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THE EFFECT OF FINANCIAL MANAGEMENT ON THE PERFORMANCE OF NON-PROFIT ORGANIZATIONS: AN EMPIRICAL STUDY IN HAITI

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Abstract

The purpose of this research is to examine the influence of financial management on the achievement of goals of non-profit organizations. Financial data of forty international non-profit organizations that provided services in the field of basic education and health care was analyzed in this study. The efficiency of financial management of non-profit organizations was measured by fiscal performance ratio, fund raising efficiency ratio and public support ratio. The general performance of those non-profit organizations was measured by the number of people benefiting from their basic education and health care services. The findings show that fiscal performance ratio and fund raising efficiency are significantly associated with the performance of non-profit organizations. Predictably, the size of non-profit organizations, as measured by total assets, also positively affects their performance.

Key Words: financial management, performance of non-profit organizations, fiscal performance ratio, fund raising efficiency ratio, public support ratio

Introduction

According to the WTO (2007), managers and employees have increasingly recognized the importance of finance in non-profit organizations. Employees, including managers, participate in all kinds of activities in order to increase the organization's performance and ensure its success. In fact, the management of the organization's resources will determine the life of the organization (York, 2010). It is important to harmonize the use of various resources within organizations in order to ensure the organization's performance and sustainability. During the 21 century, non-profit organizations have continued to occupy the focal point of every successive development plan in less-developed countries. Financial performance of non-profit organizations is very important for their sustainability and achievement of their goals. As many of non-profit organizations' missions are geared towards helping local communities, proper management of the organizations' resources, which allows accomplishment of their missions, can also benefit the communities in which non-profit organizations operate (Bureau, 2010).

Whether the organization is large or small, local or international, private or public, its performance depends on efficient management of its financial resources (Green and Griesinger, 2006). Hence, financial management of non-profit organizations is expected to have a significant impact on their performance, even when their size is controlled for. The objective of this research is to investigate the impact of effective financial management on general performance of non-profit organizations and their achievement of goals.

This study is focused on the relationship between efficiency of financial management of non-profit organizations and the results of their activities in providing access to basic education and health care in Haiti. This research is expected to provide useful information to interested parties, especially to professions in the area of finance who work in non-profit organizations. This study expands the literature on non-profit organizations by providing some insights for both academics and practitioners.

Literature Review

Non-profit organizations are legal and economic institutions with a mission to advance the economic and social welfare of a society (Bryce and Bryce, 1999). Non-profit organization operates for different purposes whether they are charitable, humanitarian, scientific, or educational, including promotion of literacy. Financial management of non-profit organizations is similar to that in the commercial sector in many respects; however, rather than increasing share-holder value, non-profit organization's primary goal is to provide for some socially desirable need on an ongoing basis (Anthony, 2010). The management and reporting activities of non-profit organizations emphasize stewardship for the resources donated to them (DeWitt, 2010).

Due to the importance of donated resources, financial managers of non-profit organizations not only determine the fund raising targets but also identify the best instruments that meet donors' requirements (Keating and Frumkin, 2001). The funds obtained through ongoing fund raising generally cannot be used for activities that are outside the strategic plan without threatening the mission and long-term sustainability of the organization (Bryce and Bryce, 1999).

Since the 1990s, there have been several empirical studies that measured the financial performance of non-profit organ-

izations using various financial ratios. According to Abraham (2004) and Glynn et al. (2003), "Ratio analysis is considered as a well-established tool to evaluate the performance of organizations profitability, liquidity and financial stability". Tuckman (1991) indicated the unreliability of applying financial ratios analysis, which has been devised for use in private sector or profit organizations, to non-profit organizations and developed financial ratios applicable to non-profit organizations in the first place. He proposed using four financial ratios to analyze whether or not a non-profit organization is financially vulnerable. These financial ratios include: Low Administrative Costs, Revenue Concentration, Inadequate Equity Balances and Low or Negative Operating Margins.

The ratios employed in this study to analyze the financial performance of non-profit organizations are as follows: fiscal performance ratio, fundraising efficiency ratio, and public support ratio. The fiscal performance ratio shows the fiscal management status of the organization (Siciliano, 1997). Fundraising efficiency measures the relationships between fundraising costs and total contribution and indicates the amount raised for each dollar of fundraising cost incurred (Green and Griesinger, 2006; Janet and Bukov-insky, 1998; Lee, 2010). Public support ratio indicates the extension of the dependence of the organization on direct public support (Siciliano, 1997; Lee, 2010).

Lee (2010) and Green and Kiesinger (2006), show that the performance of non-profit organizations (in terms of achieving their goals) depends on efficient management of their financial resources. Financial weaknesses of a non-profit organization limit the quality and quantity of services that it may provide to people in need (Green and Griesinger, 2006). Bryce and Bryce (1999) studied the effect of total assets on the goal achievement of non-profit organizations. He showed that the size of non-profit organizations is correlated with their ability to provide social services to population in need in less developed countries.

Based on the existing literature, as well as the gaps in it, and the objectives of this study, the following four hypotheses are discussed and tested in the remaining sections of this paper.

Hypothesis 1: Fiscal performance is positively associated with the performance of non-profit organizations.

Hypothesis 2: Fund raising efficiency is positively associated with the performance of non-profit organizations.

Hypothesis 3: Public support is negatively associated with the performance of non-profit organizations.

Hypothesis 4: Total assets are positively associated with the performance of non-profit organizations.

Methodology

This study aims to explore the relationships among total assets, fiscal performance, fundraising efficiency, public support and the performance of non-profit organizations. The performance involves achievement of goals by non-profit organizations in providing social services in the form of access to basic education and health care. According to Fabozzi and Drake (2009), financial analysis should be conducted using a sample of organizations that have similarities in their missions and programs. Therefore, this study is conducted using a sample of forty international non-profit organizations that provide access to basic education and health care in Haiti. The sample includes data on 40 non-profit organizations during the period from 2009 to 2011. The data consist of revenues, expenses, gifts, donations, and grants. The data source is the website of

"GuideStat.org" (www.guidestar.org). 'GuideStar.org' is the website of GuideStar USA, Inc. It provides an informational service specializing in international non-profit organizations. It updates information on more than 1.7 million IRS-recognized non-profit organizations. Financial ratios are computed from annual report of the organizations.

Around the world, educated and healthy people are the basis of economic development (Fabozzi and Drake, 2009). Universal access to basic education and health care still remains an unfulfilled commitment in many areas. Several international and multinational initiatives were launched to tackle without contestation the schooling and health of people (Jaganathan, 1999). This research also focuses on education and health care. The dependent variables in the regression analysis are access to basic education (ABE), and access to health care (AHC), which measure the numbers of people to whom the non-profit organizations provide access to basic education and access to health care respectively. "EducHealth" is another dependent variable, which is the sum of ABE and AHC. The first ratio used in this financial analysis is related to fiscal performance which shows the financial management status of each organization, and this category is calculated as the ratio of total reserves plus total revenues to total expenses (Siciliano, 1997; Lee, 2010). A ratio of 1.00 means that total revenue including reserves equals total expenses. If the ratio is higher than 1.0, an organization could save some revenues. On the contrary, if the ratio is less than 1.0, an organization might fall in a deficit.

The second financial ratio in this study is related to fundraising efficiency. Fundraising efficiency ratio measures the relationship between fundraising costs and total contributions and indicates the amount of contributions raised for each dollar of fundraising cost incurred (Green, and Griesinger, 2006; Jaganathan, 1999). This ratio is calculated as the ratio of fundraising expenses divided by total contributions. As the ratio becomes lower, it shows greater efficiency (York, 2010; Ritchie and Kolodinski, 2003). 'Standards for Charity Accountability' by 'Better Business Bureau' emphasizes that a non-profit organization should spend no more than 35% of contributions on fund raising (Bureau, 2010).

Finally, the third and last financial ratio for this study is related to public support. This ratio indicates the extent of an organization's dependency on direct public support and is calculated as the ratio of total contributions divided by total revenue. Public support includes gifts, grants, and other contributions from government and donors. A ratio that is high or increasing is not desirable because the contributions are very flexible and unpredictable (Green, and Griesinger, 2006, Lee, 2010; Bryce and Bryce, 1999). Denison and Beard (2003) mentioned that an organization can be more vulnerable to financial shock when revenue sources are concentrated on a specific source. There is no standard for this ratio, but usually a lower ratio means less risk and better performance. This research includes also total asset as independent variable that controls for the organization's size. Total asset may affect the number of people that benefit from the activities of the non-profit organizations. See the appendix for explanations of definitions of the variables in Table 1.

The regression analysis that tests the hypotheses employs the following linear equation model:

$$EducHealth = \alpha_0 + \alpha_1*(FPR) + \alpha_2*(PSR) + \alpha_3*(FRER) + \alpha_4*(TA) + \varepsilon_1$$

where:

α_0 is a constant; α_1, α_2, α_3, α_4 are regression coefficients of independent variables; and ε_1 is an error term.

Table 1. Definition of variables

Variables	Definition
EducHealth	The number of people benefiting from access to basic education and health care activities of non-profit organizations.
FPR	Fiscal performance ratio. The ratio of total revenues and total reserves to total expenses.
FRER	Fund raising efficiency ratio. The ratio of fund raising expenses to total contributions.
PSR	Public support ratio. The ratio of total contributions to total revenues.
TA	Natural Logarithm of total assets.

Result and Discussion

Data on 40 non-profit organizations are analyzed in this research. Financial information was obtained from the annual reports of these non-profit organizations for the period 2009 – 2011. The descriptive statistic, including the minimum, maximum and mean values of the variables, for 120 observations is presented in Table 2. As shown in the Table 2, the sample includes small as well as large non-profit organizations, with total assets of US$ 53,100 and US$ 557,763,254 respectively. On average, they provide assistance with the access to basic education and health care to about 2,111 persons. The mean of public support ratio is about 75%, while the minimum and maximum vary from 1% to 145%. Similarly, the mean of fiscal performance ratio is 72%, with minimum and maximum of 1% and 132%. The data of fund raising efficiency ratio seem to be positively skewed with a mean of 29%, the values ranging from 0% to 497%. See appendix Table 2 for more details.

Table 2. Descriptive statistics of 40 non-profit organizations for the period 2009-2011

Variables	N	Minimum	Maximum	Mean
Total asset	120	$ 53,100.00	$557, 763,254.00	$29,314,221.69
Total revenues	120	$20,229.33	$455, 947,867.00	$31,854,111.60
Total reserves	120	5,030.67	$182,900,622.67	$10,214,425.72
Total expenses	120	$26,480.00	$638,848,489.67	$37,200,905.38
Total contributions	120	$7,572.00	$597,587,964.67	$30,275,783.29
Fund raising expenses	120	$0.00	$25,560,301.00	$1,794,910.68
EducHealth (persons)	120	253	16,397	2,111.28
Fiscal Performance ratio	120	1.00%	132%	72%
Fund raising efficiency ratio	120	.00%	497%	29%
Public support ratio	120	1.00%	145%	75%

Table 3. below shows Pearson correlation coefficients among the variables used in this research. Performance of non-profit organizations (EducHealth) is positively correlated with the fiscal performance ratio, fund raising efficiency ratio and total assets. The correlation coefficient between the latter two and EducHealth is statistically significant at 5% and 1% level respectively. Unsurprisingly, larger organizations are able to provide their services to larger number of beneficiaries. The correlation coefficient between EducHealth and public support ratio is negative and statistically insignificant.

Table 3. Pearson coefficient based on 40 organizations

Variables	EducHealth	FPR	FRER	PSR	TA
EducHealth	1				
FPR	.182	1			
FRER	.018*	.419**	1		
PSR	-.173	.875	-.452**	1	
TA	.212**	.028	.035	-.202*	1

* mean significant at the level of 5%
** mean significant at the level of 1%

There is a strong positive correlation between fiscal performance ratio and fund raising efficiency ratio, while the correlation between the latter and public support ratio is negative and statistically significant at 5% level. This suggests that fundraising efficiency is more important than public support for both the organizations' fiscal performance and their main activity of providing access to education and health care. The correlation between total asset and public support ratio is negative and statistically significant, suggesting that compared to small-sized non-profit organizations, the larger ones have a wider range of revenue sources in addition to public support.

The results of regressing EducHealth on fiscal performance, public support, and fund raising efficiency ratios, as well as total assets are presented in Table 4.

The adjusted R-squared of 0.217 indicates that the model fits the data reasonably well. The results indicate that three of the four variables have a significant positive effect on access to basic education combined with access to health care. The effect of the fiscal performance ratio has a coefficient of 0.19, which is statistically significant at 5% level. Fund raising efficiency ratio also affects EducHealth; the coefficient equals 0.114, and it is statistically significant at 1% level. Improving fiscal performance ratio or fund raising efficiency ratio by ten percentage points allows the non-profit organizations to help two or one more individuals, respectively. Unsurprisingly, the total assets also positively affect EducHealth, with a coefficient of 0.465 and statistical significance at 1% level. However, public support ratio has a negative coefficient, and its effect on number of people benefiting from the organizations' activities is statistically insignificant.

Table 4. Regression: EducHealth = $\alpha_0 + \alpha_1$*(FPR) + α_2*(PSR) + α_3*(FRER) + α_4*(TA) +ε_1

Variables	Sign	coefficient	t-value	p-value	VIF
Constant	+		2.370	.023	
FPR	+	.190	1.276	.048*	1.109
FRER	+	.114	.741	.000**	1.184
PSR	_	-.193	-1.235	.225	1.217
TA	+	.465	4.687	.003**	1.025
R^2= .298	**Adj R^2=.217**	**F-value=3.710**	**P-value= .013**		

* mean significant at the level of 5%
** mean significant at the level of 1%

These results of the data analysis support three of the four hypotheses. Hypothesis one states that fiscal performance ratio has a positive effect on the performance of non-profit organizations, measured by number of people provided with access to basic education or health care. Lee (2010) mentioned that a higher ratio indicates better financial management in non-profit organizations. The regression results support the hypothesis one. The second hypothesis suggests that fund raising efficiency ratio has a positive effect the organizations' provision of access to basic education and health care. Ritchie and Kolodinski (2003) stated that as the ratio becomes lower it shows greater efficiency. The regression results support the second hypothesis of this research. The third hypothesis of this study expects public support ratio to be negatively associated with the performance of non-profit organizations. Greenlee and Griesinger (2006), and Bryce and Bryce (1999) implied that a high ratio is not desirable for non-profit organizations because the contributions are very flexible and unpredictable.

The third hypothesis is not supported by the regression results; they suggest that public support ratio does not have a significant effect on the organizations' performance. The fourth hypothesis suggests that total assets are positively associated with numbers of beneficiaries that a non-profit organization can reach. This suggestion is rather apparent and is supported by previous studies (Denison and Beard, 2003) and regression results of the current research.

Conclusion

Non-profit organizations are an essential part of every community. They provide benefits to members of the community. It is important to ensure that a non-profit organization is sustainable, properly capitalized and funded. Appropriate financial management ensures that there are adequate resources to support its operations and achieve its goals (Bryce and Bryce, 1999). The purpose of this study is to examine the relationship between financial management in non-profit organizations operating in Haiti and their performance in terms of providing benefits to a greater number of beneficiaries.

The results indicate that fiscal performance, fund raising efficiency and total assets are positively associated with the number of individuals whom the organizations can assist in accessing basic education and health care. The effective financial management is as important for the performance of non-profit organizations as

it is known to be crucial for the performance of for-profit firms. Additionally, this study shows that too much emphasis on unpredictable public contributions may not be very beneficial for the performance of non-profit organizations. Besides, the study also confirms the apparent notion that the greater assets of the organizations provide them with more considerable ability to achieve their goals.

This research reduces the gap in understanding the role of financial management for non-profit organizations. Improved understanding of the relationship between financial management and the performance of non-profit organizations allows its managers to employ the financial resources more efficiently for the benefit of achieving the organization's goals. Future researches may build up on the result of current study in a number of ways; including expanding the sample size used in the analysis, and checking the robustness of current results when other measurements of performance of non-profit organizations are adopted.

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