



THE IMPACT OF BANK SPECIFIC DETERMINANTS ON PROFITABILITY OF LICENSED COMMERCIAL BANKS IN SRI LANKA

Ms. HMDN Somathilake¹, Dr. K.G.A Udayakumara²
Faculty of Management Studies, Rajarata University of Sri Lanka ^{1,2}
Corresponding Author: dhanujanirmani@gmail.com

ABSTRACT

Banks, as the critical part of financial system, play a vital role in contributing to a country's economic development. The study explores the impact of bank specific determinants on the profitability of licensed commercial banks in Colombo Stock Exchange (CSE) during the period of 2012-2016. The research employs 10 Licensed Commercial Banks for the study. Measures of bank specific determinants employed in this study are Capital Adequacy, Operating Efficiency, Deposits, and Assets Management. Also this study employed return on equity (ROE) as the measurement of the bank profitability. The data were analyzed and hypotheses were tested through descriptive statistics, correlation analysis and regression analysis. The findings revealed that, banks' profitability in Sri Lanka is significantly affected by the Operating Efficiency and Capital Adequacy.

Keywords: Bank-specific determinants, Profitability, Licensed commercial banks

Introduction

Banks are the financial intermediaries that mobilize savings from surplus unit to deficit economic units. The efficiency of financial intermediation can also affect economic growth. Financial intermediaries perform key financial function in economies, provide a payment mechanism, match supply and demand in financial markets, deal with complex financial instruments and markets, and provide markets transparency, performance risk transfer and risk management functions. Intermediaries function has direct linkage with bank profitability and the economic health of a nation. Banking regulatory authorities in many nations worldwide came up with various banking reforms agenda with specific emphasis on variables determining bank profitability. During the last three decades, banking industry in Sri Lanka has experienced a transition period as a consequence of deregulation of financial sector, development in information and communication technologies and globalization of the industry. Central Bank of Sri Lanka issues banking licenses for two categories such as licensed commercial bank and licensed specialized banks. The main difference between a licensed commercial bank and a licensed

specialized bank is that the former is permitted to demand Deposit from the public and is an authorized dealer in foreign exchange, Meanwhile, latter is not. Licensed Commercial Banks consist of public, private and foreign banks.

There are so many factors influencing the bank's profitability, those factors can be divided in to two categories, such as internal factors and external factors. According to the previous research, internal factors focus on bank specific determinants and industry specific determinants. On the other hand external factors focus on macro-economic determinants. Therefore, this study aims to investigate what are the bank-specific determinants that affect to profitability of licensed commercial banks in Sri Lanka.

Problem Statement

Sri Lanka is one of a developing country in the world. Then the Sri Lankan banking system plays greater role towards the countries' economic development and the performance of banking industry is important for providing financial infrastructure for economic development. Therefore considering about bank profitability is the very important key factor. But there are few studies have being done regarding bank specific determinants on profitability of licensed commercial banks in Sri Lanka. Therefore to fill this research gap current study is conducted to examine the impact of banks specific determinants on profitability of licensed commercial banks in Sri Lanka.

Objectives of the Research

1. To examine the impact of Capital Adequacy on Return on Equity of Licensed Commercial Banks in Sri Lanka.
2. To examine the impact of Deposit on Return on Equity of Licensed Commercial Banks in Sri Lanka.
3. To examine the impact of Assets Management on Return on Equity of Licensed Commercial Banks in Sri Lanka.
4. To examine the impact of Operating Management on Return on Equity of Licensed Commercial Banks in Sri Lanka.

Research Questions

1. Is Capital Adequacy impact on Return on Equity of Licensed Commercial Banks in Sri Lanka?
2. Is Deposit on Return impact on Equity of Licensed Commercial Banks in Sri Lanka?
3. Is Assets Management impact on Return on Equity of Licensed Commercial Banks in Sri Lanka?
4. Is Operating Management impact on Return on Equity of Licensed Commercial Banks in Sri Lanka?

Literature Review

Relationship between Capital Adequacy and Bank Profitability

Ameur and Mhiri (2013) examined how bank-specific characteristics affect the profitability of 10 listed commercial banks in Tunisia over the period from 1998 to 2011 and found that Capital Adequacy is positive and highly significant on Return on Equity (ROE). According to Alper and Anbar (2011) found that Capital Adequacy have not important effect on bank profitability. According to Ashraf (2012) revealed that Capital Adequacy shows negative relationship with Return on Equity (ROE) and found to be significant at 0 percent level of

significance. Soyemi et al (2013) investigated how affect the determinants of profitability among money banks (DMBS) in Nigeria post consolidation and they found that Capital Adequacy is negative and highly significant on Return on Equity (ROE). Athanasoglu et al (2005) investigated the impact of bank-specific, Industry specific and Macro- economic Determinants on bank profitability and they found that Capital Adequacy shows positive relationship with Return on Equity (ROE). Moussa (2012) investigated Bank Specific Determinants and Macro-economic determinants effect on the Banks Profitability and found that positive and significantly effect of Capital Adequacy on Return on Equity (ROE). Swarnapali (2014) investigated Firm Specific Determinants and Financial Performance of Licensed Commercial Banks in Sri Lanka and found that Capital Adequacy have not significant effect on bank profitability. Owoputi (2014) investigated the impact of bank specific, industry specific and Macro- economic indicators on Bank profitability in Nigeria over the time period from 1998 to 2012 and found that positive and significant effect of Capital Adequacy on bank profitability in Nigeria.

Relationship between Deposit and Bank Profitability

Ameur and Mhiri (2013) examined how bank-specific characteristics affect the profitability of 10 listed commercial banks in Tunisia and found that Deposit has positive relationship with Return on Equity (ROE). According to the Alper and Anbar (2011) investigated determinants of commercial bank profitability in Turkey and found that Deposit have not important effect on bank profitability. According to Ashraf (2012) found that Deposit represent the negative relationship with Banks Profitability model of Return on Equity (ROE) and coefficient found to be insignificant. Soyemi et al (2013) investigated how affect the determinants of profitability among money banks in Nigeria post consolidation. They found Deposit is positively related to but insignificant to Return on Equity (ROE). Owoputi (2014) examined the impact of bank specific indicators on Bank profitability in Negeria and found that positive and significant effect of Deposit on bank profitability in Nigeria.

Relationship between Operating Efficiency and Bank Profitability

Ashraf (2012) found that Operating efficiency showed negative relationship with Return on Equity (ROE). According to Sufian (2011) investigated the impact of banks determinants on bank profitability in Korean banking System and found that Operating Efficiency positively effect on profitability of Korean banking system. Soyemi et al (2013) found that the Operating Efficiency positively impact on Return on Equity (ROE) of Nigerian banks. Athanasoglu et al (2005) investigated the impact of bank-specific determinants on bank profitability and they found that Operating Efficiency shows negative relationship with Return on Equity (ROE). Swarnapali (2014) found that Operating Efficiency is significant at 5 percent level in Return on Equity (ROE).

Relationship between Assets Management and Bank Profitability

Ashraf (2012) found that Assets Management has positive relationship with Return on Equity (ROE) and it is significant at 10 percent level.

Based on above literature review following hypotheses were developed,

H₁ = There is a significant impact of Deposit on bank profitability.

H₂ = There is a significant impact of Operating Efficiency on bank profitability.

H₃ = There is a significant impact of Assets Management on bank profitability.

H₄ = There is a significant impact of Capital Adequacy on bank profitability.

Research Methodology

Study Period and Data Coverage

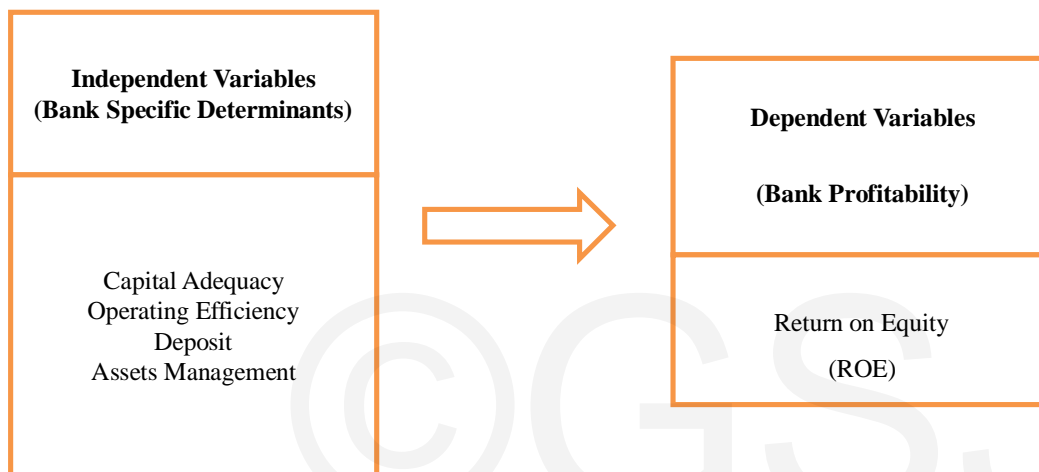
As the population of the study researcher selected 25 Licensed Commercial Banks in Sri Lanka. Among that 13

banks foreign banks were eliminated from the sample. So, initial sample is 12. But two banks have been eliminated due to other restriction (unavailability of data). Therefore final sample size was restricted as ten Licensed Commercial Banks. Such as, Bank of Ceylon, Commercial Bank Of Ceylon PLC, Hatton National Bank PLC, National Development Bank PLC, Nation Trust Bank PLC, Pan Asia Banking Corporation PLC, People's bank, Sampath Bank PLC, Seylan Bank PLC, Union Bank PLC.

Conceptual Framework

The conceptual framework constructed bellow is based on literature review amd research problems. For this study researcher consider four independent variables such as Capital Adequacy, Operating Efficiency, Deposit and Assets Management. The dependent variable is Return on Equity (ROE).

Figure1: Conceptual Framework of the Study



Source: Developed by Researcher

Operationalization of Variables

Bank profitability”, which is typically measured by using the Return on Equity (ROE), is usually expressed as the function of Bank Specific Determinants. Return on Equity (profit after tax divided by shareholders’ fund) considers as the dependent variables, Capital Adequacy (Equity/ Total Assets), Operating Efficiency (Operating Expenses/ Total Assets), Deposit (Deposit/ Total Assets) and Assets Management (Operating Income/ Total Assets) considered as the independent variables.

Data Analysis and Presentation

The data collected through secondary sources and analysed using Descriptive Statistics Analysis, Correlation Analysis and Multiple Regression Analysis.

Research Model

Regression analysis estimates relationship between the dependent and independent variables. Regression model is,

$$ROE = \beta_0 + \beta_1 (CA) + \beta_2 (OE) + \beta_3 (DP) + \beta_4 (LA) + \beta_5 (AM) + \varepsilon$$

Where,

ROE = Return on Equity

A = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$	= Coefficient of Variables
CA	=Capital Adequacy
OE	=Operating Efficiency
DP	=Deposit
LA	=Liquidity
AM	=Assets Management
ε	= Represent error term

Descriptive Statistics Analysis

Descriptive Statistics helps to understand the behavior of the variables. The Table 01 shows the result of the descriptive analysis.

Table 1: Descriptive Statistic Analysis

	N	Minimum	Maximum	Mean	SD Deviation
ROE	50	0.021	0.394	0.170	0.084
DP	50	0.080	0.854	0.718	0.123
OE	50	0.017	0.065	0.036	0.012
AM	50	0.040	0.092	0.060	0.011
CA	50	0.033	0.243	0.088	0.040

Source: Developed by Researcher

According to the Table 1 mean value of ROE 17 percent. It implies that 17 percent of profit after tax is represented by shareholder's equity. On the other hand ROE can be deviated by 8.4 percent around its mean value. Maximum value of ROE is 39.4 percent and minimum ROE value is 2.1 percent.

Correlation Analysis

The correlation analysis measures relationship between dependent and independent variables.

Table 2: Correlation Analysis

		ROE	DP	OE	AM	CA
ROE	Pearson Correlation	1				
	Sig. (2-tailed)					
DP	Pearson Correlation	0.053	1			
	Sig. (2-tailed)	0.714				
OE	Pearson Correlation	-0.376**	0.070	1		
	Sig. (2-tailed)	0.007	0.630			
AM	Pearson Correlation	0.040	-0.096	0.712**	1	
	Sig. (2-tailed)	0.782	0.505	0.000		
CA	Pearson Correlation	-0.570**	-0.144	0.040	0.059	1
	Sig. (2-tailed)	0.000	0.320	0.782	0.686	

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed by Researcher.

The table 2 represents correlation of DP, OE, AM and CA with ROE. This study Operating Efficiency has 0.376 significant negative relationship with Return on Equity at 0.01 significant level. Capital Adequacy has 0.57 significant and negative relationship with Return on Equity (ROE). It was compatible with the finding of

Swarnapali (2014), Moussa (2012). Other variables Deposits and Assets Management (AM) have insignificant positive relationship with Return on Equity (ROE).this is in accordance with findings of Alper and Anbar (2011) and Ashraf (2012).

Multiple Regression Analysis

Regression analysis helps on determine the probable form of the relationship between variables. In this research simple regression analysis was used to examine the impact of independent variables on dependent variables.

Table 3: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.128	0.067		1.913	0.062
DP	0.067	0.061	0.098	1.104	0.275
OE	-6.051	0.885	-0.848	-6.836	0.000
AM	5.280	0.957	0.686	5.519	0.000
CA	-1.197	0.184	-0.563	-6.512	0.000
R ²	0.672				
F Value	23.051				
Sig	0.000 ^b				

Dependent Variable: ROE

Predictors: DP, OE, AM, CA

Source: Developed by Researcher

According to table 3, R² value is 67.2%, the amount suggested that 67.2% of variation in Return on Equity is explained by the variation in Bank Specific Determinants. The table 4 shows the F value and significant value. F= 23.051 and significance "P" value = 0.000. It implies that the model researcher used is more significant and acceptable model.

The regression equation is,

$$ROE = \beta_0 + \beta_1 (CA) + \beta_2 (OE) + \beta_3 (DP) + \beta_4 (LA) + \beta_5 (AM) + \varepsilon$$

$$ROE = 0.128 + (-1.197) CA + (-6.051) OE + 0.067(DP) + 5.280 AM$$

Where,

ROE = Return on Equity

α = Constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Coefficient of Variables

CA = Capital Adequacy

OE = Operating Efficiency

DP = Deposit

LA = Liquidity

AM = Assets Management

ε = Represent error term

Testing Hypotheses

According to the regression results it can be summarized the results of the hypothesis testing as table 4.

Table 4: Summary of Testing Hypotheses

Hypotheses	Result	Tools
H ₁ - There is a significant impact of Deposit on bank profitability (P Value is more than acceptable value 0.05)	Rejected	Regression
H ₂ - There is a significant impact of Operating Efficiency on bank profitability (P Value = 0.000)	Accepted	Regression
H ₃ - There is a significant impact of Assets Management on bank profitability (P Value = 0.000)	Accepted	Regression
H ₄ – There is a significant impact of Capital Adequacy on bank profitability. (P Value = 0.000)	Accepted	Regression

Conclusion and Recommendation

Profitability of banks is one of the primary objective. So, all banks operations and activities are adjusted on profit making objective and managements have to formulate policies in guiding the operations and activities of banks toward profit making objective. Therefore, the present study aims to investigate the impact of Bank Specific Determinants on profitability focusing on 10 licensed commercial banks listed in Sri Lanka. Bank Specific Determinants like Deposits, Operating Efficiency, Assets Management and Capital Adequacy identified as independent variables and Return On Equity was identified as dependent variable. According to the regression analysis R square value is 67.2%. it reveals that 67.2 percent change in ROE is represented by Bank Specific Determinants considered in this study. Findings revealed that Operating Efficiency has a significant negative impact on Return on Equity (ROE). Assets Management has significant positive impact on Return on Equity. Also Capital Adequacy has negative significant impact on Return on Equity. Hence, Operating Efficiency, and Capital Adequacy appear to be important determinants of profitability of licensed commercial banks in Sri Lanka. There are some kind of limitations in this research. In this reaesrch only considered Licensed Commercial Banks in Sri Lanka. But researchers can do their research on covering other sectors Such as financial institution, Insurance and etc. This study concerned only the periods of 2012,2013,2014,2015 and 2016.So further can do research in future by increasing collecting data more than five years. In here only consider about few Bank Specific Determinants and profitability measured by using ROE. Therefore, researchers can do further research in future by adding other variables in addition to explained in this study.

REFERENCES

- Alper, D., & Anbar, A. (2011). Bank Specific and macroeconomic determinants of commercial Bank Profitability. *Business and Economics Research Journal*, 140-152.
- Ameur, I. G., & Mhiri, S. (2013). Explanatory Factors of Bank Performance Evidence from Tunisia. *International Journal of Economics, Finance and Management*, 143-152.
- Ashraf, O. M. (2012). Bank Specific and Macro Economic Profitability determinants of Islamic banks. *Qualitative Research in Financial Markets*, 255-263.

Athanasoglou, P. p., Brissimis, S., & Delis, M. (2005). Bank- Specific, Industry- Specific and macroeconomic determinants of bank profitability. *Bank of Greece*, 5-37.

Moussa, M. M. (2012). *Bank -Specific and Macroeconomic Determinants of Bank Profitability*. Turkey: Institute of Graduate Studies And Research.

Owoputi, J. A. (2014). Bank Specific, Industry Specific and macroeconomic determinants of bank profitability in Nigeria. *European Scientific Journal*, 408-423.

Roman, A., & Danuletiu, A. (2013). An Emperical Analysis of the determinants of Bank Profitability in Romania. *Annales Universitatis Apulensis Series Oeconomica*, 580-593.

Schiniotakis, N. L. (2012). Profitability factors and efficiency of Greek Banks. *Euromed Journal of Business*, 185-200.

Soyemi, K. A., Akinpelu, L., & Ogunleye, J. (2013). The Determinants of Profitability among Deposit Money Banks (DMBS) in Nigeria Post Consolidation. *Global Advance Research Journals*, 093-103.

Sufian, F. (2011). Profitability of the Korean Banking Sector Panel Evidence on Bank Specific and Macroeconomic Determinants. *Economic and management*, 43-72.

Sufian, F. (2012). Determinants of Multinational banks Subsidiary Perfomance;The host and home country effect. *Journal of Economic and Administrative Science*, 130-155.

Swarnapali, R. (2014, February 26-27). Specific Detrminants and Financial Perfomance of Licensed Commercial Bank in Sri Lanka. *Reshaping Management and Economic Thinking Intergrating and Practices Proceedings of the 3rd International Conference on management and Econamics*. Sri Lanka: ICME.