.		4.1	9	56.6	28.7	4.1	0.83
Our CBO has reported positive asset consumption ratio.		15.6	24.6	45.1	12.3	3.5	0.98

Table 2: Descriptive Statistics for Financial Sustainability

According to the results shown in Table 2, majority of the respondents (74.6%) agreed that the income generating activities had significantly contributed to the CBOs' financial wellbeing. It was also concurred by most of the respondents that donations made up a substantial proportion of the CBOs' finances (83.6%); there had been significant increment in the income-expenditure ratio over the past one year (66.1%); and that the CBOs significantly diversified their sources of revenue enhancing thus enhancing financial sustainability (67.8%). Generally, the CBOs' official agreed that their organizations had reported both positive interest cover ratio (mean = 3.9) and asset sustainability ratio (mean = 4.1). On these issues their views were largely similar (std dev < 1.00). Albeit the fact that, on average, the sampled officials admitted that the CBOs operating in Kakamega County had reported positive operating surplus ratio (mean = 3.7) and net liabilities ratio (mean = 3.9), their opinions on this assertion were significantly divergent (std dev > 1.00). Although majority of the respondents were in concurrence (mean = 3.5), there was considerable indifference towards the proposition that the aforesaid CBOs had reported positive asset consumption ratio (neutral = 24.6\%).

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4.2. Inferential Statistics

This section presents the results of both correlation and simple linear regression analyses in respect of cash flow forecast and financial sustainability.

4.2.1. Correlation Analysis

The Pearson's Product Moment Correlation Coefficient (PPMCC) was employed to analyze the relationship between cash flow forecast and financial sustainability of CBOs operating in Kakamega County. The results to this effect are presented in Table 3.

		Cash Flow Cycle	Sustainability			
Cash flow forecast	Pearson Correlation	1	.541**			
	Sig. (2-tailed)		.000			
	n	120	120			
Financial sustainability Pearson Correlation		.541**	1			
Sig. (2-tailed)		.000				
n		120	120			
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 3: Results of PPMCC between Cash Flow Forecast and Financial Sustainability

It was revealed as illustrated in Table 3 that, there existed a positive, moderate strong relationship between cash flow forecast and financial sustainability (r = 0.541). The relationship was also found to be statistically significant (p = 0.000) at p-value = 0.05. The results were interpreted to mean that enhancement of cash flow forecast was likely to moderately and substantially increase financial sustainability of the CBOs in Kakamega County. The results underlined the importance of the effectiveness of cash flow forecasting in ensuring that the aforementioned organizations were financially sustainable.

4.2.2. Simple Linear Regression Analysis

In order to determine the effect of cash flow forecast on financial sustainability of CBOs, simple linear regression analysis was carried out. The pertinent results are presented in Table 4, Table 5, and Table 6 respectively.

Model	Model r r Square Adjusted r Square		Std. Error of the Estimate			
1	.541a	.293	.287	.50747		
a. Predictors: (Constant), Cash Flow Forecast						

Table 4: Model Summary of Cash Flow Forecast against Financial Sustainability

Apparently, the results of coefficient of determination shown in Table 4 (r^2 = 0.293) indicated that cash flow forecast could explain 29.3% of variability in financial sustainability of CBOs in Kakamega County. The results meant that cash flow forecast was of considerable importance to financial sustainability of the CBOs.

	Model	Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	12.710	1	12.710	49.353	.000b		
	Residual	30.646	119	.258				
	Total	43.355	120					
	a. Dependent Variable: Financial sustainability							
	b. Predictors: (Constant), cash flow forecast							

Table 5: ANOVA of Cash Flow Forecast Against Financial Sustainability

The results of F-statistics depicted in Table 5 ($F_{1,119} = 49.353$; p = 0.000) indicated that the model ($Y = \beta_0 + \beta_1 X_1 + \epsilon$) linking cash flow forecast to financial sustainability was statistically significant at p-value = 0.05. This meant that the relationship between the two study constructs was linear. Therefore, the sample data used fitted the aforesaid simple linear regression model, and it was feasible to analyze the effect of cash flow forecast on financial sustainability as shown in Table 6.

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta				
1	(Constant)	2.275	.226		10.088	.000		
	Cash flow forecast	.405	.058	.541	7.025	.000		
	a. Dependent Variable: Financial sustainability							

Table 6: Regression Coefficients of Cash Flow Forecast against Financial Sustainability

According to the results shown in Table 6, the model $(Y = \beta_0 + \beta_1 X_1 + \epsilon)$ was interpreted as $Y = 2.275 + 0.405X_1$. This meant that for every unit change in financial sustainability (Y = 1), there had to be 0.405 unit change in cash flow forecast $(\beta_1 = 0.405)$ while other factors were held constant $(\beta_0 = 2.275)$. The results of t-statistic (t = 7.025; p = 0.000) indicated that the effect of cash flow forecast on financial sustainability of CBOs in Kakamega County was statistically significant at p-value = 0.05. The latter results led to the rejection of the null hypothesis which stated that: Cash flow forecast has no significant effect on financial sustainability of CBOs in Kakamega County. Therefore, the importance of cash flow forecast in enhancing financial sustainability of the CBOs was underlined by the study results.

5. Conclusions and Recommendations

Conclusions were drawn from the major findings of the article and subsequently pertinent recommendations were made.

5.1. Conclusions

The article concluded that CBOs were organized and sufficiently prepared in issues relative to cash flow forecast. For instance, it was inferred that the CBOs kept records of anticipated payments and receivables. Although the organizations made short-term projections of their cash flows, it was not apparent if they made cash long-term cash flow projections. The latter is crucial in determination of financial sustainability of an entity including CBOs. It was also concluded that the CBOs experienced volatile cash flows which was an indication of compromised financial sustainability. Income generating activities and projects were deduced to be imperative in enhancing financial sustainability of community-based organizations. On a similar note, it was concluded that the CBOs in Kakamega County had diversified their sources of income, most probably, with the intent of ensuring that they were financially sustainable. Moreover, cash flow forecast was inferred to be imperative in enhancing financial sustainability of CBOs.

5.2. Recommendations

The article has made several recommendations relative to cash flow forecast and financial sustainability of CBOs. It is recommended that all CBOs, irrespective of their sizes and industry, should always make short-term, medium-term, and long-term cash flow projections. This would enable these organizations to be at a vantage position to determine how well their cash flows are or are likely to be in the near and far future. Consequently, they are likely to be more effective in developing mechanisms and strategies for ensuring that the CBOs are financially sustainable. It was also recommended that the CBOs should increase the scope of their income generating activities so that they can be financially stable in the long-term and thus reduce their dependence of donations and grants.

6. References

- i. Abong'o, F. O., & Ombaba, K. M. (2018). Financial management capacities and financial sustainability of community based organizations in Turkana County, Kenya. Africa International Journal of Multidisciplinary Research, 2(3), 59-69.
- ii. Cheptot, A., Iravo, M., & Wandera, R. W. (2017). Financial sustainability of community based organizations in Mt. Elgon Sub-County, Kenya. International Journal of Management and Commerce Innovations, 4(2), 395-402.
- iii. Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- iv. Daily, C. M., Dalton, D. R., & Rajagopalan, N. (2003). Governance through ownership. The Academy of Management Journal, 46(2), 151-158.
- v. Davis, G. F., & Cobb, A. (2010). Resource dependence theory: Past and future. Research in the Sociology of Organizations, 28, 21-42.
- vi. DeFond, M., & Hung, M. (2001). An empirical analysis of analysts' cash flow forecasts. SSRN Electronic Journal, 35(1), 73-100. doi:10.1016/S0165-4101(02)00098-8
- vii. Dogan, E., & Smyth, R. (2002). Board renumeration, company performance and ownership concentration. Asean Economic Bulletin, 19(3), 319-347.
- viii. Donaldson, L. (1995). American anti-management theories. Cambridge, United Kingdom: Cambridge University Press.
 - ix. Efobi, R. U. (2008). The impact of capital structure on corporate profitability in Nigeria. Unpublished MSc Thesis , Department of Accountancy, Lagos.
 - x. Eisenhardt, K. M. (1989). Agency theory: An assessment and review. Academy of Management Review, 14(1), 57-74.
- xi. Fama, E., & Jensen, M. (1983). Separation of Ownership and Control. Journal of Law and Economics, 26(2), 288-307.
- xii. Gikonyo, J. W. (2012). Assessment of the Performance of Community Based Organizations in Kenya. Master of Business Administration thesis, Kenyatta University, Nairobi.
- xiii. Gravetter, F. J., & Forzano, L. B. (2011). Research methods for the behavioural sciences. Boston, MA: Cengage Learning.
- xiv. Hillman, A. S., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. Journal of Management Studies, 37, 235-255.

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- xv. Hoerner, E. (2012). Worlds of potential: Funding for community-based organizations in Nairobi, Kenya. Clocks and Clouds, 1(1), 1-13.
- xvi. Jensen, M. C. (1986). Agency cost of free cash flow. American Economic Review, 76(2), 323-330.
- xvii. Jensen, M. C., & Meckling, W. (1976). Theory of the firm: Managerial behaviour, agency cost and ownership structure. Journal of Financial Economics, 3(4), 305-360.
- xviii. Kang'aru, P. N., & Tirimba, I. (2018). Effects of financial planning practices on the performance of non profit making health organizations in Kiambu County, Kenya. International Journal of Scientific and Research Publications, 8(5), 600-623.
- xix. Karanth, B. (2015). Funds Management in NGOs: A conceptual framework. AIJBSR, 116-129.
- xx. Kimonge, H. K. (2011). The Relationship beween Cash Flow Management and the Financial Performance of NGOs in Kenya: A Case of NGOs in Nairobi. Unpublished Master of Business Administration research project, University of Nairobi, Nairobi.
- xxi. Kinyua, R. K. (2013). The influence of community based organizationa on the achievement of millenium development goals: A case of Lugari Sub-County in Kakamega County. Unpublished Master of Arts in Project Planning, University of Nairobi, Nairobi.
- xxii. Kivisto, J. A. (2007). Agency theory as a framework for the government-university relationship. Tampere, Finland: Tampere University Press.
- xxiii. Kothari, C. R., & Garg, G. (2015). Research Methodology: Methods and Techniques. New Delhi, India: New Age International Publishers.
- xxiv. Krivelyova, A., Kakietek, J., Connolly, H., Bonnel, R., Manteuffel, B., Rodriquez-Garcia, R., . . . Agrawal, R. (2013). Funding and expenditure of a sample of community-based organizations in Kenya, Nigeria, and Zimbabwe. Psychological and Socio-medical Aspects of AIDS/HIV, 25(Sup 1), 20-29.
- xxv. Li, Y., Moutinho, L., Opong, K. K., & Pang, Y. (2015). Cash flow forecast for South African firms. Review of Development Finance, 5, 24-33.
- xxvi. Maboya, M. (2016). Exploring the funding challenges and financial sustainability trends of selected non-profit organizations in South Africa. Unpublished Master of Business Administration, University of Pretoria, Pretoria.
- xxvii. Mugenda, O. M., & Mugenda, B. (2003). Research Methods: Quantitative and Qualitative Approaches. Nairobi: Nairobi University Press.
- xxviii. Mutinda, S. M., & Ngahu, S. (2016). Determinants of financial sustainability for non-governmental organizations in Nakuru County. Journal of business and Management, 18(9), 81-88.
 - xxix. Noor, M. I., Nour, A., Musa, S., & Zorqan, S. (2012). The role of cash flow in explaining the change in company liquidity. Journal of Advanced Social Research, 2(4), 231-243.
 - xxx. Nozari, A. (2016). The impact of financial leverage on agency cost of free cash folws in listed manufacturing firms of Tehran stock exchange. The Turkish Online Journal of Design, Art and Communication, 2137-2144.
 - xxxi. Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of the theory and evidence on problems and perspectives. Indian Journal of Corporate Governance, 10(1), 74-95. doi:10.1177/0974686217701467
- xxxii. Paredes, M. J., Moreno, F. C., & Santos, A. M. (2019). Key determinants on non-governmental organizations financial sustainability. Sustainability, 11(1411), 1-19.
- xxxiii. Penning, A., & Fardon, M. (2010). Cash management. Worcester: Osborne Books Limited.
- xxxiv. Perrow, C. (1986). Complex organization. New York, NY: Random House.
- xxxv. Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. Organizational Behaviour, 3, 1-52.
- xxxvi. Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence perspective. New York, NY: Harper & Row.
- xxxvii. Pfeffer, J., & Salancik, G. R. (2003). The external control of organizations: A resource dependence perspective. Stanford, CA: Stanford University Press.
- xxxviii. Renz, D. O. (2010). The Jossey-Bass handbook of non-profit leadership and management. San Francisco, CA: Jossey-Bass.
- xxxix. Republic of Kenya. (2016). Application Form for Regestration of a Community Based Organization (CBO). Nairobi, Kenya: Department of Social Development, State Department for Social Protection, Ministry of East Africa Community, Labour and Social Protection.
 - xl. Shleifer, A., & Vishy, R. (1986). Large shareholders and corporate control. Journal of Political Economy, 94(3), 461-488.
 - xli. Silva, B., & Burger, R. (July 15 18, 2015). Financial Vulnerability: An Empirical Study of Ugandan NGOs. 5th CIRIEC International Research Conference on Social Economy 'The Socual Economy in a Globalized World'. Lisbon, Portugal: ISCTE University Institute of Lisbon.
 - xlii. Strydom, B., & Stephen, T. (2014). Financial management in non-profit organizations. Mediteranean Journal of Social Sciences, 5(15), 55-66.
- xliii. Ulrich, D., & Barney, J. B. (1984). Perspectives in organizations: Resource dependence, efficiency and population. Academy of Management Review, 9, 471-481.
- xliv. Wachira, R. N. (2018). Financial sustainability determinants of government owned entities in Kenya. Unpublished PhD Thesis, Jomo Kenyatta University of Agriculture and Technology, Nairobi.
- xlv. Yoo, C.-Y., & Pae, J. (2011). Estimation and prediction tests of cash flow forecast accuracy. Journal of Forecasting.