Effects of Loyalty Programs on Financial Performance: The Moderating Role of Company Size

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Abstract

The purpose of this study was to develop an original framework to explore the direct effect of Loyalty programs on a firm’s financial performance and to discuss the moderating role of company size. The study applies two original concepts - Loyalty programs and company size to develop an integral model that enhances the firm’s financial performance. Secondary data was extracted from financial statements. Explanatory research design which was non-experimental in nature was employed to analyze the effect of company size on financial performance of selected service industry firms. Panel data analysis was used to link the relationship between the Loyalty programs, company size and financial performance. Findings indicated that company size moderates the relationship between loyalty programs and Financial Performance of the selected firms in the service industry in Kenya.

Key words: Company Size, Loyalty Programs, Financial Performance
Introduction

Stiff competition among business firms worldwide, declining profit and need for survival has resulted to service industries innovate new ways of doing business to boost their financial performance (Barry, 2014). One such innovation is the use of loyalty programs. Loyalty programs are structured marketing efforts that reward, and therefore encourage, loyal buying behavior, which is potentially beneficial to the firm (Magatef & Tomalieh, 2015). The rewards programs are offered by a business firm to customers who frequently make purchases. In Kenya, most service industries are encouraging their customers to join loyalty programs which help them to earn points when doing purchases as a way of retaining them. Some of these loyalty programs include: bonga points, loyalty points and smart points (Salmon, Dey & Amaro, 2017). Frequent customers are awarded points that can be converted into currency when redeemed and hence used to buy goods and services in specific business firms (Magatef & Tomalieh, 2015). Similarly, as observed by Peiguss (2012), loyalty programs also work as an incentive by providing benefits based on cumulative purchasing over time. These programs encourage repeat buying and improve retention rates by providing incentives for customers to purchase more frequently and in larger volumes which improves their financial performance.

Loyalty programs are implemented by business organizations to induce customer satisfaction with assumption of contributing positively to financial returns of a firm (Ganesh, 2000). However, market share has been found to be a key determinant in a firm’s financial returns. Most past studies done on company size has been found to have a positive relationship with the firm performance (Abbasi & Malik, 2015; Tahir & Razali, 2011; Njoroge, 2012). This is similar to results established by Mahfoudh (2012) who contends that, firm size was found to be positively related with the firm performance though not statically significant.
In this context, the study assesses whether company size moderates the relationship between loyalty programs and financial performance.

**Problem Statement**

In recent years, many service industry firms have initiated loyalty programs with the objective of enhancing customers revenue. Ganesh (2000) argued that loyalty programs are vital in building lasting relationships between the service providers and the clients and can sometimes lead to lifetime relationships which has a positive impact on firm profitability. Financial returns according to Liu and Yang (2009) depend on increases in market share and repeat-purchase loyalty which is known to increases as brand’s market share increases. Therefore, it’s on this basis that this study seeks to establish whether company size has a moderating effect on financial performance of the service industry in Kenya.

**Objective of the Study**

To determine the moderating effect of company size on the relationship between loyalty programs and financial performance of selected firms in the service industry in Kenya.

**Theoretical Framework**

**Stimulus-Response Theory**

This theory draws its arguments from Ivan Pavlov’s work during his experiments on conditioning animals. In relation to human behavior, this theory holds that people learn as they respond to stimulus by behaving in particular ways, where they get rewards for correct responses and could get punished or receive a penalty when they give an incorrect response. As a result, when people repeat the same response time and again, a pattern is established.
According to the stimulus-response theory, consumers will be less motivated to repeat a particular behavior in the absence of a reward (Petzer et al., 2006). Further, Zeidler (2009) notes that rewarded activities tend to be amplified by individuals following a rather basic learning scheme based on the amplification principle which builds on the theory of conditioning. This is the cognitive process that reward elements in loyalty programs are built on. They mean to amplify the positive purchasing behavior by closely linking it to the reception of a specific reward that could be collecting points for redemption later or even getting instant discount on purchase made. Loyalty programs are best described by their pertinent features of membership, accumulation of points, reinforcements, redemption at owners’ will and distinct organization offering them (Zeidler, 2009). The authors go further to provide a list of important characteristics of efficient reward programs that include: being attractive to attract customers to participate in the programs, should focus on increasing customer loyalty on business and brand, the program should be economical, the program should be flexible and adaptable to changes, is able to attract new customers of best customer profile, provides compelling reasons for customers to participate, and allows frequent interaction with customers.

**Empirical Review**

**Loyalty programs and firm financial performance**

Loyalty programs as noted by Magatef and Tomalieh (2015), are structured marketing efforts that reward, and therefore encourage, loyal buying behavior, which is potentially beneficial to the firm’s financial performance. This was supported by Bwire (2016), who did a study on effects of Loyalty points on Financial Performance of Mobile Telecommunication Firm in Kenya. The study found out that corporate loyalty points was positively related to financial performance.
Based on this study, the more customers feel appreciated by businesses, the higher their satisfaction levels from doing business with them and the higher chances of referring the businesses and their services to other people. However, the study focused only on the telecommunication firms in Kenya. The current study focuses on the major supermarkets, five star hotels and telecommunication firms in Kenya, and thus presenting a conceptual gap.

Harvey (2011) conducted a study on the effect of loyalty programs on financial performance among manufacturing firms in Scotland. The study was based on manufacturing firms in Scotland, whose economic status might be different from that of Kenya and thus the findings might not be the same. The current study focused on telecommunication, supermarkets and hotels in Kenya. This study therefore tried to fill the research gap that exists by carrying out a survey on the role of loyalty programs on financial performance of selected firms in the service industry (telecommunication, supermarkets, and hotel) in Kenya.

Though a number of academicians and marketers have argued that loyalty programs contribute positively to a firm’s financial performance, Soderlunds and Colliander (2015) had a different observation. In a study conducted in the retail Industry, the authors established that the nature and design of loyalty programs had the potential to either reduce satisfaction and re-patronization intentions among non-members or lead to dissatisfaction which reduces repetitive purchasing by loyalty program members. This according to the authors may be experienced in the instances where the market is saturated with loyalty programs leading to decreased customer satisfaction.
Company Size and Firm Financial Performance

Abbasi and Malik (2015) conducted a study on the effect of firm size on firm performance. According to the findings, firm size was found to have a positive relationship with firm performance. The findings corroborated with those of Naran (2013) who investigated the effects of company size on the financial performance of commercial banks in Kenya.

Financial performance was measured using Return on Equity (ROE). The study adopted a descriptive research design. The study used regression model. The study found out that a strong relationship existed between firm size and financial performance. The study concluded that there is a positive relationship between asset as proxy for company size and firm financial performance. Tahir and Razali (2011) using the firm size as one of the predictor variables, examined the relationship between enterprise risk management and firm value. The independent variables were firm size and enterprise risk management while firm value was the dependent variable. The study used regression model. The findings from the study indicated that there is a positive relationship between firm size and firm value. The size influences a firm performance because large firms can increase their current size very fast by accumulating earnings from past performance and this enhances their value.

Mahfoudh (2012) sought to find out the effect of selected firm characteristics namely firm size, leverage, firm age, liquidity, and board size on firm financial performance in Nairobi Securities Exchange (NSE). The study found out that the only variables that were positive and statistically significant were liquidity and board size while, the other three variables namely: firm size, leverage and firm age were positively related but not statistically significant. This implies that, firm size is not a major contributor in a firm’s financial performance.
Conceptual Framework

The purpose of this study is to establish whether company size would moderate the link between loyalty programs and financial performance. The research question forms a moderating model (how do loyalty programs lead to financial performance) mechanism that addresses the relationship between loyalty programs, company size and financial performance.

Figure 2.1 illustrates the conceptual model. Based on the literature review, the current study proposes the following hypothesis:

Hypothesis (H₀₁): Company size does not moderate the relationship between loyalty programs and financial performance of service industries in Kenya.

![Conceptual Framework](image)

Figure 1: Conceptual Framework
Research Methodology

Explanatory research design which is non-experimental in nature was used to analyze the moderating effect of company size on the effect of loyalty programs on financial performance of selected service industry firms. The population was all the telecommunication firms, supermarkets and five star hotels in Kenya. The target population for this study was three (3) telecommunication firms, the big five (5) supermarkets within Nairobi and sixteen (16) 5-star hotels. Since the population of telecommunication firm is small, the study used the census survey method.

Therefore, the study used the three (3) telecommunication firms (Safaricom, Airtel and Telkom Kenya). Purposive sampling was used to select the 5 big supermarkets that were offering their clients smart points and all the 16 five-star hotels in Nairobi offering loyalty points. Purposive sampling technique of selecting the 5 supermarkets and 16 hotels was suitable because of the availability of the data. Panel data analysis was used to link the relationship between the variables. Secondary data was extracted from financial statements. Panel data analysis was used to link the relationship between the loyalty programs, company size and financial performance.

The model in the equation below indicates the panel data model.

\[ Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{1i} X_{2it} + e \]  

Where;
\[ Y_{it} = ROA \]
\[ X_{1it} = \text{Loyalty Programs} \]
\[ X_{2it} = \text{Company size} \]
Results and Discussion

Descriptive Statistics

This section provides descriptive results for the variables. Descriptive statistics employed were mean, minimum, maximum and standard deviation. The results are presented in Table 1.

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>168</td>
<td>0.2138</td>
<td>0.2919</td>
<td>0.099</td>
<td>0.379</td>
</tr>
<tr>
<td>Loyalty Programs</td>
<td>168</td>
<td>1539548</td>
<td>5585112</td>
<td>1515969</td>
<td>2229289</td>
</tr>
<tr>
<td>Total Asset</td>
<td>168</td>
<td>4893768</td>
<td>6768995</td>
<td>3986577</td>
<td>7855900</td>
</tr>
</tbody>
</table>

Source: Author (2018)

The results show that the average mean of ROA was 21.38095% which indicates the average of 21.38095% of the selected companies from the year 2010 to 2016. The minimum and the maximum of ROA between the year 2010 and 2016 were 9.900% and 37.900% respectively. Its standard deviation was 29.19269% which indicated that ROA varied throughout the measurement period. Further, results showed that the average mean of loyalty programs was Ksh. 1,539,548. The minimum and the maximum of loyalty program between the year 2010 and 2016 were Ksh. 1,515,969 and Ksh. 2,229,289 respectively. Its standard deviation was Ksh. 5,585,112 which indicated that programs varied throughout the measurement period.

In addition, results showed that the average mean of total asset was Ksh. 4,893,768. The minimum and the maximum of total asset between the year 2010 and 2016 were Ksh. 3,986,577 and Ksh. 7,855,900 respectively. Its standard deviation was Ksh. 6,768,995 which indicated that total asset varied throughout the measurement period.
Trend Analysis

Loyalty Programs

Figure 1 presents results of trend analysis for loyalty programs. The results show that the value of loyalty programs for the service industry was Ksh. 2,157,240 in the year 2010. However, this value declined to Ksh. 1,870,500 in the year 2011 and further declined to Ksh. 1,515,939 in the year 2012. This trend might have been caused by the pre-election tension and campaign mood for the 2013 general election which made investors and individuals to withhold their cash. The results further show that the value of loyalty programs for the service industry rose to Ksh. 1,555,806 in the year 2013 and further rose to Ksh. 2,047,787 in the year 2014. This could have been caused by the peaceful elections of 2013 and thus indicating gain of confidence and willingness to transact business among the consumers.

The value of loyalty programs further rose to Ksh. 2,200,272 in the year 2015 and then further to Ksh. 2,229,289 in the year 2016. This shows that loyalty programs have really been gaining popularity among the service providers’ customers.
Figure 2: Trend Analysis for Loyalty Programs for the Period 2010-2016

Source: Author (2018)

Trend Analysis for Company Size for the Period 2010-2016

Figure 2 presents results of trend analysis for total asset. The results show that the value of total asset for the service industry in the year 2010 was Ksh. 3,986,587. This value increased to Ksh. 4,188,688 in the year 2011 and further rose to Ksh. 4,317,986 in the year 2012. The results also showed that the value for the total asset further increased to Ksh. 4,495,849 in the year 2013 and further rose to Ksh. 4,612,592 in the year 2014. The value further rose to Ksh. 4,798,797 in the year 2015 and further increased to Ksh. 7,855,900 in the year 2016. This implies that the return on asset for the service industry have been increasing over the years. This could be due to expansion of service industries in different part of the country and also to the neighboring countries such as Uganda, Southern Sudan and Rwanda.
Figure 3: Trend Analysis for Company Size for the Period 2010-2016

Source: Author (2018)

Trend Analysis for Financial Performance (ROA)

Figure 3 presents results of trend analysis for ROA. The results show that the value of ROA for the service industry in the year 2010 was 0.140. This value declined to 0.099 in the year 2011 but rose to 0.117 in the year 2012. The results further showed that the value for the return on asset further increased to 0.168 in the year 2013 and further rose to 0.262 in the year 2014. The value further rose to 0.333 in the year 2015 and further increased to 0.379 in the year 2016. This implies that the return on asset for the service industry have been increasing over the years.
Figure 4: Trend Analysis for ROA for the Period 2010-2016

Source: Author (2018)

Diagnostic Test

Diagnostic tests for this study were conducted. This included; normality test, multicollinearity test, heteroskedasticity test and autocorrelation.

Normality Test

The test for normality for the dependent variable (ROA) was examined using the graphical method approach as shown in the Figure 4. The results indicate that the residuals are normally distributed.
Figure 5: Normality Test for Financial Performance

Residual Mean Score
Source: Author (2018)

Multicollinearity Test

According to Field (2009), VIF values in excess of 10 are an indication of the presence of multicollinearity. The results in Table 2 present variance inflation factors results and were established to be 1.0 which is less than 10 which according to Field (2009), it indicates that there is no multicollinearity.

Table 2: Multicollinearity Results Using VIF

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty programs</td>
<td>1.03</td>
<td>0.973404</td>
</tr>
<tr>
<td>Total asset</td>
<td>1.02</td>
<td>0.981199</td>
</tr>
<tr>
<td>Mean</td>
<td>1.03</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author (2018)
Panel Unit Root Test (Stationarity Test)

Most economic variables are usually non-stationary in nature and prior to running a regression analysis. Unit root tests were thus conducted using the Levin Lin Chu (LLC) test to establish whether the variables were stationary or non-stationary. The purpose of this is to avoid spurious regression results being obtained by using non-stationary series. Results in Table 3 indicated that all variables are stationary (i.e. absence of unit roots) at 5% level of significance.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Statistic</th>
<th>P-value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty programs</td>
<td>-5.35179</td>
<td>0.0000</td>
<td>Stationary</td>
</tr>
<tr>
<td>Company size (Total Asset)</td>
<td>-10.8855</td>
<td>0.0000</td>
<td>Stationary</td>
</tr>
<tr>
<td>ROA</td>
<td>-11.6787</td>
<td>0.000</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

Source: Author (2018)

Fixed and Random Effects (Hausman test)

In order to determine whether the fixed or random effects model is appropriate, Hausman test was used. The null hypothesis is that random effect is appropriate. The rule of the thumb is that if p value<0.05, reject the null hypothesis and vice versa. Table 4 presents the results for the Hausman test. A resultant p-value of 0.345 was larger than the conventional p value of 0.05 and thus not rejecting the null hypothesis that the random effect is appropriate and thus the random effects model was more appropriate.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>(b) Fixed</th>
<th>(B) Random</th>
<th>(b-B) Difference</th>
<th>Sqrt (diag(V_b-V_B)) S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company size</td>
<td>-4.54E-09</td>
<td>-2.86E-09</td>
<td>-1.68E-09</td>
<td>1.20E-09</td>
</tr>
</tbody>
</table>

15
Regression Analysis

Loyalty programs and Financial Performance

Panel regression was performed to establish the relationship between loyalty programs and Financial Performance. Results are presented in Table 5. The results showed that loyalty programs have a positive and statistically significant relationship with financial performance (r = 1.02, p = 0.035).

Table 5: Regression Analysis for Loyalty Programs and Financial Performance

| ROA         | Coef. | Std. Err | T     | P>|t| | [95% conf. interval] |
|-------------|-------|----------|-------|-----|----------------------|
| Loyalty programs | 1.020 | 4.85 | 2.11 | 0.035 | 7.16 1.97 |
| _cons       | 0.193 | 0.04202 | 4.62 | 0.000 | 0.11161 0.27634 |
| R Squared   | 0.4024 |       |      |     |                      |
| F           | 4.44 |       |      |     |                      |
| p value     | 0.0351 |       |      |     |                      |

Source: Author (2018)

ROA = 0.193 + 1.020LP

The loyalty program was found to be satisfactory in explaining financial performance of the service industries. This is supported by coefficient of determination also known as the R² of 40.24%. This means that loyalty programs explain 40.24% of the variations in the dependent variable which is the financial performance of the service industry.

Test for moderation

A multiple regression model was estimated to establish the joint effect of all the independent variables on the dependent variable. Results are presented in Table 6.
Table 6: Overall Regression Analysis Model

| ROA                              | Coef. | Std. Err | T     | P>|t| |
|----------------------------------|-------|----------|-------|------|
| Loyalty Program                  | 0.854 | 0.489    | 2.04  | 0.001|
| Loyalty Program*Company Size     | 0.286 | 0.319    | 2.2   | 0.003|
| _cons                            | 0.378 | 0.0887923| 0.13  | 0.898|
| R Squared                        | = 0.6120|
| F-statistic                      | = 18.89|
| p-value                          | = 0.0167|

Source: Author (2018)

Thus, the specific regression model was modeled as:

ROA = 0.3781 + 0.854LP + 0.286(LP × CS)

The results in Table 6 show that loyalty programs have a positive and statistically significant relationship with financial performance (r = 0.854, p = 0.001). The results further showed that the interaction term between loyalty programs and company size has a positive and significant relationship with financial performance (r = 0.286, p = 0.003). Loyalty programs with the moderating variables were found to be satisfactory in explaining financial performance of the service industries. This is supported by coefficient of determination also known as the R squared of 72.2%. This means that loyalty programs and the moderating variables explain 61.2% of the variations in financial performance of the service industries.

The results indicated that the p value was 0.0167 which was less than the conventional probability of 0.05 significance level. This implied that the overall model was statistically significant. In addition, the F calculated was 18.89 which was higher than the F critical 2.46. This implied that loyalty program with the presence of the moderating variables (company size) are good predictor of financial performance of the service industries.
Hypothesis Testing for Company Size

The null hypothesis was that there is no significant moderating effect of company size on the relationship between loyalty programs and financial performance of the service industry in Kenya. Results in Table 6 above show that the p-value of the interaction term was 0.000 p<0.05 suggesting a highly statistically significant moderating effect of company size on the relationship between loyalty programs and financial performance of the service industry in Kenya.

Conclusion

The study concluded that loyalty programs had a positive and significant effect on the financial performance of the selected firms in the service industry in Kenya. Additionally, company size also had a positive and significant effect on the financial performance of the selected firms in the service industry in Kenya. The study further concluded that company size moderates the relationship between loyalty programs and financial performance of the selected firms in the service industry in Kenya.

Recommendations

The study recommends that there is need to optimize the assets of the company in an organization to maximize on the benefits accruing from the size of the company as well as a need to develop sound techniques of managing current assets to ensure that neither insufficient nor unnecessary funds are invested in current assets as maintaining a balance between short-term assets and short-term liabilities is critical.
References


