BANKING PERFORMANCE MEASUREMENT IN INDONESIA BEFORE AND DURING THE COVID-19 PANDEMIC

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ABSTRACT

The COVID-19 pandemic that has hit the world, including Indonesia, has had an impact on the banking industry. The performance of both Islamic and conventional banking will be of public concern, especially during the pandemic because they are looking for a safe place to save money and a comfortable place to borrow money. This study aimed to determine the differences in the financial performance of Islamic and conventional banks before and during the COVID-19 pandemic. Calculation of banking financial performance uses 2 (two) models, the CAMEL model and the EAGLES model. The research sample is 13 Islamic banks and 13 conventional banks in Indonesia. Data were analyzed using the Wilcoxon Signed Rank test. The results of this study are that there are differences in the financial performance of Islamic banks and conventional banks before and during the COVID-19 pandemic in several aspects of measurement. Looking at the 2 methods of calculating bank performance, it can be seen that Islamic banks in a pandemic condition are more stable than conventional banks. In difficult economic conditions, financing to Islamic banks is increasing in line with increasing savings growth. This indicates that people still believe in Islamic banks to store their funds. This makes the liquidity and capital adequacy of Islamic banks superior to conventional banks during the pandemic. This study is expected to be an input for Islamic banks and conventional banks to continue to improve their services to the people of Indonesia during the COVID-19 pandemic. The pandemic forces everyone to be able to transact more digitally.

Keywords: Bank Financial Performance, CAMEL, EAGLES

INTRODUCTION

The COVID-19 pandemic that occurred from March 2020 until now has had a significant impact on all industries in the world, especially in Indonesia. The banking sector has not been spared the impact of this pandemic. According to Damhuri (2020), the Association of Indonesian Islamic Economists (IAEI) stated that the Islamic finance industry has a relatively stable performance during the pandemic compared to the performance of the conventional financial industry. Minister of Finance, Sri Mulyani, stated that several factors contributed to Islamic banking outperforming conventional banking during the pandemic, including asset growth, growth in third-party funds, and lending/financing. Due to the increasing demand for Islamic financial services during the crisis, the Islamic finance industry is more stable.

This is in line with the Financial Services Authority (OJK) which stated that the performance of the Islamic banking industry during the pandemic was better than the conventional banking industry. The challenges that Islamic banking has faced during this pandemic are advancements in the pattern of financial transaction services that shift from physical to virtual. In addition, there are other challenges that must be considered by Islamic banking during the pandemic, i.e., capital, limited human resources in the Islamic finance industry, product competitiveness, and the low level of research and development of Islamic economics and finance (Hasibuan, 2021).

According to Marcu (2021), during the pandemic, banks experienced difficulties and pressures in terms of operations such as delays in loan interest rates for corporate customers. The pandemic challenges resilience and adaptability by accelerating the digitalization of the banking industry. According to Lasak (2021), after the pandemic, many difficult situations will arise in the business world, allowing the banking sector to continue its intermediation function and provide the necessary financing services for the real economy. Matters of concern are helping workers to adjust to the new normal, assisting companies in their short-term problems, restructuring unsustainable debt, and providing new investment loans.

The performance of banking in both the Islamic and conventional sectors during the pandemic is of great concern to the public. This is because people want to find a safe place to save their funds during the pandemic, which certainly has a lot of impact on economic activity. In addition, by looking at banking performance, the public can consider where they will invest safely during the pandemic. Banking services have also adapted to pandemic conditions over time, such as the ability to open an account online and have the data verified online by the bank, as well as numerous changes to service features on mobile banking that make it easier for customers to transact anywhere and at any time.

Given the importance of understanding banking performance during the pandemic and comparing it to the pre-pandemic period, and the fact that there is a research gap from previous studies, the researchers conducted this study with the following objectives:

1. Identifying the difference in the performance of Islamic banks before and during the COVID-19 pandemic.
2. Identifying the difference in the performance of conventional banks before and during the COVID-19 pandemic.
3. Identifying the difference in the performance of Islamic banks and conventional banks during the COVID-19 pandemic.

LITERATURE REVIEW

Banks are intermediary institutions whose existence is very important for the community, especially in Indonesia. When looking at the state of conventional commercial banks in Indonesia, the Return on Assets (ROA) of conventional commercial banks is decreasing, i.e., in 2018 by 2.55%, in 2019 by 2.47%, in 2020 by 1.59%, and in August 2021 at 1.9% began to rise again. Meanwhile, the Return on Assets (ROA) of Islamic commercial banks increased from 1.23% in 2018 to 1.76% in 2019 and then

decreased in 2020 by 1.26% and increased again in August 2021 by 1.69%. From this data, it can be seen that there are differences in the ability to generate profits between conventional and Islamic commercial banks (Financial Services Authority, 2021).

The COVID-19 pandemic has had many impacts on all economic sectors in the world, including the banking sector in Indonesia. According to Sholihah (2021), the banking sector, both conventional and Islamic, experienced a substantial decline during the pandemic. Revenues from fundraising and disbursing financing declined, while operating costs increased. In comparison to the situation in the banking sector in India, according to Saldanha and Nitin (2021) the COVID-19 pandemic has greatly affected the banking sector in the eyes of customers. Individuals who prefer to interact directly or physically with banks should change this habit by interacting online. The majority of respondents believe that the future of India's payments and banking system will be fully digital. In MENA (Middle East North Africa) countries, according to Mateev et al. (2021), regulators responsible for the stability of the banking sector require a more disciplined approach in bank lending decisions and build sufficient capital conservation buffers to limit the impact of significant downside risks from depletion of the capital buffer during the pandemic.

1. Bank Performance Measurement

- **CAMEL Model**

Capital adequacy is used to show bank's ability to take risks. The higher this ratio, the better (Biswas & Bhattacharya, 2020). According to Gandhi et al. (2020), the capital adequacy parameter shows whether the bank's capital is sufficient to overcome the liquidity crisis. According to Haddad et al. (2019), capital adequacy is measured by the Capital Adequacy Ratio (Capital adequacy = Equity Capital/Total Assets).

Asset quality is measured by Net NPA/Total Assets, where the lower the value, the better (Biswas & Bhattacharya, 2020). According to Majid and Ulina (2020), NPL/NPF (Non-Performing Loan/Financing) is used to measure the inability of customers to repay loans received from banks within a predetermined period of time. NPL/NPF is measured by the formula for non-performing loans (financing) divided by total loans. According to Bawa (2017), asset quality is measured by Net NPAs to Total Assets. According to Gandhi et al. (2020), the asset quality parameter is to measure the level of financial strength. The most important ratio considered is non-performing assets (NPA) as a percentage of total assets. According to Haddad et al. (2019), asset quality is calculated from non-performing loans divided by total loans.

Management quality measures were found to be positively related to performance (Kuhil, 2018). The quality of management as measured by ROE shows the success of the owner's fund distribution in profitable investments so as to generate sufficient returns. The higher the ROE value, the better (Biswas & Bhattacharya, 2020). According to Nguyen (2020), there are several financial ratios as a proxy for management efficiency. There are financial ratios that can show the ability of bank managers to manage bank resources efficiently, maximize profits, and reduce operational costs.

Earning quality as measured by interest income/total assets is the proportion of interest income earned from total assets. The higher the value, the better (Biswas & Bhattacharya, 2020). According to Bawa (2017), earning quality is measured by ROA (return in assets). According to Zedan and Daas (2017), bank income reflects the growth capacity and financial health quality of income. This is necessary for a balanced financial structure and helps to reward shareholders. Thus, consistently healthy income is very important for the sustainability of banking institutions. According to Haddad et al. (2019), earnings quality can be measured by ROA.

One of the main missions facing the management of any financial institution is to ensure an adequate level of liquidity at all times, whatever the emergency may be. This indicates that banks have the right amount of funds on hand when they need them or can raise liquid funds in a timely manner without affecting their operations. A bank can close if it cannot increase its liquidity needs sufficiently, or in other words, its liquidity needs cannot be ignored (Zedan & Daas, 2017). According to Biswas and Bhattacharya (2020), liquidity as measured by liquid assets/total assets shows the proportion of liquid assets that can be used to meet customer demands and cope with emergencies. The higher the value, the better. According to Bawa (2017), liquidity is measured by the cash to deposit ratio, investment to deposit ratio, and credit to deposit ratio.

- **EAGLES Model**

"Eagles" is a key success factor in today's banking sector, which measures bank performance more consistently and objectively. The metrics that are measured are Earning Ability, Asset Quality, Growth, Liquidity, Equity and Strategy. Earning Ability is measured using Return on Assets (ROA), Return on Net Worth (RONW), and Income to Overhead Ratio (IOR). Asset Quality is measured using the level of bad debts provisions, i.e., bad debts and doubtful accounts as a percentage of the total loan. Growth relates to how a bank positions itself in the market. Deposit growth must be proportional to loan growth. This growth is measured by calculating the growth of savings and loan growth. Liquidity is measured using the deposit to loan ratio and the investment deposit ratio. Equity is measured using the capital adequacy ratio. Strategy is measured using the Strategic Response Quotient (SRQ), which is the interest margin divided by net operating costs or it can also be calculated by the formula of interest income divided by interest cost. Interest income on interest expense provides insight into a bank's ability to revalue its assets in relation to liabilities and pass on the increase in interest costs to its customers (Kumari & Prasad, 2017). According to AlAli (2019), the CAMEL model used to evaluate the financial health of banks could not predict the financial collapse of Asian banks during the 1997 economic crisis. Therefore, another model was developed to measure financial performance, i.e., the EAGLES model.

2. Research Gap

The following are data from previous studies that examined banking performance using the CAMEL model:

Table 1: Previous Studies on Comparison of Performance Measurement using the CAMEL Model

Researcher(s) (Year)	Research Subject	Research Object (Measurement of Performance using CAMEL Model)
Jahja & Iqbal (2012)	2 Islamic banks and 6 conventional banks in Indonesia [2005 to 2009]	• CAR, NPL, ROA, ROE, BOPO, LDR
Toin (2014)	5 Islamic banks and 5 conventional banks in Indonesia [2010 to 2012]	• Capital: Capital Adequacy Ratio (CAR) • Profitability: Return on Equity (ROE) and Return on Assets (ROA) • Liquidity: Cash Ratio, Loan to Deposit Ratio (LDR) • Efficiency: Non Performing Loans (NPL), Operating *Costs to Operating Income (BOPO)*
Syukur (2014)	Bank Mandiri and Bank Syariah Mandiri [2010 to 2012]	CAR, LDR, ROA, ROE,
Umardani & Muchlish (2016)	6 Islamic banks and 6 conventional banks in Indonesia [2005 to 2012]	CAR, ROA, ROE, LDR/FDR, BOPO, NPL
Sovia et al. (2016)	7 Islamic banks and 7 conventional banks in Indonesia [2012 to 2014]	CAR, ROA, ROE, BOPO, LDR, NPL, (Net Interest Margin) NIM/Net Operating Margin (NOM)
Arinta (2016)	Conventional and Islamic Bank Mandiri [2011 to 2015]	CAR, NPL, ROA, ROE, NIM, LDR
Putri & Dharma (2016)	7 Islamic banks and 7 conventional banks in Indonesia [2011 to 2013]	CAR, NPL, ROA, ROE, LDR
Solikah et al. (2017)	15 Islamic and conventional banks in Indonesia [2013 to 2015]	CAR, NPL, ROA, BOPO, LDR
Wahyuni & Efriza (2017)	12 conventional banks dan 9 Islamic banks [2011 to 2014]	CAR, NPL, ROA, ROE, LDR, BOPO
Bawa (2017)	19 banks in India [2006 to 2015]	• Capital Adequacy: CAR, Return on Advance, ROE • Asset quality: Net NPAs to Total Assets, Net NPAs to Net Advances, Percentage Change in NPAs • Management capacity: Total Advances to Total Deposits, Profit Per Employee, Business Per Employee • Profitability: Net Interest Margin (NIM)/Total Assets, Burden to Total Assets, Operating Profit/Total Assets, Return on Assets • Liquidity: Cash to Deposit Ratio, Investment to Deposit Ratio, Credit to Deposit Ratio Cash
Zedan and Daas (2017)	5 banks in Palestina [2015]	• Capital adequacy: CAR • Asset quality: NPF • Quality of management: Non expense ratio • Profitability: ROA, ROE • Liquidity: LDR
Kuhil (2018)	18 banks in Eithopia [1999 to 2015]	• Capital adequacy: CAR, • Asset quality: PRTL (provision to total loans), • Profitability: NIITI (Non interest Income to Total Income), • XEFF-managerial efficiency (Managerial efficiency measure using DEA scores), • Management: COIN (Total cost to Total income

Researcher(s) (Year)	Research Subject	Research Object (Measurement of Performance using CAMEL Model)
		• Liquidity: LATD (Liquid assets to Deposits)
Majid and Ulina (2020)	3 Islamic banks and 3 conventional banks in Indonesia [2003 to 2017]	• ROA, CAR, LDR/FDR, NPL/NPF, Cost to Income Ratio (CIR)
Gandhi et al. (2020)	9 public sector merged banks and 10 private sector merged banks [comparison after merger]	• Capital Adequacy Ratio (CAR), Debt Equity Ratio, Proprietary Ratio, Total Advances to Total Asset Ratio, and Government Securities to Total Investment Ratios • Asset quality: Non-Performing Assets (NPAs) • Efficiency management: Expenditure to Income Ratio, Total Advances to Total Deposit Ratio, Asset Turnover Ratio, Earning Per Employee, and Business Per Employee • Earnings quality: ROA, ROE, Spread Ratio, Net Interest Margin, Operating Profit to Working Fund Ratio, and Interest Income to Total Income Ratio.

Source: Results of data processing (2022)

Toin (2014) Toin (2014) states that the CAR and NPL of Islamic banks and conventional banks are not much different, efficiency is seen from the BOPO value and profitability of conventional banks is better than Islamic banks, and liquidity of Islamic banks is better than conventional banks. Syukur (2014) states that the liquidity of Bank Mandiri Syariah was better than conventional, the capital adequacy ratio and profitability of Bank Mandiri were better than Bank Mandiri Syariah. Solikah et al. (2017) state that conventional banks are better in terms of profitability and credit risk and Islamic banks are better in CAR, BOPO, and FDR ratios. Jahja and Iqbal (2012) state that the profitability and liquidity of Islamic banks are better than conventional banks, while the CAR, NPF, and BOPO ratios of Islamic banks are lower in quality than conventional banks. Umardani and Muchlish (2016) state that the value of CAR, ROA and ROE of conventional banks is better than Islamic banks. The NPF, FDR, and BOPO values of Islamic banks are better than conventional banks. Sovia et al. (2016) state that the ROA, BOPO, and NPL ratios of conventional banks are better than Islamic banks. Islamic banks have better CAR and FDR quality than conventional banks. Arinta (2016) states that the performance of Bank Syariah Mandiri is better than conventional Bank Mandiri. Putri and Dharma (2016) state that there are significant differences between Islamic and conventional banks in the NPL, ROA, ROE, and LDR variables. Wahyuni and Efriza (2017) state that the overall performance of Islamic banking is better than conventional banking.

The following are data from previous studies that examined banking performance using the EAGLES model:

Table 2: Previous Studies on Comparison of Performance Measurement using the EAGLES Model

Researcher(s) (Year)	Research Subject	Research Object (Measurement of Performance using EAGLES Model)
Guru et al. (2015)	Banks in Malaysia that are performing merger [2009 to 2013]	Selecting the optimal merger partner, i.e., optimizing the key performance parameters. • Earning ability: ROA, ROE • Asset quality: ratio of gross impairment to total loans • Growth: loan and deposit growth • Liquidity: loan to deposit ratio • Equity: ratio of total capital to risk weighted assets • Strategy: Strategic Response Quotient (SRQ)
Kumari and Prasad (2017)	Top 10 public and private sector banks in India [2005 to 2015]	Comparing the CAMEL and EAGLE models. Private banks perform better than public banks. • Earning ability: Return on Assets (ROA), Return on Net Worth (RONW) and Income to Overhead Ratio (IOR) • Asset quality: Percentage of non performing loan • Growth: loan and deposit growth rate

Researcher(s) (Year)	Research Subject	Research Object (Measurement of Performance using EAGLES Model)
		• Liquidity: deposit to loan ratio • Equity: capital adequacy ratio • Strategy: Strategic Response Quotient (SRQ)
AlAli (2019)	Islamic and conventional banks in Kuwait [2011 to 2018]	Conventional banks outperformed Islamic banks in all areas except on the growth side. • Earning: ROA • Assets Quality: NPL • Growth: loan growth • Liquidity: LDR (loan deposit ratio) • Equity: capital adequacy ratio • Strategic response: interest burden (interest margin/net operating cost)
Ristanti and Ismiyanti (2021)	10 largest banks in Indonesia [2010 to 2019]	Identifying the determinants of profitability of the 10 largest banks in Indonesia. Loan Deposit Ratio (LDR), Net Interest Margin (NIM), Net Interest Income Margin/Net Operating Cost (NIM/NOC), and Loan Growth (LG) are 4 factors that significantly affect ROA/profitability. • Earning: ROA, ROE, interest margin, Income to Cost ratio • Asset quality: NPL • Growth: loan growth, deposit growth, NPL growth, staff cost growth • Liquidity: loan to deposit ratio • Equity: Capital adequacy ratio • Strategic response: interest burden, number of time cover
Sathavara and Christian (2021)	5 largest private banks in India [2009 to 2019]	Evaluated the financial performance of selected private banks in India using the EAGLES model. • Earning ratios: return on assets, interest income to total income and interest income to total assets. • Asset Quality ratios: gross NPA, net NPA and government securities to total investment ratio. • Growth ratios: growth of deposits and growth of advances. • Liquidity ratios: liquid assets to total assets, current assets to total assets and government securities to total assets. • Equity ratios: capital adequacy ratio and total advances to total assets.

Source: Results of data processing (2022)

Based on tables 1 and 2, there are differences in the results of previous studies. There are those who state that the performance of Islamic banks is better than conventional banks, and vice versa. The entire studies used as references by the author was carried out in the time period before the COVID-19 pandemic occurred. According to Kumari and Prasad (2017), only a few researchers compared the CAMEL model with the EAGLES model and most concluded that the EAGLES model was better at measuring bank performance.

In this case, the researcher wants to make a comparative analysis between the financial performance of Islamic banks and conventional banks before and during the COVID-19 pandemic using the CAMEL and EAGLES models. The novelty of this research is using the EAGLES model in measuring bank performance which is still rarely studied. The hypotheses in this study are as follows:

1. There are differences in the performance of Islamic banks before and during the COVID-19 pandemic.
2. There are differences in the performance of conventional banks before and during the COVID-19 pandemic.
3. There are differences in the performance of Islamic banks and conventional banks during the COVID-19 pandemic.

RESEARCH METHODOLOGY

The researcher collected data from various sources related to the topic that researchers took. The researcher used the observation method (secondary data collection), which is by collecting the annual reports of Islamic and conventional banks. To complete the data obtained from observation, it is necessary to add additional supporting data obtained through literature study by studying books, journals, and articles. Furthermore, the collected data were analyzed using the comparative analysis method to determine the comparison between the variables studied. The data used were banking financial performance data for the period of 2019 and 2020. The researcher collected data from the official website of each bank because it presents the complete annual report needed to conduct this study.

The population of this study is all Islamic and conventional banks in Indonesia. The sample selection technique for Islamic banks uses the saturated sample method, which is taking all members of the population to be sampled. In this study, the number of samples of Islamic banks were 13 banks consisting of Aceh Syariah Bank, West Nusa Tenggara Syariah BPD, Muamalat Bank, Victoria Syariah Bank, BRI Syariah, BNI Syariah, Mandiri Syariah Bank, BJB Syariah, Mega Syariah Bank, Panin Bank. Syariah, Bukopin Syariah, BCA Syariah, and BTPN Syariah. In this case, BRI Syariah, BNI Syariah, and Bank Syariah Mandiri have not merged to become Bank Syariah Indonesia. The sample selection technique for conventional banks uses the random sampling method, i.e., randomly selecting conventional banks to be sampled. Researchers took the 13 largest conventional banks in Indonesia, i.e., BRI, Bank Mandiri, BNI, BCA, BTN, CIMB Niaga, OCBC NISP, Panin Bank, BTPN, Bank Danamon, Bank Jabar Banten, Bank Mega, and Bank Permata.

Below are the variables to be studied:

Table 3: Variable Operationalization

Variables	Indicators	Scale
Banking Performance (CAMEL model)	**Capital**: Capital Adequacy Ratio (CAR) (Biswas & Bhattacharya, 2020), (Haddad et al., 2019)	Ratio
	Asset quality: Non Performing Financing/Loan (NPF/NPL) (Majid & Ulina, 2020)**,** (Haddad et al., 2019)	
	Management: Return on Equity (ROE) (Biswas & Bhattacharya, 2020)	
	Earning: ROA (Bawa, 2017), (Zedan & Daas, 2017)	
	Liquidity: Financing/Loan to deposit ratio (FDR/LDR) (Zedan & Daas, 2017)	
Banking Performance (EAGLES model)	**Earning ability**: Return on Asset (ROA) (Gandhi et al., 2020)	Ratio
	Asset quality: Non Performing Financing/Loan (NPF/NPL) (Majid & Ulina, 2020)**,** (Haddad et al., 2019)	
	Growth: Savings and loan growth (Kumari & Prasad, 2017), (Guru et al., 2015), (AlAli, 2019)	
	Liquidity: Financing/Loan to deposit ratio (FDR/LDR) (Ristanti & Ismiyanti, 2021), (Kumari & Prasad, 2017)	
	Equity: Capital Adequacy Ratio (CAR) (AlAli, 2019)	
	Strategy: Interest income/interest cost (Kumari & Prasad, 2017)	

Source: Results of data processing (2022)

The data were analyzed using a different test, namely the Wilcoxon Signed Rank test. The reason the researcher used this test was to measure the difference between pairs of data groups but not normally distributed. If the results of the Wilcoxon Signed Rank test show a sig. <0.05, there is a significant difference between the financial performance conditions of Islamic and conventional banks before and during the COVID-19 pandemic.

DISCUSSION

- There is a difference in the performance of Islamic banks before and during the COVID-19 pandemic

Table 4: Wilcoxon Signed Rank Test Results for Islamic Banks using the CAMEL Method

	CAR_post - CAR_pre	NPF/L_post - NPF/L_pre	ROE_post - ROE_pre	BOPO_post - BOPO_pre	L/FDR_post - L/FDR_pre
Z	-2.201[a]	-.942[b]	-1.782[b]	-.245[a]	-.105[a]
Asymp. Sig. (2-tailed)	.028	.346	.075	.807	.917

Source: SPSS Output Source: SPSS Output

Based on table 4, only the capital condition as measured by the Capital Adequacy Ratio (CAR) has a sig. value of <0.05, which means there is a significant difference in the capital conditions of Islamic banks before and during the covid-19 pandemic. The CAR value has increased from before the pandemic by 23% and during the pandemic by 27%.

Table 5: Wilcoxon Signed Rank Test Results for Islamic Banks using the EAGLES Method

	ROA_ post - ROA_pre	NPF_post - NPF_pre	Financing_ post - Financing_pre	Deposit_ post - Deposit_pre	FDR_ post - FDR_pre	CAR_post - CAR_pre	SRQ_post - SRQ_pre
Z	-.623[a]	-.942[a]	-1.992[a]	-1.569[a]	-.105[b]	-2.201[b]	-.747[a]
Asymp. Sig. (2-tailed)	.533	.346	.046	.117	.917	.028	.455

Source: SPSS Output

Based on table 5, there are 2 factors that have a sig. value of <0.05. First, there is growth in the financing aspect. This means that there is a significant difference in the growth of Islamic bank financing before and during the COVID-19 pandemic. The value of Islamic bank financing has decreased from before the pandemic by 13% and during the pandemic by 3%. Second, the capital value as measured by the Capital Adequacy Ratio (CAR) has a sig. value of <0.05, which means there is a significant difference in the capital conditions of Islamic banks before and during the COVID-19 pandemic. The CAR value has increased from before the pandemic by 23% and during the pandemic by 27%.

- There are differences in the performance of conventional banks before and during the COVID-19 pandemic.

Table 6: Wilcoxon Signed Rank Test Results Conventional Bank Performance using the CAMEL Method

	CAR_post - CAR_pre	NPF/L_post - NPF/L_pre	ROE_post - ROE_pre	BOPO_post - BOPO_pre	L/FDR_post - L/FDR_pre
Z	-.804[a]	-2.448[b]	-1.712[b]	-1.853[a]	-3.110[b]
Asymp. Sig. (2-tailed)	.422	.014	.087	.064	.002

Source: SPSS Output

Based on table 6, there are 2 factors that have a sig. value of <0.05. The first is asset quality (measured by non-performing loan/NPL), which means there is a significant difference in the quality of conventional bank assets before and during the COVID-19 pandemic. Conventional banks' NPL value has decreased from before the pandemic by 1.36% to 1.06% at the time of the pandemic. The second is liquidity (measured by loan deposit ratio/LDR), which means that there is a significant difference in liquidity of conventional banks before and during the COVID-19 pandemic. Liquidity (LDR) decreased from 97% before the pandemic to 82% during the pandemic.

Table 7: Wilcoxon Signed Rank Test Results Conventional Bank Performance using the EAGLES Method

	ROA_post - ROA_pre	NPL_post - NPL_pre	Loan_post - Loan_pre	Deposit_post - Deposit_pre	LDR_post - LDR_pre	CAR_post - CAR_pre	SRQ_post - SRQ_pre
Z	-1.572[a]	-2.448[a]	-2.551[a]	-.235[b]	-3.110[a]	-.804[b]	-3.076[b]
Asymp. Sig. (2-tailed)	.116	.014	.011	.814	.002	.422	.002

Source: SPSS Output

Based on table 7 there are 4 factors that have a sig. value of <0.05. The first is asset quality (measured by non-performing loan/NPL), which means there is a significant difference in the quality of conventional bank assets before and during the COVID-19 pandemic. Conventional bank NPL value has decreased from before the pandemic by 1.36% to 1 0.06% at the time of the pandemic. The second is loan growth, which means there is a difference in loan growth, and decreased significantly from 23% before the pandemic to -10% during the pandemic. The third is liquidity (measured by loan deposit ratio/LDR), which means there is a significant difference in liquidity of conventional banks before and during the COVID-19 pandemic. Liquidity (LDR) decreased from 97% before the pandemic to 82% during the pandemic. The fourth is the strategy (measured by the Strategic Response Quotient), which means that there are significant differences in the strategies of conventional banks before and during the COVID-19 pandemic. The ability of conventional banks to cover interest costs from interest income has increased from 2.49 to 2.72 before the pandemic. during a pandemic.

- There are differences in the performance of Islamic banks and conventional banks during the COVID-19 pandemic.

Table 8: Performance Measurement of Islamic and Conventional Banks using CAMEL Model during the Pandemic

Measurement	Islamic Banks	Conventional Banks
Capital	0.2657	0.2333
Asset quality	0.0173	0.0106
Management	0.0654	0.0910
Earning	0.8876	0.8283
Liquidity	0.8997	0.8245

Source: Results of data processing (2022)

Table 9: Performance Measurement of Islamic and Conventional Banks using EAGLES Model during the Pandemic

Measurement	Islamic Banks	Conventional Banks
Earning ability	0.0261	0.0408
Asset quality	0.0173	0.0106
Growth (Financing)	0.0292	- 0.0980
Growth (Deposit)	0.0544	0.0035
Liquidity	0.8997	0.8245
Equity	0.2657	0.2333
Strategy	2.2990	2.7212

Source: Results of data processing (2022)

Based on table 8, of 5 areas measured by the CAMEL method, conventional banks outperform Islamic banks in 3 areas, i.e., asset quality (NPF/L), management (ROE), and earnings (BOPO). Based on table 9, of 7 areas measured by the EAGLES method, Islamic banks outperform conventional banks on 4 areas, i.e., growth (financing), growth (deposits), liquidity (L/FDR), and equity (CAR).

If calculated using both the CAMEL and EAGLES methods, both show differences. Based on the CAMEL method, Islamic banks only have a significant difference before and during the COVID-19 pandemic in 1 (one) thing, i.e., the capital or the ability of the bank to bear the risk of increasing losses. This means that during the pandemic, Islamic banks are better able to bear the risk of loss. It is different with conventional banks which have significant differences before and during the COVID-19 pandemic in 3 (three) areas, i.e., asset quality, earnings, and liquidity. During the pandemic, the NPL decreases, which means the pandemic does not prevent customers from completing their receivables to the bank. In addition, earnings (the ability of banks to generate profits in this case measured by BOPO) have increased. This means that the operating expenses on bank operating income are increasing during the pandemic. Furthermore, conventional bank liquidity has also decreased during the pandemic. When viewed from the average value of the ratio calculated in the CAMEL method, conventional banks are better than Islamic banks because they outperform on 3 areas, i.e., asset quality, management, and earnings.

Based on the EAGLES method, Islamic banks have significant differences before and during the covid 19 pandemic in 2 (two) areas, i.e., financing growth which has decreased significantly during the pandemic and liquidity which has increased during the pandemic. Meanwhile, conventional banks have significant differences before and during the COVID-19 pandemic in 3 (three) areas, i.e., the declining NPL value, decreasing liquidity, and the increasing ability of conventional banks to be able to cover interest costs from interest income. When viewed from the average value of the ratio calculated in the EAGLES method, Islamic banks are better than conventional banks because they outperform on 4 areas, i.e., financing growth, customer savings/deposit growth, liquidity, and capital adequacy.

CONCLUSION

From the results of this study, it can be concluded that:

1. There is a difference in the performance of Islamic banks before and during the COVID-19 pandemic.
2. There are differences in the performance of conventional banks before and during the COVID-19 pandemic.
3. There are differences in the performance of Islamic banks and conventional banks during the COVID-19 pandemic.

The COVID-19 pandemic has an impact on the financial performance of Islamic and conventional banks. Looking at the 2 methods of calculating bank performance, it can be seen that Islamic banks in a pandemic condition are more stable than conventional banks. In difficult economic conditions, financing to Islamic banks is increasing in line with increasing savings growth. This indicates that people still believe in Islamic banks to store their funds. This makes the liquidity and capital adequacy of Islamic banks superior to conventional banks during the pandemic. The results of this study also strengthen what was stated by the Minister of Finance, Sri Mulyani, in Damhuri (2020), which stated that Islamic banks were more stable than conventional banks during the pandemic due to three aspects, i.e., asset growth, growth of third-party funds, and financing growth.

This study is expected to be an input for Islamic banks and conventional banks to continue to improve their services to the people of Indonesia during the COVID-19 pandemic. The pandemic forces everyone to be able to transact more digitally. The limitation of this study is that the number of years taken was only 2 years, i.e., 2019 (before the pandemic) and 2020 (during the pandemic). For further studies, it is expected to increase the period and number of research samples.

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