

## Sustainability of Card Incorporated in the Philippines

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**Abstract** –Microfinance is a vital economic services afforded to financially struggling individuals to increase tier income and enhancing their financial security, thereby improving their standard of living. It is a sustainable means of poverty alleviation designed to empower entrepreneurs' to start and operate business, encouraging self-reliance and become a productive citizen to meet the challenges of the times. The CARD (Center for Agricultural and Rural Development) Inc. is a non-government organization, acknowledged to be the leader in microfinance industry in the Philippines and has evolved as an outstanding Microfinance Institution (MFI) with a near perfect repayment rate, which contributed to its financial viability as per global microfinance standards. The study sought to determine the financial sustainability of Card Incorporated as influenced by 1) Return on Assets (ROA), 2) Return on Equity (ROE), and 3) Debt to Equity Ratio (DTER), which are the independent variables of the study. On the other hand, the financial self-sufficiency ratio, a measure of an institution's ability to generate sufficient revenue to cover its costs, which is widely regarded as the best measure of the institutions' financial performance serves as the dependent variable of the study. Needed data for this study were sourced from the website of the Card Incorporated and covered the periods 2007- 2016. Linear Regression Analysis was used to estimate and quantify the relationship between dependent and independent variable of the study. The statistical software GRETL (Gnu Regression Econometrics Time Series Library) was made use of to facilitate data management and computations of regression coefficients thru the OLS (Ordinary Least Squares) method.

**Keywords** – Financial Sustainability, Microfinance, Ordinary Least Squares

### INTRODUCTION

Microfinance has been recognized as an important tool for achieving several key Millennium Development Goals (MDGs). The microfinance is attached to financial services as deposits, loans, payment services, money transfer and insurance product to the poor and low income of households and enterprising. According to Cordaid (2013), Card Incorporated is one of the biggest microfinance institutions in the world and its home market is the Philippines and it has expanded its activities to other Asian countries. In the Philippines most of families are poor, the impacts of microfinance in the poverty are to help the family with the insufficient earnings. One of the microfinance institutions that was established in the Philippines is the Card Incorporated founded as a social development organization in 1986, the Center for Agriculture and Rural Development (CARD) Inc. (A Nonstock, Not for Profit Organization) has evolved into an outstanding microfinance institution that is presently leading the pack of microfinance institutions in the Philippines. By providing continued access to integrated microfinance and social development, CARD is still

making a difference on the Philippines as long as donations are given.

CARD spent considerable time in refining its methodology with the end view of achieving the twin goals of outreach and sustainability. Within ten years of its operations, CARD has successfully formalized its microlending operations by transforming itself into a formal financial institution, a microfinance oriented rural bank, the CARD Bank Inc. Continually expanding and improving its products and services for its clients, CARD has now grown and branched out into nine (9) mutually reinforcing institutions currently known as the CARD Mutually Reinforcing Institutions (CARD MRI), providing a wide range of microfinance services, both financial and non-financial to different market niches.

Financial sustainability refers to the ability to manage funding so it can meet its spending commitments both now and in the future (Owen, 2013). Hence, the objective of this study is focus of financial of Card Incorporated is how to handle their money and the expenses in the potential condition. Regardless of an organization for profit or nonprofit status, the challenges of establishing financial capacity and financial sustainability are central to organizational function. However, maintaining the ability to be

financially fast over the long term may be especially important for nonprofits. Therefore, the nonprofits is not intended to make a profit, but to make money for the society to save and to provide a service that was not use of profit. The goal of that financial sustainability for nonprofits is to maintain or expand services with the organization when they develop the elastic and occasional economic shocks in the short term.

### OBJECTIVES OF THE STUDY

The purpose of this study was to determine the financial sustainability of Card Incorporated in the Philippines.

Specifically, this research answers the following questions:

1. What are the various programs offered by Card Incorporated?
2. What are factors and significant variables that determine the sustainability of microfinance programs by Card Incorporated?
3. How did their financial structures grow throughout the period of observation?
4. Is the institution financially sustainable?

### MATERIALS AND METHODS

This study used the descriptive-correlational type in research interpretation using the gathered data from the financial sustainability of Card Incorporated in the Philippines. To improve the study we used the secondary data analysis in getting the information of the study and to achieve the objectives of this study.

### Data Collection

This study used financial statements and data from 2007-2016. This was obtained from Card Incorporated in Philippines and MIX market which is an online database that provides information and important financial condition of various microfinance institutions globally.

### Research Design

This study determines the financial sustainability of Card Incorporated in the Philippines. Descriptive research typically describes what appears to be happening and what important form educational; it can involve collections of quantitative along a continuum in numerical form, such as rate, level on a test the number of times and to describe categories of information such as patterns of interaction when using technology in a group situation. Descriptive research

involves gathering data that describe events and then organize, tabulates, depicts and describes the data collection. The current status of the phenomena to describe the respect to variable or conditions in a situation (Key, 2010).

### Data Analysis

The researchers used the secondary data analysis using the regression analysis among the factors and variables that can affect the financial sustainability. To achieve this, the researchers used the GRETL the regression equation and estimate the regression line that represents the relationships between the determinants of financial growth and financial sustainability.

### RESULTS AND DISCUSSION

This section presents the data gathered in the study, details of analysis made and the interpretation of findings in accordance to the statement of the problem. Card Incorporated is a microfinance development non-government organization that provides individuals, families, and communities the opportunities to improve their lives through microenterprise and to help them progress out of poverty. These programs and services are concentrated on housing, educational, agricultural, health and business, and community development.

The operational equation used for this study is given below:

$$FSS = c + \alpha_1(ROA_t) + \alpha_2(ROE_t) + \alpha_3(DTER_t) + e$$

Where:  $c$  is the constant term.

FSS, the dependent variable, is the ratio of adjusted revenue over adjusted expenses.

Return on assets (ROA) is the ratio of net operating income over adjusted total assets.

Return on equity (ROE) is the ratio of net operating income over average stockholders' equity.

Debt to equity ratio (DTER) is the adjusted total liabilities over total equity of the firm.

Using GRETL, the following regression equation, standard errors, t-ratios, p-values, R-squared and F ratio were obtained:

$$FSS_t = -0.871409 - 0.310806ROA_t + -0.0504493ROE_t + 0.00434750DTER_t + e$$

According to Beg (2016), microfinance institution that has an FSS value greater than 1 is financially sustainable. Based on the results of data from 2007 to 2016, the mean value of FSS of Card Incorporated is 1.209000 indicating that the institution is financially stable. FSS is computed as follows:

Financial Self-Sufficiency (FSS) = Adjusted Financial Revenue / Adjusted (Financial Expense + Impairment Losses on Loans + Operating Expense)

The regression equation is derived with the help of ordinary least squares method. The constant has a value of -0.871409 which says that when all the explanatory variables are set equal to zero financial sustainability of the institution will be equal to -0.871409. This reflects that with the effect and relationship of explanatory variables the value of FSS will be lower, thus these variables are significant. The standard deviation of the explained variable alone is -0.871409 which indicates a very low variability in the distribution for the period t.

Looking at the result of regression in the year 2009 the trend is declining this is due to the financial crisis, where many financial institutions and economies across countries were affected. But despite this Card Inc., remained financially sustainable within the 10-year period.

#### Goodness of Fit

The value of r-squared in the FSS regression equation is 0.139842 which depicts that 13.98% of the variation is explained by the explanatory variables in the model. This only indicates that ROE, ROA, and DTER are good measure and determinant of microfinance financial sustainability. Looking at the value of adjusted r-squared it can be noted that there is a very small difference from r-squared because it has a value of -0.290238. Though it is lower, the difference is not that big to alter the result and analysis in the variation that is explained by independent variables.

On the other hand, the F ratio is also obtained in analysis of variance and has a value of 0.325153 with the df of 3 in numerator and 6 in denominator. According to Levin & Fox [2009] F ratio is a test of significance of regression that is whether the regression explains a significant amount of variation. F ratio is significant if it is greater than the critical value given the df in numerator and denominator at alpha levels of 0.05 and 0.01. ANOVA model gave a result of F ratio of 115.6321 which is both significant at alpha level of 0.01 and 0.05.

The three variables are not significant relationship between financial sustainability of Card Incorporated. Such as study of other indicators they study are the same of our study in the results of not significant.

The study found that the average size of savings had a positive influence on return on assets and that this relationship was positive. The rest of the variables did not have a significant influence on ROA, ROE and DTER. On the challenges, the study found that the major challenges facing microfinance institutions in Kenya are funding, repayment default and government regulations (Beatrice, 2008).

#### CONCLUSION AND RECOMMENDATION

The results taken from the tabulated data were analyzed and interpreted. The data analysis revealed the following:

1. The programs offered by Card Incorporated are housing, educational, agricultural, health and business, and community development.
2. In the regression results, Card Incorporated is explained by the chosen independent variable. Started the trend in a year 2007, while in 2008 & 2009 is increasing. The Return on Assets, in the period of 2010 the line graph is decreased, while in the year 2013 the line graph is increased, but in a year 2015 are continuously rise until 2016. The figure shows the trends ROE are increasing from the year of 2006 to 2009 in the year of 2010 is decrease then in the year of 2011 to 2012 are increasing. The DTER results, in the year of 2013 to 2014 is declining and in the period of 2015 is increased, in year 2016 is declining in a year of 2009 to 2010 are decreased.
3. According to regression results, the assets, liabilities and equity of Card Incorporated there are increased in the period of 2007 to 2016.
4. In regression results, return on assets, return on equity and debt to equity yielded a not significant result. On the other side, probability value suggest that there is a significant relationship of the variable ROA, ROE, and DTER.

Since the study revealed there is no significant relationship between all variables and Card Incorporated. We recommend finding more variables of microfinance. The researchers suggest that Card Incorporated should make proper use of their assets so as to have a better return on their assets. The financial performance of Card Incorporated must be improved



and they must aim at finding ways to have decreased cost per borrower.

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