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-RESEARCH ARTICLE-

THE ROLE OF CAPITAL BUFFER AND EFFICIENCY ON THE PROFITABILITY OF ISLAMIC BANKS: AN EVIDENCE FROM ASEAN

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─Abstract─

Recently, the profitability of financial institutions, especially the banking sector has been an essential element for the country's economic growth around the globe. This aspect requires the intentions of recent studies and policymakers. Hence, the present article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. The study collected the secondary data of the Islamic Banks of the ASEAN countries from the Islamic Financial Services Board (IFSB) from 2010 to 2022. The article also used the Feasible Generalized Least Square (FGLS) method to test the association among the variables. The outcomes indicated that the capital buffer, efficiency, banks size, liquidity and leverage have a positive linkage with the profitability of the Islamic banks in ASEAN countries. The study guides the policymakers in making policies related to improve the profitability of the banks by focusing on the capital buffer and efficiency.

Keywords: Capital buffer, efficiency, banks size, liquidity leverage, profitability, Islamic banks, ASEAN countries

INTRODUCTION

The economy of any country is the combination of sectors like services and manufacturing. Each sector has its unique importance for the prosperity of the economy. There are a few sectors that are more important due to their affiliation with other sectors like the banking sector. As the world has become a global village therefore the financial practices of the world have also been developed and switched to electronic means. As finance is the need of every sector therefore the banking system is the need of every sector. Not only the business sector but it also becomes one of the vital needs of the society. Every day trillions of transactions proceeded through banking channels which result in financial exchange throughout the world. The banking sector also ensures betterment in its performance with the view to increase its network so that they increase its profitability. Profitability is the ultimate aim of every organization all around the globe. The firms invest their maximum efforts to increase their profitability so that they might able to pay back their shareholder (Ha, Gillet, Le, & Vo, 2020). Literature proposed that there is a number of factors that results in affecting the banking sector profitability like firm size, buffer capital, operational performance, strategy, and leverage. Keeping in view the importance of capital buffer, efficiency, firm size, liquidity, and leverage for the firm's profitability the current study explored this nexus in ASEAN.

As far as the banking sector of ASEAN, it's performing well and is in a good position (Wanke, Hassan, & Gavião, 2017). One of the core reasons is AFC (Ha et al., 2020). As of 2019, the average capital-to-asset ratio of ASEAN banks was higher than 11%,

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making it comparable to US banks and far higher than European banks (Ha et al., 2020). The profitability of ASEAN banks has been strong as a result of the region's strong economic growth and high-yield environment, (Mongid & Tahir, 2011). The profitability of financial institutions, especially the banking sector has been an essential element for the country's economic growth around the globe. This aspect requires the intentions of recent studies and policymakers. Hence, the present article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries.

Several literature exists on the cultural economy, urbanization and eco-innovation but still, gaps exists in literature and the present investigation are addressing are 1) the equation consists of the factors like firm profitability, capital buffer, efficiency, firm size, liquidity and leverage particularly in the Banking Sector of ASEAN is not tested before in recent time, 2) Tabak, Fazio, Ely, Amaral, and Cajueiro (2017) and Andaiyani, Hidayat, Djambak, and Hamidi (2021) investigated whether there us any sort of nexus between capital buffer and profitability in different countries at different times, however, the current study will also work on this relationship along with other variables like efficiency, firm size, liquidity and leverage particularly in banking sector of ASEAN with fresh sample set, 3) Eling and Jia (2019) and Azad, Raza, and Zaidi (2018) investigated whether there us any sort of nexus between efficiency buffer and profitability in different countries at different times, however, the current study will also work on it along with other variables like capital buffer, firm size, liquidity and leverage using the fresh sample set, 4) Abeyrathna and Priyadarshana (2019), Ozcan, Unal, and Yener (2017), Saragih, Tarigan, Pratama, Wardati, and Silalahi (2020) and Utami, Indrianto, and Pratama (2019) investigated whether there us any sort of nexus between firm size and profitability in different countries at different times, however, the current study will also work on it along with other factors like capital buffer, efficiency, liquidity and leverage in ASEAN with fresh data sample set, 5) Vintilă and Nenu (2016) and Malik, Awais, and Khursheed (2016) investigated whether there us any sort of nexus between liquidity anf profitability in different countries at different times, however, the current study will add the variables like eco-product innovation, circular economy readiness and sustainable entrepreneurship with fresh sample set, 6) Dalci (2018) investigated whether there us any sort of nexus between leverage and profitability in different countries at different times, however, the current study will also work on it in the relationship between eco-innovation both product and process and urban sustainability particularly in ASEAN with fresh sample set, The current study pertaining a noticeable significance, 1) being one of the most important topics of the modern era i.e., firms profitability the present investigation will highlight the need to explore it, particularly in the context of buffer capital, efficiency, size, liquidity, size and leverage, 2) although there is a lot of literature available on banking sector profitability is available but the present study will result in add the literature on the topic in the context of ASEAN, 3) provide a guideline as well as help to the banking related professionals to highlight these factors important for the prosperity as well as profitability of banking system.

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REVIEW OF LITERATURE

The profitability of financial institutions, especially the banking sector has been an essential element for the country's economic growth around the globe. This aspect requires the intentions of recent studies and policymakers. Hence, the present article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. One of the prime aims of the organizations is sustainable prosperity. Firms all around the globe ensure their maximum efforts to ensure their prosperity and in this context, profitability is one of the prime factors. Literature proposed that there are a lot of factors that play a vital role in the profitability of the firm and one important among them is capital buffer. In this context, Marbun, Effendi, Lubis, and Pratama (2020) and Tabak et al. (2017) checked whether there is any sort of association between capital buffer and firm profitability. The study was conducted on a population of 51 economies. The study was empirical in nature. The study used the data of 12 years as a sample. The selected sample covers the tenure from 2000 to 2012. For the sake of analysis, the study used the regression analysis approach. The results received from the analysis proposed that there is a significant association between capital buffer and firm profitability and the nature of the association is positive. Similarly, Andaiyani et al. (2021) and Atrizka, Lubis, Simanjuntak, and Pratama (2020) checked whether there is any sort of association between capital buffer and firm profitability. The study was conducted on the population of Indonesia. The study was empirical in nature. The study used the data of 02 years as a sample. The selected sample covers the tenure from 2015 to 2017. For the sake of analysis, the study employed the GMM analysis approach. The results received from the analysis proposed that there is a significant and positive association between capital buffers. Additionally, Masdjojo, Suwarti, Nuswandari, and Sudiyatno (2023), Pratami, Feriyanto, Sriyana, and Pratama (2022) and Tambunan, Siregar, Wijaya, and Pratama (2023) checked whether there is any sort of association between capital buffer and firm profitability. The study was conducted on the population of Indonesia. The study was empirical in nature. The study used the data of 03 years as a sample. The selected sample covers the tenure from 2017 to 2020. For the sake of analysis, the study used the multiple regression and sobel test analysis approach. The results received from the analysis proposed that there is a significant and positive association between capital buffer and profitability.

The profitability of the firms is the outcome of a number of factors. Factors like effectiveness, efficiency, leverage, and operational performance are key in this regard. Efficiency is one of the factors which enhance the performance of the overall system with the view to achieving the goal. Literature proposed that there is a significant association between efficiency and firms' profitability. In this context, Eling and Jia (2019), checked whether there is any sort of association between efficiency and firm profitability. The study was conducted on the population of the USA. The study was empirical in nature. The study used data from 500 insurance companies as a sample. The selected sample data was collected with the help of questionnaires. For the sake of analysis, the study used the simple regression and analysis approach. The results received from the analysis proposed that there is a significant association between efficiency and profitability. Similarly, Azad et al. (2018), Saragiha, Wardatib, and Pratamac (2020) and Tanjung, Ruslan, Lubis, and Pratama (2022) checked whether there is any sort of association between efficiency and firm profitability. The study was conducted on the population of Pakistan. The study was empirical in nature. The study used data from 5 years as a sample. The selected sample covers the tenure from 2010 to 2015. For the sake of analysis, the study employed the OLS and correlation matrix analysis approach. The results received from the analysis proposed that there is a significant association between efficiency and profitability. Additionally, Rosko, Al-Amin, and Tavakoli (2020) checked whether there is any sort of association between efficiency and firm profitability. The study was conducted on the population of the USA. The study was empirical in nature. The study used the data of 1317 nonprofit based hospitals in USA as a sample. The selected sample data was collected with the help of questionnaires. For the sake of analysis, the study employed the OLS regression analysis approach. The results received from the analysis proposed that there is a significant association between efficiency and profitability.

The profitability of financial institutions, especially the banking sector has been an essential element for the country's economic growth around the globe. This aspect requires the intentions of recent studies and policymakers. Hence, the present article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. The business sector of any country is the combination of their level of firms like small-size, medium-size, and large-size firms. Literature proposed that the firm size significantly affects the profitability of the firms. In this context, Abeyrathna and Priyadarshana (2019) checked whether there is any sort of association between firm size and firm profitability. The study was conducted on the population of Sri Lanka. The study was empirical in nature. The study used 3 years data of from 20 manufacturing firms as a sample. The selected sample covers the tenure from 2014 to 2017. For the sake of analysis, the study employed the correlation and regression analysis approach. The results received from the analysis proposed that there is a significant association between firm size and profitability. Similarly, Ozcan et al. (2017) checked whether there is any sort of association between firm size and firm profitability. The study was conducted on the population of Turkey. The study was empirical in nature. The study used 8 years data of from 112 publicly listed firms in Turkey as a sample. The selected sample covers the tenure from 2005 to 2013. For the sake of analysis, the study employed the GMM estimator analysis approach. The results received from the analysis proposed that there is a significant association between firm size and profitability. Additionally, Kartikasari and Merianti (2016) checked whether there is any sort of

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association between firm size and firm profitability. The study was conducted on the population of Indonesia. The study was empirical in nature. The study used the 5 years data of 100 manufacturing firms of Indonesia as a sample. The selected sample covers the tenure from 2009 to 2014. For the sake of analysis, the study employed the panel data regression analysis approach. The results received from the analysis proposed that there is a significant association between firm size and profitability.

The firms particularly operate on the basis of the shareholder's investment. The stakeholders prior to investing in any sector ensure its proper analysis. One of the important tools to verify the firm's health is to check its liquidity in different ways. Literature proposed that the firm's liquidity significantly affects its profitability. In this context, Vintilă and Nenu (2016) checked whether there is any sort of association between firm liquidity and firm profitability. The study was conducted on the population of Romania. The study was empirical in nature. The study used the data of 10 years as a sample. The selected sample covers the tenure from 2005 to 2014. For the sake of analysis, the study employed the correlation matrix analysis approach. The results received from the analysis proposed that there is a significant association between firm liquidity and profitability. Similarly, Malik et al. (2016) and Tambunan, Siregar, Wijaya, and Pratama (2022) checked whether there is any sort of association between firm liquidity and firm profitability. The study was conducted on the population of Pakistan. The study was empirical in nature. The study used the data of 05 years as a sample. The selected sample covers the tenure from 2009 to 2013. For the sake of analysis, the study employed the OLS analysis approach. The results received from the analysis proposed that there is a significant association between firm liquidity and profitability. Similarly, Mohanty and Mehrotra (2018) checked whether there is any sort of association between firm liquidity and firm profitability. The study was conducted on the population of India. The study was empirical in nature. The study used the data of 06 as a sample. The selected sample covers the tenure from 2011 to 2016. For the sake of analysis, the study employed the correlation matrix analysis approach. The results received from the analysis proposed that there is a significant association between firm liquidity and profitability.

There are a lot of financial factors which affect the firm performance which further results in affecting its profitability like leverage, insolvency percentage, and political conditions. Literature proposed that there is a significant association between leverage and firms' profitability. The firms particularly operate on the basis of the shareholder's investment. The stakeholders prior to investing in any sector ensure its proper analysis. One of the important tools to verify the firm's health is to check its liquidity in different ways. In this context, Dalci (2018) checked whether there is any sort of association between leverage and firm profitability. The study was conducted on the population of China. The study was empirical in nature. The study used data from 09 years as a sample. The selected sample covers the tenure from 2008 to 2016. For the sake of

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analysis, the study employed the GMM estimator analysis approach. The results received from the analysis proposed that there is a significant association between leverage and profitability. Similarly, Minnema and Andersson (2018) checked whether there is any sort of association between leverage and firm profitability. The study was conducted on the population of Sweden. The study was empirical in nature. The study used the data of 05 years as a sample. The selected sample covers the tenure from 2012 to 2016. For the sake of analysis, the study employed the OLX fixed efforts analysis approach. The results received from the analysis proposed that there is a significant association between leverage and profitability. Additionally, Reddy and Narayan (2018) checked whether there is any sort of association between leverage and firm profitability. The study was conducted on the population of India. The study was empirical in nature. The study used data from 04 years as a sample. The selected sample covers the tenure from 2006 to 2007 and 2015 to 2016. For the sake of analysis, the study employed the correlation matrix analysis approach. The results received from the analysis proposed that there is a significant association between leverage and profitability.

RESEARCH METHODOLOGY

The article investigates the impact of capital buffer, efficiency, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. The study collected the secondary data of the Islamic Banks of the ASEAN countries from the IFSB from 2010 to 2022. The study equation is mentioned below:

$$PR_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 EFF_{it} + \beta_3 BS_{it} + \beta_4 LQ_{it} + \beta_5 LV_{it} + e_{it} \quad \textbf{(1)}$$

Where;
PR = Profitability
t = Time Period
i = Banks
CB = Capital Buffer
EFF = Efficiency
BS = Bank Size
LQ = Liquidity
LV = Leverage

The study used the banks' profitability as the dependent variable proxies as return on equity. In addition, the study also used two predictors such as capital buffer proxies as % of buffer against total risk-weighted assets and efficiency proxies as the receivable turnover ratio. Finally, the study used three control variables named bank size proxies as the logarithm of total assets, liquidity proxies as the ratio of current assets and current liabilities and leverage proxies as the ratio of total debts and total equity. These proxies and variables are given in Table 1.

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Table 1: Variables with Measurements

S#	Variables	Measurement	Sources
01	Profitability	Return on equity	IFSB
02	Capital Buffer	% of buffer against total risk-weighted assets	IFSB
03	Efficiency	The receivable turnover ratio	IFSB
04	Bank Size	The logarithm of total assets	IFSB
05	Liquidity	The ratio of current assets and current liabilities	IFSB
06	Leverage	The ratio of total debts and total equity	IFSB

The study checks the details of the constructs used in the study using descriptive statistics. In addition, the article also used the matrix of correlation to test the correlation among the variables. Moreover, the study examines the multicollinearity using variance inflation factor (VIF). The equations are given below:

$$R^2_{PR} \quad PR_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 \mathrm{EFF}_{it} + \beta_3 \mathrm{BS}_{it} + \beta_4 \mathrm{LQ}_{it} + \beta_5 \mathrm{LV}_{it} + e_{it} \qquad \textbf{(2)}$$
$$R^2_{CB} \quad CB_{it} = \alpha_0 + \beta_1 PR_{it} + \beta_2 \mathrm{EFF}_{it} + \beta_3 \mathrm{BS}_{it} + \beta_4 \mathrm{LQ}_{it} + \beta_5 \mathrm{LV}_{it} + e_{it} \qquad \textbf{(3)}$$
$$R^2_{EFF} \quad EFF_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 \mathrm{PR}_{it} + \beta_3 \mathrm{BS}_{it} + \beta_4 \mathrm{LQ}_{it} + \beta_5 \mathrm{LV}_{it} + e_{it} \qquad \textbf{(4)}$$
$$R^2_{BS} \quad BS_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 \mathrm{EFF}_{it} + \beta_3 \mathrm{PR}_{it} + \beta_4 \mathrm{LQ}_{it} + \beta_5 \mathrm{LV}_{it} + e_{it} \qquad \textbf{(5)}$$
$$R^2_{LQ} \quad LQ_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 \mathrm{EFF}_{it} + \beta_3 \mathrm{BS}_{it} + \beta_4 \mathrm{BS}_{it} + \beta_5 \mathrm{LV}_{it} + e_{it} \qquad \textbf{(6)}$$
$$R^2_{LV} \quad LV_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 \mathrm{EFF}_{it} + \beta_3 \mathrm{BS}_{it} + \beta_4 \mathrm{LQ}_{it} + \beta_5 \mathrm{PR}_{it} + e_{it} \qquad \textbf{(7)}$$
$$j = R^2_{EX}, R^2_{LBFEP}, R^2_{LCO2,}\, R^2_{SG,} R^2_{FS,} \qquad \textbf{(8)}$$
$$Tolrance = 1 - R^2_j \qquad VIF = \frac{1}{Tolerance} \qquad \textbf{(9)}$$

The article also used the FGLS method to test the association among the variables. The FGLS method is one of the developments of the least square method used to estimate regression coefficients. The FGLS method can handle the problem of Ordinary Least Square (OLS) when there is a violation of classical assumptions such as heteroscedasticity and autocorrelation. The FGLS method infers the regression coefficient if the error variance is unknown in the regression model, and is able to produce an estimator that is BLUE. The equation of the technique given below:

$$PR_{it} = \alpha_0 + \beta_1 CB_{it} + \beta_2 EFF_{it} + \beta_3 BS_{it} + \beta_4 LQ_{it} + \beta_5 LV_{it} + e_{it} \qquad \textbf{(10)}$$

RESEARCH FINDINGS

The article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. The study checks the details of the constructs used in the study using descriptive statistics. The outcomes indicated that the mean figure of PR was 14.761 percent, CR was 12.129 percent and EFF was 1.289 percent. In addition, the outcomes

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indicated that the mean figure of BS was 13.920 percent, LQ was 2.901 percent and LV was 2.705 percent. These values are mentioned in Table 2.

Table 2: Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
PR	14.761	1.920	13.109	17.363
CB	12.129	0.325	11.043	15.004
EFF	1.289	0.281	1.128	1.982
BS	13.920	1.261	11.281	15.479
LQ	2.901	0.123	2.109	3.211
LV	2.705	0.543	1.089	2.864

In addition, the article also used the matrix of correlation to test the correlation among the variables. The outcomes indicated that the capital buffer, efficiency in terms of collection of receivables, banks size, liquidity and leverage have a positive linkage with the profitability of the Islamic banks in ASEAN countries. These values are mentioned in Table 3.

Table 3: Correlation Matrix

Variables	PR	CB	EFF	BS	LQ	LV
PR	1.000					
CB	0.556	1.000				
EFF	0.467	0.453	1.000			
BS	0.765	0.466	0.578	1.000		
LQ	0.545	0.675	0.477	0.456	1.000	
LV	0.667	0.453	0.564	0.576	0.473	1.000

Moreover, the study examines the multicollinearity using VIF. The outcomes indicated that the VIF values are lower than five and reciprocals are larger than 0.20. These values exposed no multicollinearity exists. These values are mentioned in Table 4.

Table 4: Multicollinearity Test

	VIF	1/VIF
EFF	3.765	0.266
BS	3.271	0.306
CB	3.091	0.324
LQ	2.764	0.362
LV	1.743	0.574
Mean VIF	2.927	.

The article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. The article also used the FGLS method to test the association among the

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variables. The outcomes indicated that the capital buffer, efficiency in terms of collection of receivables, banks size, liquidity and leverage have a positive linkage with the profitability of the Islamic banks in ASEAN countries. These associations are mentionde in Table 5.

Table 5: FGLS Model

Variable	Coefficient	t-Statistic	Prob.
CB	0.743***	4.755	0.000
EFF	1.843***	6.574	0.000
BS	0.564***	4.453	0.000
LQ	1.092**	2.102	0.043
LV	2.101**	2.664	0.023
Cons	1.282***	5.874	0.000

R square = 63.467

DISCUSSIONS

The article investigates the impact of capital buffer, efficiency in terms of collection of receivables, bank size, liquidity and leverage on the profitability of the Islamic banks in ASEAN countries. The results revealed that capital buffer is positively linked to bank profitability. These results are in line with Andaiyani et al. (2021), which highlights that capital buffers are the reserves set aside out of the regular income. When a bank has a capital buffer, it has the potential to recover from shocks and saves its position. So, capital buffer improves and maintains bank profitability. These results also agree with Mehzabin, Shahriar, Hoque, Wanke, and Azad (2023), which checks the role of capital buffer in increasing bank profitability. The study posits that a capital buffer enables banking institutions to overcome risks, reduces the damages from risk exposures, and secures the source of profits. Thus, the capital buffer contributes to bank profitability.

The results revealed that bank efficiency is positively linked to bank profitability. These results are in line with Haryanto, Chandrarin, and Bachtiar (2019), which implies that banking businesses rely on clients' deposits and their usage in different ways like investments, loans, leases, etc. If some banking institution is quite efficient in receiving and managing deposits, they could have higher profits. These results also match with Neves, Proença, and Dias (2020), when bank management shows improved efficiency in gaining deposits and making the best use, they may improve their profitability.

The results revealed that bank size is positively linked to bank profitability. The research article of Ali and Puah (2019) supports the current study results. This study states that if the size of a banking institution is increasing and it succeeds in expanding its activities beyond spatial and time limits by applying up-dated technology, it can better serve customers and raise demand. As a result, the total profits of the banking institution are higher. These results also agree with Kumar, Thrikawala, and Acharya (2022), which explains that if a bank's size is large, it has a greater number of branches, greater value

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of assets, and can run its business at a higher level. So, the bank is in a position to have higher profits.

The results revealed that liquidity is positively linked to bank profitability. These results are in line with Saleh and Abu Afifa (2020), which implies that the liquidity of assets determines the banks' ability to arrange ready cash and put it into business projects at the right time in order to avail of opportunities. That is why, with higher liquidity, bank profitability can be improved. These results also agree with Duan and Niu (2020), which indicates that the higher the liquidity of assets, the greater the possibility for the bank to gain profits.

The results revealed that leverage is positively linked to bank profitability. These results align with Martynova, Ratnovski, and Vlahu (2020), which reveals that banks are the financial institutions which deal in money. If the leverage rate is higher, banks may expand their fundamental function and generate higher profits. These results are supported by Budhathoki, Rai, Lamichhane, Bhattarai, and Rai (2020). Authors claim that if the leverage rate gets higher and favorable, banks have better quality resources and can better manage the business to attain higher profits.

IMPLICATIONS

There are future directions for researchers out of this study. The study initiates to examine the combined influences of capital buffer and bank efficiency along with control factors like bank size, liquidity, and leverage on bank profitability. The study is also an exception in the way that it checks the role of capital buffer, bank efficiency, bank size, liquidity, and leverage in the profitability of banks operating in ASEAN economies.

The study also has great empirical importance to ASEAN economies and other ones where banks are considered the root of the economy. The study highlights how the banks' profitability can be improved. The study guides that banks must have a capital buffer in order to increase their profitability. There is also a guideline that the managerial personnel and other workers must develop the ability to show higher efficiency in creating and maintaining bank deposits. It would increase bank profitability. The study guides the policymakers in making policies related to improve the profitability of the banks by focusing on the capital buffer and efficiency. The study also gives a suggestion that there should be an improvement in bank size so that bank profitability is higher. The study implies that asset liquidity must be improved, and thereby, bank profitability should be increased. Moreover, the study conveys that banking management must try to increase the leverage rate. It would increase bank profitability.

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CONCLUSION

The authors had the intention to analyze the role of capital buffer and bank efficiency in bank profitability. They were also to examine the role of control factors like bank size, liquidity, and leverage in bank profitability. The data in need regarding capital buffer, bank efficiency, bank size, liquidity, leverage and profitability were taken from ASEAN economies. According to study results, capital buffer, bank efficiency, bank size, liquidity, and leverage have a positive relation to bank profitability. The results showed that when a bank has a significant amount of capital buffer, they are able to face uncertain circumstances, avoid contingent risk exposures, and benefit from better opportunities. This improves and maintains bank profitability. The results also indicated that the banks which show efficiency in increasing and maintaining the deposits with them could have a stable financial position and earn higher profits. The study also concluded that the higher the bank size, the higher the scope of banking functions and their effectiveness. It results in larger banking profits. The results also indicated that if assets in bank ownership are high liquidity, it is helpful to banks in business planning and raising profits. Moreover, the study concluded that with higher leverage, banking companies could arrange funds immediately for use in business. Therefore, banks can expand their business and can earn more profits.

LIMITATIONS

The study implication is limited on some grounds. Future researchers must be attentive to remove these limitations. In this research study, only microeconomic factors like capital buffer, bank efficiency, bank size, liquidity, and leverage have been taken into consideration as determinants of bank profitability. Macroeconomic factors like inflation, employment level, national income, fiscal policy, interest rate etc., also have a key role in bank profitability, but there is no detail regarding these factors. Now, it is expected from future researchers also look at macroeconomic factors' role in bank profitability to give a broad scope to their study. Moreover, only the banking sector of selected ASEAN countries was taken to consider the impacts of capital buffer, bank efficiency, bank size, liquidity, and leverage on bank profitability. In order to make the research findings applicable at a broader level, number of countries should be increased.

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