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IMPACT OF BRANCHES NATIONWIDE ON PERFORMANCE OF SELECTED LISTED COMMERCIAL BANKS IN SRI LANKA

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KeyWords

Branches, Nationwide, performance, Commercial Banks

ABSTRACT

This study investigates that the impact of expanding branches nationwide on the performance of listed commercial banks in Sri Lanka. There may be many determinants that have specific impact on the performance of commercial banks. Among those determinants, number of branches is also placing an important role. So that this paper assesses the impact of implications of branches nationwide on the performance by examining return on assets, return on equity and earning per share over the 5 years from 2011 to 2016 and the number of branches year by year. Regression and Correlation analysis have been employed for the study to investigate the impact of branches nationwide on performance of selected listed commercial banks in Sri Lanka. The results of the analysis has revealed that expansion of branches have significant impact on the performance of commercial bank. According to the finding, Over all analyses expressed that independent variable (Number of branches) and control variable (firm size) has the significant impact on the one of the dependent variable (Earning per share) and insignificant with the other variables of firm performance which are Return on Assets and Return on Equity. It could be justified with the argument that establishing branches takes times to become profitable as this study comprising shorter period, the actual effect of branches increasing which will result in long-term have not resulted in the short period of ROA and ROE in this study. This study only covers the listed banks, cover all the commercial banks in Sri Lanka or increase the sample will result the accurate results.

Introduction

Investment decision is one of the most important financial decisions as it is to intelligently allocate capital to long term assets. Expanding the branches of the firm is a vital investment decision that has to be more concentrated by every growing firm, because they have to invest more capital in the establishment of displaying outlets. From this point of view, it has been argued that branches are relatively expensive channels of delivering retail financial services' (Orlow, Radecki & Wenninger, 1996).

Expanding branches nationwide might be a common decision that all sector firms could adopt to enhance their mobility through the country. Hence banks are the dominate sectors which apparently expand their branches nationwide continuously to improve their revenue through the purpose of stimulating more deposits. It has been stated as Geographical dispersion of branches is identified by some studies as a strategy to improve revenue and minimize banking sector risk (Berger et al. 1997; Hughes et al. 1999; Shiers 2002)

The center of development in an economy is the financial markets and the institutions. From all the financial institutions, the banks are playing a major role as a financial intermediary. When considered the Sri Lankan economy, during past few years banking industry has experienced a huge transformation due to tighten in the regulations mainly in risk management framework, development in information and communication technology and globalization of the banking industry.

Especially after the period of 2009 the number of full-service branches in Sri Lanka has increased steadily. Since the conclusion of the civil war in 2009, the banking sector expanded in terms of its geographical dispersion, number of branches and business volumes. The impetus for these developments can be categorized into three avenues: 1) a conducive macro-economic environment prevailed in the country with the achievement of long lasting peace after the end of the armed conflict; 2) increased demand for banking services in the conflict-affected areas with the revival of economic activities; 3) directives issued by the Central Bank of Sri Lanka (CBSL) for geographical dispersion of bank branches targeting improvements in access to finance for inclusive growth. (Thilakaweera, Harvie, & Arjomandi, 2016)

By the end of 2016, the banking sector consisted of 25 licensed commercial banks (LCBs) and 7 licensed specialized banks (LSBs). There were 12 branches of foreign banks within the total number of LCBs. The banking sector continued to contribute to economic activity and development throughout the year by enhancing banking services and expanding its network and accessibility throughout the country. Accordingly, 70 new banking outlets (excluding student savings units) were opened and 366 new ATMs were installed during the year. By end 2016, there were 6,659 banking outlets and 3,843 ATMs installed for the purpose of providing efficient banking operations. (Central Bank, 2016)

A significant portion of the observed increase in bank quality can be traced to the implementation of nationwide branching. By allowing banks to open branches in almost any state, the new regime has permitted consumers to enjoy greater networks, free of the inconvenience of fees, not only within their market and state, but throughout larger geographic regions. Branch density also appears to increase following deregulation, as well as salary per employee, which suggests that banks have hired more highly skilled employees, who can provide better service and expertise. (Astrid, 2003)

This study investigates that the impact of expanding branches nationwide on the performance of listed commercial banks in Sri Lanka. There may be many determinants that have specific impact on the performance of commercial banks. Among those determinants, number of branches is also placing an important role. Prasanna Chandra (1989) in his study revealed that number of branches is one of the important factors in analyzing the performance of the organization. This study would hopefully benefit academics, researchers, policy-makers and practitioners of Sri Lanka and other similar countries through exploring the impact of expanding branches nationwide on performance, and pursuing strategies to improve the current status of it.

Statement of Problem

The research into the relationship between expanding branches nationwide and performance has also been frequently conducted in previous years. Stiroh and Strahan (2002) find that a bank's relative profit rate and its subsequent market share growth is strengthened after deregulation, and attribute this to the competitive reallocation effects that transfer assets to better performers, based on a sample from 1976 to 1994.

In particular, Berger and Mester (2003) find that for the period 1991-1997, costs rise while revenues rise by more than the cost increase as banks might be providing higher quality services, particularly for banks engaging in mergers — many of which were allowed by nationwide branching. They argue that while providing new services and improving service quality raised costs significantly, firms maximized revenues by expanding or maintaining market shares and through higher prices.

Berger et al. (1997), Hughes et al. (1999) and Shiers (2002) concluded as Geographical dispersion of branches is identified by some studies as a strategy to improve revenue and minimize banking sector risk. The studies conducted in this area, have been inconclusive (i.e. mixed results). The mixed outcomes of that research suggest that a significant gap exists in understanding the nature, intensity and direction of the relationship between expanding branches nationwide and performance.

Research Questions

From this research problem, the researchers are able to find out following research questions.

- i. Do expanding branches nationwide significantly impact on the performance of the listed commercial banks in Sri Lanka?
- ii. Is there any significant relationship between expanding branches nationwide and performance of listed commercial banks in Sri Lanka?

This research aims at investigate and analyse the impact of expanding branches nationwide on the performance of listed commercial banks. Increasing branches is the general trend of commercial banks which have the higher market capitalization. They try to reach the customer nationwide with the physical full service branches. Number of branches of the banks is one of the important determinants of the performance of them as it expands their customer network, enhancing deposits, share price and profit rate. This will be empirically tested and analyzed in this study.

Research Objectives

The main purpose of the present study is to investigate whether the expanding branch networks to nationwide have the impact on the performance of listed commercial banks in Sri Lanka. In addition to above, the study has the following specific objective.

• To examine the relationship between expanding branches nationwide and the performance of the listed commercial banks in Sri Lanka.

Significance of the study

Expanding branches nationwide is the considerable issue that Sri Lanka has been faced after the completion of civil war which was held in 2009. All these state-owned, private and foreign banks expanded their operations aggressively in terms of branch networks, assets, liabilities, lending and deposits after the ending of a quarter century long bloody civil-war in Sri Lanka in 2009. (Thilakaweera, Harvie, & Arjomandi, 2014).

This study has the significance that the commercial banks could able to assessing whether their overall performance will be increased by expanding branches nationwide or the impact level on their performance and also they could measure whether the expanding branch networks to nationwide has brought their management positive effects on the performance as they have expected.

This study has been carried out by many authors (Thilakaweera, Harvie, & Arjomandi, 2016; Berger & Mester, 2003; Jayaratne & Strahan, 1998) but they haven't emphasized the impact of the overall performance by expanding branches nationwide. Overall performance should be measured according to the branch network size to find out the actual state of the bank and the valid of the investment decision they have made. In this study researcher will analyse total expanding number of branches nationwide and the overall performance of the listed banks in Sri Lanka. Thus this study has the great significance among the banking sector.

Figure 01: Conceptual Framework



Table 01: Operationalization of Variables	Table 0	: Operatio	nalization o	of Variables
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Key concept	Variables	Indicators	Measurement	
Branches Nation- wide	Number of Branches Nationwide	Number of branches year by year	Number denoted in annual report of the bank	
Firm Size Total assets Value of Total ass by year		Value of Total assets year by year	Value indicated in the annual report(log)	
	Earnings per Share(EPS)	How much is earned per ordinary share	<u>Net profit after tax</u> Number of Ordinary Shares	
Performance	Return On Assets	How much is earned on bank's total assets	<u>Net Profit After tax</u> X100 Total Assets	
	Return On Equity	How much is earned on bank's capital	<u>Net Profit After Tax</u> X100 Total Equity	

Hypotheses

Based on the conceptualization model, two hypotheses which were developed in order to determine the relationship between Expanding branches nationwide and performance. The following hypotheses are formulated for the study.

- H1 -There is a significant impact of Expanding branches nationwide on Performance.
- H2 -There is a significant relationship between Expanding branches nationwide and Performance.

Sampling Design

The present study is confined only to the nine listed commercial banks in Sri Lanka. All branches are taken for the study representing the period of 2011-2016, and the value of each item was considered for the purpose of ratio computation and analysis which are related to correlation and regression.

The population of interest in this study is (initially) the 25 listed LCBs on the CSE, as at February 2016. In selecting the population, the risk of missing data was minimised by excluding firms that were not listed throughout the review period. After the eliminations, eight LCBs remained in the population.

Sample of eight listed commercial banks use in this study are;

- Commercial Banks of Ceylon PLC
- DFCC bank PLC
- HNB
- NTB PLC
- Pan Asia Banking corporation
- Sampath Bank PLC
- Seylan Bank PLC
- Union Bank of Colombo PLC

Methods of Data Collection

The research is focusing the impact of expanding branches nationwide on performance of the Listed Commercial Banks. This study utilized a data collection, which means that the data have been collected over the sample period of 2011-2016. In this study, data was collected from the secondary sources;

• Annual reports of the listed commercial banks.

Data analysis method

The analysis method will be a summary of how branches nationwide impact on performance. In order to make proper findings, data has to be analyzed and interpreted through relevant analysis techniques. Data analysis is done by the help of software package STATA it is used for processing the data. The following statistical tools or techniques used in the study.

Correlation analysis

In this study, the correlation co-efficient analysis is under taken to find out the relationship between the following two variables;

- Independent variable-Expanding Branches Nationwide.
- Dependent variable– Performance.
- Control variable– Firm Size

For supporting the independent variables, control variables could be used and in this study firm size is taken in to the account as a control variable. In this research, in order to find out the relationship between variables, Pearson-co-efficient of correlation is used.

Regression analysis

Regression analysis is a statistical tool for the investigation of relationships between variables. Usually, the investigator seeks to ascertain the causal effect of one variable upon another. This study involves only one independent variable and is therefore normal regression analysis used to drive the conclusion but not multiple regression analysis. The technique involves developing a mathematical equation that describes the effect of the one variable to upon another. In general, regression analysis describes the mathematical equation, that "best fist" the value recorded for the two variables.

Regression analysis in this study is used to test the hypothesis (H1) that the significant impact of expanding branches nationwide on performance. Simple regression is used to find out relationship between branches nationwide and performance which begins with a set of data values and determines a "best fit" equation of the firm.

Y = a + bx

Where,

- Y Dependent Variable
- a Y intercept of the equation
- b Slope of the equation
- x Independent Variable and Control Variable

In this study regression models could be created as follows;

EPS= ao+ a1 NOA + a2 FS..... Model 01 ROA= b0+ b1 NOA + b2 FS.....Model 02 ROE= c0+c1 NOA + c2FS.....Model 03

Where,

EPS indicates Earning per Share, ROA indicates Return on Assets, ROE indicates Return on Equity, NOB indicates the Number of Branches and FS indicates the Firm Size. a0, b0 and c0 indicate the constant terms

a1, a2, b1, b2, c1, c2 are regression coefficients

Data Analysis

Data analysis is done by the help of software package STATA (version 13.0) it is used for processing the data. It analyses using statistic tools such as Descriptive Statistics, correlation and regression analysis in order to find out the answers to objective questions and to solve hypothesis of this study.

Descriptive Statistics

The current section deals with the results of the study which includes descriptive statistics. The descriptive statistics are calculated and analysis mean and standard deviation of all variables have been presented in Table 2 and performance variables consisting EPS, ROA and ROE. Data from 2011/12 to 2015/16 were collected for Number of branches, Firm size and along with the performance variables from annual reports. A summary of the descriptive statistics for these variables is presented below.

Table 02: Descriptive Statistics for Independent Variables

Variable	Mean	Std.Dev	Min	Max
NOB	145.8	75.6	30	264
FS	25.9	0.96	23.9	27.5
ROA	1.55	1.75	0.11	11.9
ROE	13.6	7.18	0.34	31.3
EPS	11.7	9.51	0.1	35.6

Source: Results from the panel data analysis

As in the table above the number of observations included in the regression analysis is 40 observations with three dependent variables; Earnings Per Share, Return on Assets and Return on Equity and one independent variable number of branches and one control variable Firm Size. The minimum value is the lowest value with relate to the variables and maximum is the highest value of mentioned variables. The mean value is the measurement of central tendency where it represents the average value of the above variables. According to the statistics it can be observed that the minimum Earning per Share is 0.1 whereas the maximum is 35.6 and minimum Return on Assets is 0.1% while maximum is 11.91% .But compare to the return on assets, return on equity of the banks is having the higher ratio and the average is also indicates a higher value of 13.6%. The maximum number of branches is stated 264 and minimum number is 30 over these five years of listed commercial banks in Sri Lanka. The higher the value of standard deviation, the spread of the observations is also higher. Except, Number of branches, others are having smaller spread.

Regression analysis

Regression analyses the impact between the independent and dependent variables which have used in the study; normal regression analysis has performed to identify the impact of number of branches on the performance as conceptualized in the models.

Table 03: IV	lodel summary	(Dependent varia	ables – EPS, RUA	l, and	RUE)	
Model	F values	R Square	Adjusted	R	Prob>F	
			Square			
1	16.03	0.4642	0.4352		0.000	
2	1.14	0.0581	0.0072		0.3304	
3	2.07	0.1006	0.0520		0.1406	

Table 03 show the model summary. Co-efficient of determination is a measure of a portion of total variance in the Y variable. That is explained or accounted for by the introduction of the X variable.

Here for Model 01

R2 = 0.4642

Adjusted R2 = 0.4352

In this model R2 indicates that 46.42% of the EPS can be explained by the differences in the Independent variable (Number of branches) and Control variable (Firm size). The remainder 53.58% of the EPS is attributed to other factors. Here the value of an adjusted R2 is 0.4352, slightly less than the value of 0.4642. The F-statistics and significance level shows that EPS model generate statistically significant outcomes.

Independent Variable	Coefficients	p-value
(Constant)	1.7646	0.983
NOB	0.1851	0.005
FS	0.1429	0.012

Table 05: Result of regression analysis (Dependent variable=ROA)

Independent Variable	Coefficients	p-value
(Constant)	1.7646	0.983
NOB	0.1851	0.005
FS	0.1429	0.012

Table 06: Result of regression analysis (Dependent variable=ROE)

Independent Variable	Coefficients	p-value
(Constant)	78.59	0.663
NOB	-0.0183	0.273
FS	3.658	0.330

From the above table; it is clearly shown that number of branches with coefficient is 0.1851 significantly related to EPS (P<0.01). It means one unit changes in Number of branches (NOB) increase EPS by 18.51%. Firm size which has been considered as the control variable Also significantly related with EPS with coefficient of 0.1429 according to the p value at 5% level of Significance (P<0.05). It presents one unit changes in firm size increase EPS by 14.29%.

So it could be identified as NOB, the independent variable which significantly impact on EPS with positive effect at 1% level while firm size which considered as Control variable also have the positive significant impact on EPS at 5% level. Thus, the regression Model one has obtained in the Chapter three could be accepted. Whereas Model two and three is disagreed as Independent variable (NOB) and Control variable (FS) has insignificant impact on ROA and ROE.

Correlation Coefficient Analysis

Table 07: Correlation Matrix

Variables	NOB	FS	ROA	ROE	EPS
NOB	1.0000				
FS	0.9356*** (0.000)	1.0000			
ROA	0.0262 (0.8727)	-0.0601 (0.7124)	1.0000		
ROE	0.2656* (0.0976)	0.3097 (0.0518)	0.5459*** (0.0003)	1.0000	
EPS	0.6813*** (0.000)	0.6380*** (0.000)	0.3630** (0.0213)	0.4646** (0.0026)	1.0000

*** Correlation is significant at the 0.01 level

** Correlation is significant at the 0.05 level

Correlation analysis is used to identify the strength of relationship between two variables. Correlation analysis shows there is a significant relationship between the EPS which is one of the variables measuring the performance and the number of branches. Results further indicate that correlation between EPS and NOB is 0.681.it clearly described the strong and positive relationship between EPS and NOB which is at the significance level of 1%. Meanwhile correlation between EOS and FS which is used as the control variable in this study is 0.6380 which is also denoted the positive and strong relationship at significance level 1%.Correlation between the ROA, ROE and NOB shows insignificant relationship according to the p values.

It is consistent with the findings of Boland (2009) also studied the effect of bank branch networks on profitability. He identifies the reasons why branches may not become as profitable as expected. He states that what many banks struggle with today are too many branches. A second problem is that the branches follow a very transactional model. This costs the bank money and creates complexity, but it does not bring in revenues. The problem can be traced back to when the decision was taken to open the branches.

Damar (2007) explained the relationship between number of branches and organizational performance. It states that banks seek more deposits in a market when the revenue obtained by investing the funds (adjusted for risk) exceeds the cost of obtaining those funds. More local deposits may be obtained either by offering higher deposit rates and/or by providing the depositor with more convenience by means of a larger branch network, and profit maximization requires that in equilibrium, subject to qualifications, the incremental cost of obtaining local deposits through rate setting and branching should equate.

Over all analyses expressed that independent variable Number of branches and control variable firm size has the significant impact on the one of the independent variable Earning per share and insignificant with the other variables of performance which are Return on Assets and Return on Equity. It could be justified with the argument that establishing branches takes times to become profitable as this study comprising shorter period, the actual effect of branches increasing which will result in long-term have not resulted in the short period of ROA and ROE in this study.

This is supported by Bruce Voelker (2011) a partner at the New York-based Accenture, also points out that, banks have gained a new appreciation for the importance of bank branches because consumers still want them. However, it's not necessarily a quick or easy strategy to execute. It takes time for new branches to become profitable, and they can be a big drain on the time and attention of senior management. Moreover, at least one leading consulting firm believes that, ultimately, a bank's branches won't perform any better than its existing ones.

And according to Milligan (2011) there can be a variety of reasons why a branching strategy fails to achieve its expected payoff, beginning with a failure to perform a thorough feasibility study. But a common mistake that many banks have made in the past is to overspend. Obviously, the higher its fixed costs, the longer it takes for a branch to become profitable. (Milligan, 2011)

Hypotheses Testing

Here the correlation analysis and regression analysis are used to test the hypothesis. The hypothesis testing formulated by the researcher for this study based on the hypothesis referred earlier.

Those are,

H1: There is a significant impact of expanding branches nationwide on performance.

From the above regression analysis analyses it is clearly shown that number of branches with coefficient is 0.1851 significantly related to EPS (P<0.01). It means one unit changes in Number of branches (NOB) increase EPS by 18.51%. Firm size which has been considered as the control variable Also significantly related with EPS with coefficient of 0.1429 according to the p value at 5% level of Significance (P<0.05). It presents one unit changes in firm size increase EPS by 14.29%. So it could be identified as NOB, the independent variable which significantly impact on EPS with positive effect at 1% level while firm size which considered as Control variable also have the positive significant impact on EPS at 5% level. Independent variable (NOB) and Control variable (FS) has insignificant impact on ROA and ROE. So this H1 could be partially accepted as Earning per Share is the main variable which expresses the performance as it is determine the shareholder's wealth.

H2: There is a significant relationship between expanding branches nationwide and performance

Correlation analysis shows there is a significant relationship between the EPS which is one of the variables measuring the performance and the number of branches. Results further indicate that correlation between EPS and NOB is 0.681.it clearly described the strong and positive relationship between EPS and NOB which is at the significance level of 1%. Meanwhile correlation between EOS and FS which is used as the control variable in this study is 0.6380 which is also denoted the positive and strong relationship at significance level 1%.Correlation between the ROA, ROE and NOB shows insignificant relationship according to the p values. So this H2 also partially accepted.

Table 08: Summary of Hypotheses Testing Results

HYPOTHESES		TOOLS	RESULTS
H1	There is a significant impact of	Regression	Partially accepted
Ha	There is a significant relationship be-	Correlation	Partially accented
112	branches		

Findings of the study

Any research is carried out to find out truth. Based on the presented data, data analysis and finding are identified. Regression analysis has been used as statistical tool to find the impact between the independent and dependent variables which have used in the study; normal regression analysis has performed to identify the impact of number of branches on the performance as conceptualized in the models while Correlation analysis is used to identify the strength of relationship between two variables.

In this study it is clearly identified that number of branches with coefficient is 0.1851 significantly related to EPS (P<0.01). It means one unit changes in Number of branches (NOB) increase EPS by 18.51%. Firm size which has been considered as the control variable Also significantly related with EPS with coefficient of 0.1429 according to the p value at 5% level of Significance (P<0.05). It presents one unit changes in firm size increase EPS by 14.29%. So it could be identified as NOB, the independent variable which significantly impact on EPS with positive effect at 1% level while firm size which considered as Control variable also have the positive significant impact on EPS at 5% level. Thus, the regression Model one has obtained in the Chapter three could be accepted. Whereas Model two and three is disagreed as Independent variable (NOB) and Control variable (FS) has insignificant impact on ROA and ROE.

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Conclusion

This study demonstrates the impact of branches nationwide on performance. This study has examined empirically the relationship between the number of branches and profitability using listed commercial banks in Sri Lanka over 2011 – 2016.

This research has been completed with the two important objectives that are to identify the impact of branches nationwide on performance of listed commercial banks in Sri Lanka and to identify the relationship between the branches nationwide and the performance. Correlation analysis show that number of branches have positive and significantly related to the performance.

Increased level of branches provides the firm with high cost of establishment at the same time deposits from new branches will considerably enhance. If the increase in the deposits equal to the costs then banks can earn the expected performance. According to the finding, Over all analyses expressed that independent variable Number of branches and control variable firm size has the significant impact on the one of the dependent variable Earning per share and insignificant with the other variables of firm performance which are Return on Assets and Return on Equity. It could be justified with the argument that establishing branches takes times to become profitable as this study comprising shorter period, the actual effect of branches increasing which will result in long-term have not resulted in the short period of ROA and ROE in this study. This study only considers the five year of data collection future studies could take a long period to identify the real performance while this study only covers the listed banks, cover all the commercial banks in Sri Lanka or increase the sample will result the accurate results.

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