The Internal and External Factors That Determine the Performance of Islamic Banks in Malaysia

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Abstract

This study's objective is to assess the return on assets (ROA) performance of all fifteen (15) Islamic banks in Malaysia that are eligible to use panel-specific data between the years 2011 and 2020. A data assessment methodology and all relevant additional resources, such as Eikon Thomson Reuters and the bank's annual reports, have been utilized for this study. When regressing the balanced panel data, the Pooled Ordinary Least Squares (POLS) Model employs the EViews 12 software to analyze. According to the conclusions of this research, there is a significant relationship between the performance of Islamic banks in Malaysia from 2011 to 2020 and the ratio of net loans to total assets (NLTA), shareholders' equity ratio (SER), bank size (LNBS), and gross domestic product (GDP). Since the banking sector is a significant contributor to the national economy, effective bank management is essential to ensure that the Islamic bank is always profitable by minimizing risk and losses caused by internal and external factors. In addition, most prior research has focused on conventional rather than Islamic banks, necessitating this investigation into the factors that affect the profitability of Islamic banks in Malaysia.

Keywords: External Factors, Performance, Internal Factors, Islamic Bank, Malaysia

Introduction

The World Bank reported that Malaysia will still be a developing country despite having an upper middle-income level and a population of 32,776,195 people in 2021. In addition, Malaysia is a country that can be found in Asia and is regarded as one of the nations that are included in the group of countries known as South East Asia. Malaysia has a climate that is classified as equatorial, and its population is comprised of people from a variety of cultural backgrounds. Following the pandemic, the economy of Malaysia had tremendous growth in the year 2021, expanding by 3.1%. This is an ideal signal to promote the eighth sustainable development goal (SDG), decent work and economic growth, by supporting sustainable,

comprehensive, and stable economic growth. SDGs were created to guide the world toward a more sustainable future that was established in 2015.

Chart 1
Malaysian GDP Growth (Annual %) from 2017 to 2021

Malaysian GDP Growth (Annual %) from 2017 to 2021

5.8	4.8	4.4		3.1
2017	2018	2019	2020	2021
			-5.6	
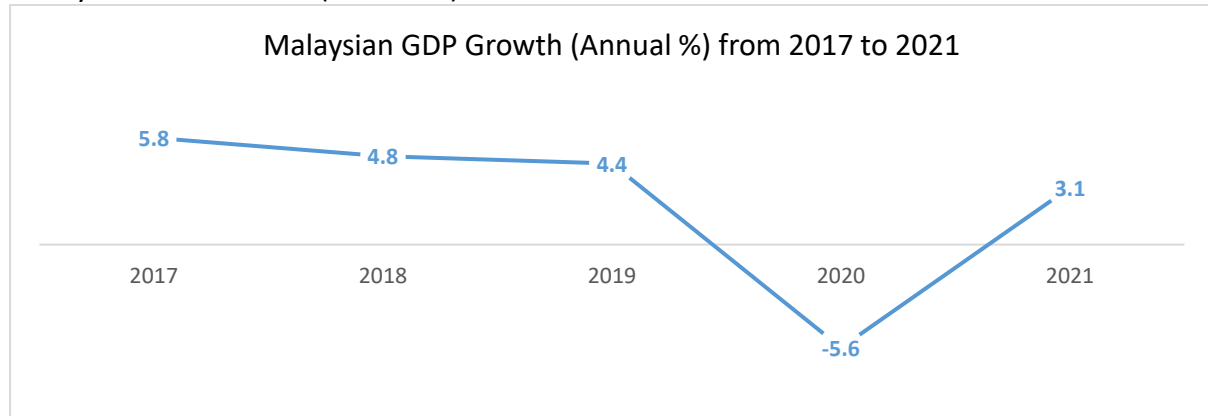
Source: World Bank

Five main sectors contribute to economic growth: services, manufacturing, agriculture, mining and quarrying, and the construction sector. Over the fourth year, starting from 2018 to 2021, the service sector is the most significant economic contributor, more than fifty per cent of the total, according to chart 2. This indirectly demonstrates the service sector's importance to Malaysia's economic structure. The service sector consists of wholesale and retail trade, food and beverage, accommodation, information and communication, transportation and storage, private health, private education and the arts, entertainment and recreation, and professional and real estate agent services.

Chart 2
GDP by Sector Contributing to the Malaysian Economy from 2018 to 2021

GDP by Sector Contributing to the Malaysian Economy from 2018 to 2021

	Services	Manufacturing	Agriculture	Mining & Quarrying	Construction
2018	56.7	22.4	7.3	7.6	4.2
2019	57.7	22.3	7.1	7.1	4.7
2020	57.7	22.9	7.4	6.8	4.0
2021	55.9	26.7	4.0	8.2	5.2

Source: Department of Statistics Malaysia

Financial services are another sector that contributes to the economic growth of nations worldwide. The financial services sector in Malaysia consists of 26 commercial banks, 11 investment banks, and 16 Islamic banks, 30 of which are locally-owned and 23 foreign-owned. These financial institutions must obtain a licence from the central bank of Malaysia, also known as Bank Negara Malaysia (BNM), which routinely evaluates and monitors their risk

management procedures. In addition, there will also be brokerage firms, insurance companies, and fund management companies.

Table 1

The rank of the Top 10 Listed Companies on Bursa Malaysia based on Market Capitalization in 2022

No	Company	Market Capitalization	Sector
1.	Malayan Banking Berhad	106.653b	Banking
2.	Public Bank Berhad	90.454b	Banking
3.	Petronas Chemicals Group Berhad	70.240b	Chemicals
4.	IHH Healthcare Berhad	57.151b	Health Care Providers
5.	CIMB Group Holdings Berhad	56.875b	Banking
6.	Tenaga National Berhad	50.167b	Electricity
7.	Hong Leong Bank Berhad	45.089b	Banking
8.	Press Metal Aluminium Holdings Berhad	39.633b	Metals
9.	Petronas Gas Berhad	34.232b	Gas, Water & Multi-utilities
10.	MISC Berhad	32.362b	Transportation & Logistics Services

Source: malaysiastock.biz

According to Table 1, the financial institutions with the highest market capitalization in August 2022 were Maybank, Public Bank, CIMB, and Hong Leong Bank, respectively. In addition, the banking industry is represented by four of the ten listed companies. Malayan Banking and Public Bank take the top two spots in market capitalization, respectively. These statistics show that the Malaysian economy benefits significantly from the contributions of the financial services and banking sectors. It is in line with the BNM Financial Sector Blueprint 2011 – 2020, which outlines a strategy plan for Malaysia's financial system over the next ten years as the country works to transform its economy into one with high value-added and high income.

Although Islam is Malaysia's state religion, the country's financial sector utilizes conventional and Islamic banking practices. The commercial operations of these two banks are relatively identical, with the exception that Islamic banks comply with Shariah law, which is a set of Islamic principles that forbids riba (interest), maysir (gamble), and gharar (speculative). In 1983, Malaysia saw the establishment and development of an Islamic bank, considered a relatively new addition to the country's financial system (Guru, 2002). Additionally, Islamic banks have the potential to become one of the financial sectors that are growing the quickest, which would make them a viable and competitive choice for funding Malaysia's robust economic growth.

The prior study on the factors that determine Islamic bank performance in Malaysia is lacking. According to research carried out by Quan et al (2019), conventional and Islamic banks in Malaysia ought to be given the same amount of consideration. This is due to the fact that Islamic banks in GCC countries perform significantly better than conventional banks in terms of fee income, capitalization, liquidity, asset quality, and market concentration (Saif-Alyousfi

and Saha, 2021). Furthermore, as a result of a comprehensive evaluation of the prior literature, this study has the potential to give beneficial insights to bank customers, investors, and policymakers. In this study, the performance of Islamic banks in Malaysia is investigated by considering internal and external aspects from 2011 to 2020.

Literature Review

Islamic Bank Performance

Numerous research evaluates Islamic banks using the same financial parameters as conventional banks to assess financial performance, including profitability, liquidity, risk, and solvency. In addition, the performance of Islamic banks and conventional banks primarily relied on financial ratios as proxies, such as return on assets (ROA), return on equity (ROE), net interest margin (NIM), profit before tax, the cost-to-income ratio, equity-to-total-asset ratio, or a combination of these ratios. However, return on assets (ROA) is the most popular metric, and academics in many nations have used it to evaluate bank profitability. For example, a study from Tunisian banking (Naceur, 2003) and a study from Pakistan (Ali et al., 2011) use the return on assets (ROA) as the dependent variable to measure the bank's performance and profitability.

In addition to return on assets (ROA), return on equity (ROE) is used to measure a bank's performance, despite its limitations and inconsistent results from previous studies, regardless of their success. Hassan and Bashir (2003) used return on assets (ROA) and return on equity (ROE) as overall success measures when discussing the profitability drivers of Islamic banking. This study also has the same thought as the previous study that the return on assets (ROA) is the primary metric used to evaluate the performance of banks, whether Islamic or conventional (Bashir, 2003; Guru et al., 2002; Naceur, 2003; Obamuyi, 2013; Yensu et al., 2021).

Loan Loss Provision to Total Assets (LPPTA)

Credit risk consists of nonperforming loans to total loans, loan loss provisions to loans, and leverage ratios. Numerous studies in the Islamic banking industry have examined the relationship between loan loss provision to total assets and bank financial performance. According to Alshatti (2015), nonperforming loans and loan loss provisions negatively impact the financial performance of Jordanian banks. Credit risk also reduces the profitability of Islamic banks in Pakistan (Ali et al., 2011), Egypt (Fayed, 2013) and 12 MENA countries selected (Trad et al., 2017).

Net Loan to Total Assets (NLTA)

The net loan-to-assets ratio is a vital liquidity ratio that measures the proportion of a bank's assets secured by loans; the higher this ratio, the less liquid the bank is. As a bank's liquidity management can positively or negatively impact its performance, Islamic banks should maintain sufficient liquidity to address potential issues quickly. Previous research reveals a positive relationship between the ratio of loans to total assets and profitability (Athanasoglou et al., 2008; Sufian and Habibullah, 2009; Vong and Chan, 2009). And contrast, results by Kosmidou and Tanna (2005) demonstrate a negative correlation between liquidity and profitability.

Total Overhead Cost to Total Assets (TOTA)
According to Abduh and Alias (2014), the total overhead cost to total assets (TOTA) measures the bank's operating expenses, including payroll of branch and headquarters expenses. The role of this ratio is to compensate for increased overhead expenses, and banks demand higher margins. Consequently, they anticipate a positive relationship between overhead expenses and profit margins. In addition, Islam and Nishiyama (2016) note that this ratio helps measure the performance of both conventional and Islamic banks. A study positively correlated the overhead cost to total assets toward the bank profitability or profit margin (Bashir, 2003; Malim and Masro, 2018). Still, a study does not have any significant relationship with any return on assets (ROA), return on equity (ROE) and profitability (Hassan and Bashir, 2012).

Shareholders Equity Ratio (SER)
The ratio indicates the number of bank assets on which shareholders have a residual claim in the event of liquidation. The shareholders' equity ratio typically serves as a proxy for capital efficiency. According to prior research, a sufficient amount of capital enables banks to sustain their operations (Athanasoglou et al., 2008), reduces reliance on external funds, thereby increasing profitability (Wasiuzzaman and Tarmizi, 2009) and serves as a safeguard to ensure profitability and stability (Trad et al., 2017). Thus, this ratio is significantly helpful in measuring the relationship between capital efficiency and bank profitability, as proven by (Flamini et al., 2009; Kosmidou and Tanna, 2005; Naceur, 2003; Sufian and Habibullah, 2009; Vong and Chan, 2009). A study reports that capital negatively affects profitability conducted by Athanasoglou et al (2008); Hassan and Bashir (2003); Wasiuzzaman and Tarmizi (2009), and one sample study reported positively correlated bank profitability is Zarrouk et al. (2016).

Bank Size (LNBS)
The bank's size boosted profitability and efficiency. A larger bank would have greater product diversification and better client access due to economies of scale, lower costs, and scope. Bank size has a mixed effect on the past study. Numerous studies find that bank size has little impact on profitability (Berger and Humphrey, 1997; Obamuyi, 2013; Wasiuzzaman and Tarmizi, 2009). Contradict study found that bank size impacts profitability (Ali et al., 2011; Flamini et al., 2009).

Gross Domestic Product (GDP)
Gross domestic product (GDP) is the dominant macroeconomic variable to measure total economic activity within a country. Studies in Malaysia (Guru et al., 2002), Tunisia (Naceur, 2003), the United Kingdom (Kosmidou and Tanna, 2005), the South Eastern European region (Athanasoglou et al., 2008), Sub-Saharan African (Flamini et al., 2009), and China (Sufian & Habibullah, 2009) utilize this variable to measure bank profitability. Finding Hassan and Bashir (2003) indicate that GDP growth rate positively affects bank profitability.

Inflation (INF)
Inflation is a sustained or long-term price increase caused by a mismatch between goods and money. Banks can increase revenues and profits by adjusting interest rates in response to accurately predicted inflation rates. In unexpected inflation, banks adjust their interest rates inappropriately and slowly, causing a faster increase in bank costs relative to revenues and lower profitability. Studies agree that inflation has a relationship with profitability found by (Abreu and Mendes, 2002; Bashir, 2003; Tan and Floros, 2012).

Data and Methodology

The researcher utilizes secondary data from Eikon Thomson Reuters and the bank's annual reports from 2011 to 2020 to determine the internal and external variables that determine the performance of Islamic Banks in Malaysia. Furthermore, due to a lack of data, the scope of this study was limited to 15 Islamic banks, excluding Kuwait Finance House (Malaysia) Berhad as the list in table 2.

Table 2

15 samples of Islamic Banks in Malaysia

No	Name	Ownership
1.	Affin Islamic Bank Berhad	Local
2.	Al-Rajhi Banking & Investment Corporation (Malaysia) Berhad	Foreign
3.	Alliance Islamic Bank Berhad	Local
4.	AmBank Islamic Berhad	Local
5.	Bank Islam Malaysia Berhad	Local
6.	Bank Muamalat Malaysia Berhad	Local
7.	CIMB Islamic Bank Berhad	Local
8.	Hong Leong Islamic Bank Berhad	Local
9.	HSBC Amanah Malaysia Berhad	Foreign
10.	Maybank Islamic Berhad	Local
11.	MBSB Bank Berhad	Local
12.	OCBC Al-Amin Bank Berhad	Foreign
13.	Public Islamic Bank Berhad	Local
14.	RHB Islamic Bank Berhad	Local
15.	Standard Chartered Saadiq Berhad	Foreign

Source: Bank Negara Malaysia

The variables used in this study are detailed in Table 3, along with measurements and expected outcomes based on previous research. The collected data are then analyzed using the software Eviews, including descriptive, correlation, and multiple regression analyses.

Table 3

Measurement of Study Variables

Determinants of Performance Islamic Bank					
		Variables	Measurement	Source	Expected Sign
Dependent Variable		Return on Assets (ROA)	Net income/Total assets	(Bashir, 2003; Guru, B. K., Staunton, J., & Balashanmugam, 2002; Naceur, 2003; Obamuyi, 2013; Yensu et al., 2021).	
Independent Variable	Internal Variable	Loan Loss Provision to Total Assets (LLPTA)	Loan Loss Provision/Total Assets	(Ali et al., 2011; Alshatti, 2015; Fayed, 2013; Trad et al., 2017)	-
		Net Loan to Total Assets (NLTA)	Net Loan/Total Assets	(Athanasoglou et al., 2008; Kyriaki Kosmidou and Tanna, 2005; Sufian and Habibullah, 2009; Vong and Chan, 2009)	+/-
		Total Overhead to Total Assets (TOTA)	Total Overhead/Total Assets	(Bashir, 2003; Hassan and Bashir, 2012; Malim and Masro, 2018)	+/-
		Shareholders' Equity Ratio (SER)	Total Shareholders' Equity/Total Assets	(Flamini et al., 2009; Kyriaki Kosmidou and Tanna, 2005; Naceur, 2003; Sufian and Habibullah, 2009)	+/-
		Bank Size (BS)	Natural Log of Total Assets	(Ali et al., 2011; Berger and Humphrey, 1997; Flamini et al., 2009; Obamuyi, 2013; Wasiuzzaman and Tarmizi, 2009)	+/-
	External Variable	Gross Domestic	Growth of Gross Domestic Product	(Athanasoglou et al., 2008; Flamini et al., 2009; Guru	+

		Product (GDP)		et al., 2002; Naceur, 2003; Pasiouras and Kosmidou, 2007; Sufian and Habibullah, 2009)	
		Inflation	Rate of Inflation	Abreu and Mendes (2002); Bashir (2003); Tan and Floros (2012).	+/-

Source: Authors' explanations

Model Estimation

The purpose of this study's model estimation is to determine the influence of internal and external factors on the performance of Islamic banks as measured by return on assets (ROA), which replicates the research of (Bashir, 2003; Naceur, 2003; Obamuyi, 2013; Quan et al., 2019; and Yensu et al., 2021). This study employs the Pooled Ordinary Least Square (POLS) method of multiple regression to examine the variables that affect the performance of Islamic banks in Malaysia. The estimation model for the performance of Islamic banks has the following structure:

$$ROA_{i,t} = \beta_0 + \beta_1 LLPTA_{i,t} + \beta_2 NLTA_{i,t} + \beta_3 TOTA_{i,t} + \beta_4 SER_{i,t} + \beta_5 BS_{i,t} + \beta_6 GDP_{i,t} + \beta_7 INF_{i,t} + \varepsilon_{i,t}$$
(1)

$ROA_{i,t}$	:	Return on assets for Islamic bank i time t;
$LPPTA_{i,t}$	:	Loan loss provision to total assets for Islamic bank i time t;
$NLTA_{i,t}$	:	**Net loan to total assets for Islamic bank i time t;**
$TOTA_{i,t}$	:	**Total overhead cost to total assets for Islamic bank i time t;**
$SER_{i,t}$	:	**Shareholders' equity ratio for Islamic bank i time t;**
$BS_{i,t}$	:	Bank size (Logarithm of total assets) for Islamic bank i time t;
$GDP_{i,t}$	:	Gross Domestic Product (Annual growth of GDP) for Islamic bank i time t;
$INF_{i,t}$	:	Inflation rate for Islamic bank i time t;
β	:	The Coefficient Representing the Independent Variables.
$\varepsilon_{i,t}$	:	Error Terms for Islamic bank i time t.

Results and Findings

Table 4 shows descriptive analysis that provides basic information about dataset variables and highlights potential relationships between variables. The study includes 150 annual observations from 15 Islamic banks in Malaysia from 2011 to 2020.

Table 4
Descriptive Analysis

Stats	Obs	ROA	LLPTA	NLTA	TOTA	SER	BS	GDP	INF
Max	150	0.0566	0.0179	0.9206	105.309	0.1833	19.9657	0.0600	0.0387
Min	150	0.0004	-0.0019	0.0000	0.0000	0.0442	15.5599	-0.0558	-0.0113
Mean	150	0.0097	0.0037	0.6715	10.0500	0.0793	17.3224	0.0403	0.0185
Std. dev	150	0.0069	0.0034	0.1067	15.4565	0.0285	1.0336	0.0326	0.0138

*The dependent variable is the return on asset (ROA).

*The independent variables are loan loss provision to total assets (LLPTA), net loan to total assets (NLTA), the total overhead cost to the total asset (TOTA), shareholder's equity ratio (SER), bank size (BS), gross domestic product (GDP) and inflation (INF).

The data for 15 Islamic banks compiled by Thomson Eikon Reuters are summarised in Table 4. The mean or average value of the return on assets (ROA) ratio is 0.9%, indicating that the management's ability to generate profits from its current and fixed assets has increased. From 2011 to 2020, Islamic banks in Malaysia establish a loan loss provision to total assets (LLPTA) ratio of 0.3%, which reflects the overall quality of their credit portfolio. In addition, the ratio of net loans to total assets (NLTA) represents 67% of a bank's ability to meet its financial obligations; Islamic banks were less liquid during the study timeframe. Next, the total overhead cost to the total asset (TOTA) shows that Islamic banks rely heavily on operational costs, such as salary and branch and headquarters operational costs, resulting in less profit. According to the average shareholder's equity ratio (SER), only 7.9% of shareholders have residual claims on Islamic banks if liquidated. The largest Islamic bank in Malaysia has over RM19.6 billion in assets, while the smallest has over RM15.6 billion. During the period covered by this study, the average gross domestic product (GDP) and inflation (INF) show a positive signal of economic growth.

Table 5
Correlation Analysis

	ROA	LLPTA	NLTA	TOTA	SER	LNBS	GDP
ROA	1.0000						
LLPTA	0.0432	1.0000					
NLTA	-0.0975	0.1801	1.0000				
TOTA	-0.0670	-0.0190	-0.0783	1.0000			
SER	0.3224	0.4068	0.0904	-0.0979	1.0000		
LNBS	0.4201	-0.0510	0.2503	-0.3982	0.2137	1.0000	
GDP	0.1529	-0.1483	-0.1437	0.0942	-0.1326	-0.1263	1.0000

The correlation between inflation and the gross domestic product is 0.7989; therefore, eliminating one between these variables is required because of a strong positive correlation. Table 5 shows the revised model without inflation variables. Firstly, the size of the bank (LNBS)

has the most significant impact on bank profitability, followed by the loan loss provision to total assets (LLPTA) and the shareholder equity ratio (SER). Similarly, from 2011 to 2020, the gross domestic product (GDP) positively impacts the Profitability of Islamic banks in Malaysia. However, the total overhead cost to total assets (TOTA) and net loans to total assets (NLTA) negatively correlate with the bank's overall profitability.

Table 6
Multiple Regression - Pooled Ordinary Least Square (POLS) Regression

	Coefficient	Standard Error	t-stat	P-value
LLPTA	-0.0461	0.0091	-5.0837	0.6660
NLTA	0.0669***	0.1547	0.4325	0.0041
TOTA	-0.0137	0.0047	-2.9203	0.1117
SER	0.0001***	0.0000	1.6004	0.0009
INBS	0.0639***	0.0188	3.3970	0.0000
GDP	0.0033***	0.0005	6.2042	0.0027
R-squared	0.3384			
Adjusted R-squared	0.3106			
Prob (F-statistic)	0.0000			

Note: p-values in parentheses; * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 6 presents four variables that have a significant impact on the profitability of an Islamic bank with a 1% level of significance: net loans to total assets (NLTA), shareholder's equity ratio (SER), bank size (LNBS), and gross domestic product (GDP).

Theoretically, bank loans are likely to be the primary source of income, which will positively affect the bank's performance. Based on the result presented, there is a significant relationship between net loans to total assets (NLTA) and Islamic banks' Profitability, and this study agrees with (Samad, 2004; Srairi, 2009) that the NLTA ratio affects ROA and is statistically significant for Islamic bank performance. Moreover, loan activity and bank profitability can be attributed to the bank's ability to manage operations more effectively by reducing production costs, and banks can offer the public more reasonable loan terms (Isik and Hassan, 2003; Sufian and Noor, 2009).

The shareholders' equity ratio (SER) correlates positively with the return on assets (ROA), consistent with the findings of (Samad and Hassan, 2018), who examine both conventional and Islamic banks. It implies that Islamic banks in Malaysia should concentrate on improving their equity performance to increase their profitability. Therefore, according to most studies, a high ratio of equity to total assets is an excellent indicator of profitability, consistent with the findings of (Bashir, 2003; Kosmidou et al., 2006; Pasiouras and Kosmidou, 2007; Sufian and Noor, 2009).

The relationship between bank size (LNBS) and return on assets (ROA) is significant, indicating that bank size is vital for maintaining a bank's market position. However, the relationship between bank size and profitability is minimal but optimistic. Past research found different results on bank size: bank size was a major determinant of bank performance in Saudi Arabia (Ahmed and Khababa, 1999), larger banks are less efficient than smaller banks in Sudan

(Hussein, 2003), and the size of the bank has a negative impact on return on average equity but a positive impact on return on average assets and net interest margins (Sufian and Habibullah, 2009). Islamic banks' profitability depends on their size. Islamic banks can increase their total assets by lending more money to customers because they cannot engage in high-risk activities.

Theoretically, gross domestic product (GDP) has a substantial and positive relationship with return on assets (ROA) regarding macroeconomic variables. The results indicate a significant relationship between gross domestic product (GDP) and return on assets (ROA). Since GDP consider a country's income, this result is not surprising: a higher gross domestic product (GDP) will result in higher profits for Islamic banks. Muda et al (2013); Srairi (2009); Zeitun (2012) found that gross domestic product (GDP) affects return on assets (ROA) positively and significantly, meaning a country's gross domestic product (GDP) improves bank performance. Even though the results indicate a significant relationship between gross domestic product (GDP) and bank profitability, there are several ways to increase the gross domestic product (GDP), as profitability will increase with a higher gross domestic product (GDP). These include lowering taxes, reducing unemployment, boosting productivity, and producing more goods and services with the same resources.

Conclusion

These studies determine the factors that affect the performance of Islamic banking in Malaysia. The key findings show that internal and external factors impact the Islamic bank's performance. Furthermore, Islamic banks in Malaysia must profit from good economic times and protect themselves from bad economic times, as borrowers may default on loans during a recession; Islam and Nishiyama (2016) agree that banks expand their operations during economic expansion and incur losses during recessions. This study may provide an overview of the factors influencing the profitability of Islamic banks in Malaysia from 2011 to 2020. The profitability of Islamic banks is positively connected with the internal factors of net loans to total assets (NLTA), the shareholders' equity ratio (SER), and bank size (LNBS), whereas the external factor favourably correlated with profitability is gross domestic product (GDP). Thus, internal and external factors have a direct impact on the performance of an Islamic bank.

The future research could examine both conventional and Islamic banks in Malaysia to identify performance-influencing factors. The scope of the study could be expanded to include Islamic banks in countries with similar banking concepts to Malaysia and evaluate their strengths and weaknesses. In addition, future research may include tax and regulation factors, currency exchange rates, and service quality. Lastly, examining the differences in profitability drivers between small and large banks or high- and low-profit institutions would be interesting. Then, future research also would distinguish between local and international Islamic banks and employ a more advanced method of analysis to generate more reliable and meaningful results.

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