COMPARATIVE ANALYSIS OF FINANCIAL PERFORMANCE BETWEENSHARIA AND CONVENTIONAL BANKING DURING 2017 - 2021

Mamik Utami[1], Muhammad Ali[2], and Muhammad Sobarsyah[3]

[1] Hasanuddin University, Makassar, Indonesia. E-mail: mamik.utami.mu@gmail.com
[2] Hasanuddin University, Makassar, Indonesia. E-mail: muhd.alilakatu@gmail.com
[3] Hasanuddin University, Makassar, Indonesia. E-mail: msobarsyah@gmail.com

Abstract

This research aims to find out whether there are differences on the financial performance of Islamic and Conventional banking during 2017 – 2021 by using Mann Whitney U test to analyze the Capital Ratio (CAR), Profitability Ratio (ROA), Asset Quality Ratio (NPF/NPL), Efficiency Ratio (BOPO), Liquidity Ratio (FDR/LDR) and Earning Assets Ratio (NIM). The object of this research is conventional public banking registered by the Financial Services Authority (OJK) and classified to the criteria of BUKU III and BUKU IV which are categorized by type, namely National Private Banks and State-Owned Banks in 2017 - 2021. As for sharia banking registered with OJK which is categorized as a national private bank in 2017 – 2021. This research sample consisted of 19 banks, including 12 conventional banks and 7 Islamic banks in Indonesia. This study used a purposive sampling technique and secondary data obtained from the official banking website and the OJK website. The results of the Mann Whitney test shows that there are significant differences in the ratios of ROA, BOPO and NIM in Islamic and conventional banking. Meanwhile for the CAR, NPL/NPF and LDR/FDR ratios, the results of Mann Whitney test showed there were not significant difference between the performance of Islamic and conventional banking during that period. This research found the results that conventional banking has a better ability in earning profits, managing productive assets, cost efficiency, as well as the ability to fulfill its obligations while Islamic banking had better in using capital to support its assets and the collectibility of its productive assets. Nevertheless, the financial performance of Islamic banks is not significantly different from the financial performance of conventional banks.

Keywords: *Conventional Banks, Shariah Banks, Financial Performance.*

A. INTRODUCTION

The financial system plays a very important role in the economy. As part of the economic system, functions to allocate funds from surplus to deficit side (OJK, 2017). If the financial system is unstable and doesn't serves efficiently, the allocation of funds will not functioning properly, and economic growth may be hampered. Over the years, two distinct banking systems have emerged, each with its unique principles and practices: Sharia banking and conventional banking. Sharia banking operates in accordance with Islamic principles, while conventional banking

follows conventional financial practices. As a financial institution, banks need to maintain their performance in order to operate optimally. Bank performance is a significant consideration for parties with an interest in the bank. According to Kasmir (2011) to assess the financial condition of a banking company can be seen from the bank's financial statements which describe the bank's financial performance. To measure the financial performance of a bank can be seen from the financial ratios of the bank itself. The financial ratios assessed include liquidity ratios, profitability ratios, and solvency ratios.

In 2017 – 2021, Indonesia has experience a fluctuating economic situation. Including changes in interest rates, fluctuations in global markets, and the COVID-19 pandemic. Especially in 2020, the global economy was attacked by the Covid-19 pandemic which had an extraordinary impact around the world, not only on health but also on the economy and financial system stability (Ashraf et al., 2022). The Covid-19 pandemic has changed the dynamics of the world economy and the banking industry is no exception. The global financial recession is one of the phenomena that can reduce the sustainability of the national economy. Uncertain economic conditions due to the Covid- 19 pandemic also impacted the performance and stability of the banking sector (Yun- ingsih et al., nd). The main focus of this research is to see whether the performance of Islamic Banks is different from Conventional Banks in terms of profitability, capital, li- quidity, cost distribution, cost efficiency and asset management during 2017 – 2021. We use a sample of Islamic and conventional banks over the period 2017 to 2021 to assess whether there are significant differences between conventional and Islamic banks.

B. LITERATURE REVIEW

Indonesian banking sector consists of two distinct systems namely Conventional Banks and Islamic Banks. Even though Indonesia is a predominantly Muslim country, the market share of Islamic banking is much lower than conventional banking. In 2020, the total assets of Islamic banks to GDP are only 2.34%. Thus, sharia banking only contributes no more than 4.4% of the banking sector (OJK, 2020). The Islamic and conventional banking systems raise questions to what extent banks are better able to absorb crisis shocks. Until now, studies of resilience between Islamic and conventional banks in facing crises continue to show inconsistent results. Studies show that Islamic banks are more resilient to crises than conventional banks (Alqahtani et al., 2017; Chazi & Syed, 2010; Fakhfekh et al., 2016; Hasham, 2017; Khediri et al., 2015;Ashraf et al., 2022). This is evidenced by a survey conducted by the IMF in 2010 on the crisis that occurred in 2008 in 8 countries in the world showing that Islamic banks are stronger in terms of profitability, distribution of financing and total assets compared to conventional banks when facing global finance. Islamic banks tend to extend more credit during financial panics (Farooq & Zaheer, 2015). Another study found that Islamic banking has a lower level of resilience to economic crises than conventional banking (Cihak & Hesse, 2010; Hassan & Dridi, 2011; and Beck et al., 2013). Then, several studies have found no difference between Islamic banks and conventional banks in dealing with crises (Bourkhis & Nabi, 2013; Johnes et al., 2014; Olson & Zoubi, 2017). In theory, shariah finance differs significantly from conventional finance. Specifically, Sharia-compliant finance does not allow for the charging of interest payments (*riba*), as only

goods and services are allowed to carry a price, does not allow for speculation, and prohibits financing of specific illicit activities. At the same time, Sharia-compliant finance relies on the idea of profit- and loss- and thus risk-sharing, on both the liability and asset side and posits that all transactions have to be backed by a real economic transac- tion that involves a tangible asset (Beck et al, 2013).

C. METHODS

Research Design
This research used a comparative quantitative approach by comparing the finan- cial performance of conventional banks and Islamic banks during 2017 – 2021 using financial ratios as comparative indicators.

1. **Capital Adequacy Ratio (CAR)**

   Capital Adequacy Ratio aims to calculates a company's ability to total assets according to each risk based on the capital owned by the bank. So that it can be known the strength of a company's capital on its assets and the bank can bear the risk for its customers and maintain the stability of the bank.

$$CAR = \frac{Eligible\ Capital}{Risk - weighted\ assets}$$

Table 3.1 CAR Component Criteria

Ratio	Rank
$CAR \geq 15\%$	Very Good
$13,5\% \leq CAR < 15\%$	Good
$12\% \leq CAR < 13,5\%$	Fair
$8\% \leq CAR < 12\%$	Bad
$CAR < 8\%$	Very Bad

2. **Return On Asset (ROA)**

   ROA measures the effectiveness or ability of bank management to generate income from managing owned assets. ROA provides information about how efficient a bank is running, because it shows how much profit it generates (Mishkin, 2016).

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

Table 3.2 ROA Component Criteria

Ratio	Rank
$ROA > 1,5\%$	Very Good
$1,25\% < ROA \leq 1,5\%$	Good
$0,5\% < ROA \leq 1,25\%$	Fair
$0\% < ROA \leq 0,5\%$	Bad
$ROA \leq 0\%$	Very Bad

3. **Non Performing Loan/Finance (NPL/NPF)**

   NPL ratio reflects to the risk of the credit portfolio, where the higher the ratio is, the higher the bank's credit risk profile, which in turn will affect the stabil- ity of the bank as a whole. The term NPF is used in Islamic banking, to replace the

concept of a loan. NPF can be interpreted as a loan that is experiencing payment difficulties.

$$NPL = \frac{Number\ of\ Loan}{Total\ Portofolio}$$

Table 3.3 NPL/NPF Component Criteria

Ratio	Rank
$NPL \leq 7\%$	Very Good
$7\% < NPL \leq 10\%$	Good
$10\% < NPL \leq 13\%$	Fair
$13\% < NPL \leq 16\%$	Bad
$NPL > 16\%$	Very Bad

4. **Operational Cost Ratio (BOPO)**

BOPO is an efficiency ratio used to measure the ability of bank management to control operational costs against operating income. The smaller this ratio means the more efficient operational costs so that the possibility of a bank in a troubled condition is getting smaller.

$$BOPO = \frac{Operating\ Expenses}{Operating\ Income}$$

Table 3.4 BOPO Component Criteria

Ratio	Rank
$50\% - 75\%$	Very Good
$76\% - 93\%$	Good
$94\% - 96\%$	Fair
$96\% - 100\%$	Bad
$> 100\%$	Very Bad

5. **Loan/Finance to Deposit Ratio (LDR/FDR)**

Loan/finance to deposit ratio aims to measure the composition of the amount of credit extended compared to the amount of public funds and own capital used. LDR is used by conventional banks while FDR is used for shariah banks. This ratio is used to assess the liquidity level of a bank by dividing the amount of credit extended by the bank to third party funds (Kasmir, 2014).

$$LDR = \frac{Total\ Loans}{Total\ Deposit}$$

Table 3.5 LDR/FDR Component Criteria

Ratio	Rank
$LDR \leq 75\%$	Very Good
$75\% < LDR \leq 85\%$	Good
$85\% < LDR \leq 100\%$	Fair
$100\% < LDR \leq 120\%$	Bad
$LDR > 120\%$	Very Bad

6. **Net Interest Margin (NIM)**

Net Interest Margin ratio aims to measure a bank's management ability to manage its productive assets to generate net interest or operation income. The greater this ratio, the higher the interest income on earning assets man- aged by

the bank so that the possibility of a bank in a troubled condition is getting smaller.

$$NIM = \frac{Interest\ Revenue - Interest\ Expenses}{Average\ Earning\ Assets}$$

Table 3.6 NIM Component Criteria

Ratio	Rank
$NIM > 3\%$	Very Good
$2\% < NIM \leq 3\%$	Good
$1,5\% < NIM \leq 2\%$	Fair
$1\% < NIM \leq 1,5\%$	Bad
$NIM \leq 1\%$	Very Bad

Population and Sample

The population used is all conventional commercial banks and Islamic banks that are registered with the OJK and IDX and have financial reports for the period 2017 – 2021.The samples used were taken based on the following criteria:

a) Conventional banking registered with the OJK and the Indonesia Stock Exchange (IDX) which publishes annual financial reports for the period 2017 to 2021.
b) Conventional banking that is registered in BUKU III & IV which has a core capitalof 5-30 trillion or above 30 trillion.
c) Sharia banking registered with the OJK and publishes annual financial reports forthe period 2017 to 2021.

Based on the sample criteria above, the number of samples in this study were 19 banks, including 12 conventional banks and 7 Islamic banks..

Data analysis technique

This study analyzed by using secondary data obtained from the official website of IDX which is www.idx.co.id, data source from Indonesian Financial Services Authority (OJK) website and official website of each bank. The analysis technique used is descriptive statistical test and Mann Whitney hypothesis testing. The financialratios include CAR, ROA, NPL/NPF, BOPO, LDR and NIM.

D. ANALYSIS AND DISCUSSION

Descriptive Analysis of Conventional and Sharia Banking Ratios

Descriptive statistics provide an overview of the amount of data, the average (*mean*), the minimum and maximum values, as well as the standard deviation on each ratios.

Table 4.1 Descriptive Results of Conventional Banking Ratios 2017 - 2021

Variable	N	Maximum	Minimum	Means	Std Deviation
CAR	60	35.70%	16.80%	22.40%	0.0052
ROA	60	4.22%	0.13%	2.05%	0.0013
NPL	60	4.78%	1.12%	2.78%	0.0011
BOPO	60	98.12%	54.20%	78.11%	0.0132
LDR	60	113.5%	56.47%	85.89%	0.0157
NIM	60	9.30%	3.06%	5.28%	0.0016

Table 4.2 Descriptive Results of Islamic Banking Ratios for 2017 - 2021

Variable	N	Maximum	Minimum	Means	Std Deviation
CAR	35	58.27%	11.51%	26.15%	0.0193
ROA	35	13.58%	-10.77%	1.73%	0.0079
NPF	35	12.52%	0.32%	3.67%	0.0049
BOPO	35	217.4%	58.07%	98.58%	0.0579
FDR	35	196.7%	38.33%	88.15%	0.0395
NIM	35	35.96%	0.83%	6.99%	0.0166

Source: Data processed, 2023

Based on descriptive results table, it can be seen from the mean value both banks have capital (CAR) ratio above 15% which based on regulations criteria Table 3.1 both banks are in a very good condition. Also for profita- bility (ROA), asset quality (NPL) and net interest margin (NIM) ratios both banks are categorized as in very good condition. For operational ratio (BOPO), conventional bank have mean value 78,11% which means bank has a good condition meanwhile shariah bank have mean value 98,58% which means bank have a bad condition for manage their efficiency. On li- quidity ratio (LDR/FDR) both banks are in fair condition as it can be seen based on regulations criteria.

Hypothesis Test Results

To see the difference in performance between Islamic and conventional banks in the 2017-2021 period in each ratio, the Mann Whitney hypothesis test was used, which is an alternative to the independent sample t-test when the data is not normally distributed.

Table 4.3 Results of Hypothesis Testing of Banking Ratios for 2017 - 2021

Variable	Mann-Whitney U	p-values	Hypothesis
CAR	884.00	**0.200**	Rejected
ROA	554.50	**0.000**	Accepted
NPL	954.50	**0.461**	Rejected
BOPO	416.00	**0.000**	Accepted
LDR	1.03×10^3	**0.908**	Rejected
NIM	554.00	**0.000**	Accepted

Based on the results of hypothesis testing, the following results are obtained:

1. Based on the results of the hypothesis test, it can be seen that the CAR ratio has a significance value greater than 0.05, this indicates that there is no difference in financial performance between Islamic banks and conventional banks during

2017 – 2021. Both Islamic banks and conventional banks have the ability to finance operational activities and make contribution to profitability. The results of the descriptive CAR ratio test on Table 4.1 and Table 4.2, conventional banks have a smaller capital adequacy ratio than Islamic banks. Therefore it can be said that in terms of capital ratios, Islamic banks much better than conventional banks. However, refers to the regulation of Bank Indonesia that CAR ratio standard is above 15%, then the two banks are still in ideal conditions or in very healthy conditions. A high capital ratio indicates that the bank has a strong financial position and can absorb losses more easily.

Generally Islamic banks are required to maintain a higher level of capital adequacy to ensure that they have sufficient funds to cover unexpected losses. This is because Islamic banks are not allowed to charge or pay interest, meaning they cannot rely on interest income to cover losses. Instead, they must rely on other sources of income, such as fees and commissions, to generate income.

2. On ROA ratio, the significance value is less than 0.05, this indicates that there is a significant difference in financial performance. It means that there are differences in the efficiency of asset management between the two banks. This can be seen by the results of the descriptive statistics Table 4.1 and Table 4.2, the mean ROA ratio of conventional banks is greater than that of Islamic banks. Therefore, it can be said that the ratio of profitability in conventional banks is better than Islamic banks. Because the higher of ROA ratio, the greater the level of profit achieved by the bank. Refers to Bank Indonesia standard which state that the best standard of ROA is above 1.5%, sharia and conventional banking are in a very healthy condition. One of the factors is the large number of customers who choose to use conventional bank services, therefore bank conventional more profitable.

3. Based from the results of hypothesis testing, the asset quality ratio or the NPL/NPF ratio shows that there is no significant difference between the performance of Islamic and conventional banking. This shows that both types of banks have the same ability in managing credit portfolios and assessing credit risk. The results of the descriptive analysis shows that the financial performance of conventional banks is better than the financial performance of Islamic banks. Where the NPL ratio of conventional banks is 2.78%, which is smaller than that of NPF of Islamic banks, which is 3.67%. However, both Islamic and conventional banks have an asset quality value under Bank Indonesia regulations, which is 7%. Therefore, it can be said that the ratio of asset quality represented by the NPL/NPF ratio in conventional banks is much better than Islamic banks. This is because the level of non-performing loans that occur in conventional banks is less than that of non-performing loans in Islamic banks. In addition, financing at Islamic banks is different from conventional banks where conventional banks provide financing with interest and guarantees that can reduce financing risk, while Islamic banks provide financing on the principle of profit sharing (*mudharabah)* and buying and selling (*murabaha*) which depend on the success of the customer's business.

4. Based on the results of the BOPO ratio hypothesis test, it shows that there is a significant difference between the performance of Islamic banks and conventional banks. Referring to the results of the descriptive analysis, the

average BOPO value of conventional banks is smaller than Islamic Islamic banks. Therefore, it can be said that the ratio of efficiency in conventional banks is better than Islamic banks. Because the higher BOPO is, the lack of ability to reduce operational costs will lead to bank's inefficiency. This inefficiency creates a high cost allocation that can reduce bank income (Rusdiana, 2012). This reason is because conventional banks are better at generating profits by increasingoperating income and reducing operating costs.

5. The liquidity ratio (LDR/FDR) obtained a significance value greater than 0.05 which indicates that there is no significant difference between the performance of Islamic and conventional banks. Based from the results of the descriptive analysis, Islamic banks are still superior to conventional banks in liqudity. Referring to Bank Indonesia regulations, these two banks are in a fairly adequate condition in managing their liquidity quality. Although the minimum requirements are met, there are several weaknesses that require management attention. The lower LDR ratio of a bank is, the greater the risk that will be faced because the bank will have difficulty fulfilling its short-term financial obligations in paying customer deposits. While the bank's liquidity is too high, the bank is less able to get its profitability. This is due to the large amount of unused funds to generate productivity. In this case conventional banks are much better to shariah banks even though the two banks have carried out their intermediary function properly, namely neither too high nor too low in financing distribution. A good LDR/FDR is one that is not less or does not exceed BI standards.

6. Based on the results of the margin ratio hypothesis test, it appears that there are significant differences in managing earning assets in the two types of banking. This could indicate a difference in the efficiency of asset management and the passivity of funds between the two. Differences in the efficiency of asset management and fund passivity can be caused by several factors such as the structure of the asset portfolio and fund liabilities, the interest rate offered, and the business strategy implemented. Islamic banks tend to prioritize financing products based on profit-and-loss sharing, so that the interest income generated may be lower than conventional banks which focus more on deposit products and fixed interest loans. Based from the results of the average descriptive statistical comparison, the NIM ratio of conventional banks is smaller than that of Islamic banks, but the two banks are classified as in a very healthy condition. The higher NIM ratio is, the higher the net interest income on earning assets managed by the bank. This shows that Islamic banks tend to be more effective in managing fund assets and liabilities to generate profits in the form of profitsharing.

E. CONCLUSION

From the research results, Islamic banks have an advantage in using capital to support their assets and the collectibility of their productive assets. So that Islamic banks need to improve operational efficiency to remain competitive with conventional banks, improve their performance to obtain greater profits with the principle of profit sharing that they apply and can reduce the liquidity ratio to comply with regulations standard, by not allocating too many funds on credit. Nevertheless, the financial performance of Islamic banks is not significantly different

from the financial performance of conventional banks.

As for conventional banks, they have better abilities in earning profits, managing productive assets, cost efficiency, and the ability to fulfill their obligations. In order to maintain excellence, conventional banks can further improve their performance in order to get even better results.

In general, Islamic banks and conventional banks have almost the same performance and are also able to survive and show the same good performance especially Islamic banks which can also compete with conventional banks even though their market share is still lacking.

REFERENCES

Alqahtani, F., Mayes, D. G., & Brown, K. (2017). Islamic bank efficiency compared to conventional banks during the global crisis in the GCC region. Journal of International Financial Markets, Institutions and Money, 51, 58–74. https://doi.org/10.1016/j.intfin.2017.08.010

Ashraf, B. N., Tabash, M. I., & Hassan, M. K. (2022). Are Islamic banks more resilient to the crises vis-à-vis conventional banks? Evidence from the COVID-19 shock using stock market data. Pacific Basin Finance Journal, 73. https://doi.org/10.1016/j.pacfin.2022.101774

Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. Journal of Banking & Finance, 37, 433-. https://doi.org/http://dx.doi.org/10.1016/j.jbankfin.2012.09.016

Bourkhis, K., & Nabi, M. S. (2013). Islamic and conventional banks' soundness during the 2007– 2008 financial crisis. Review of Financial Economics. https://onlinelibrary.wiley.com/doi/abs/10.1016/j.rfe.2013.01.001

Chazi, A., & Syed, L. A. M. (2010). Risk exposure during the global financial crisis: the case of Islamic banks. International Journal of Islamic and Middle. https://www.emerald.com/insight/content/doi/10.1108/17538391011093261/full/html

Čihák, M., & Hesse, H. (2010). Islamic banks and financial stability: An empirical analysis. Journal of Financial Services Research. https://link.springer.com/article/10.1007/s10693-010-0089-0

Fakhfekh, M., Hachicha, N., Jawadi, F., Selmi, N., &   (2016). Measuring volatility persistence for
conventional and Islamic banks: An FI-EGARCH approach. Emerging Markets….
https://www.sciencedirect.com/science/ article/pii/S1566014116300164

Farooq, M., & Zaheer, S. (2015). Are islamic banks more resilient during financial panics? Pacific Economic Review, 20(1), 101–124. https://doi.org/10.1111/1468-0106.12096

Hasan, M., & Dridi, J. (2011). The effects of the global crisis on Islamic and conventional banks: A comparative study. Journal of International Commerce, Economics and Policy, 2(02), 163- 200.

Hashem, S. Q. (2017). Financial Stability of Islamic Banks: A Systemic Risk Perspective. iris.unipv.it. https://iris.unipv.it/bitstream/11571/1203342/2/Thesis-Financial Stability of Islamic Banks with Systemic Risk.pdf

Johnes, J., Izzeldin, M., & Pappas, V. (2014). A comparison of performance of Islamic and conventional banks 2004-2009. Journal of Economic Behavior and

Organization, 103, 1–15. https://doi.org/10.1016/j.jebo.2013.07.016

Khediri, K. B., Charfeddine, L., & Youssef, S. B. (2015). Islamic versus conventional banks in the GCC countries: A comparative study using classification techniques. Research in International Busines https://www.sciencedirect.com/science/article/pii/S0275531914000440

Kasmir. (2012). Dasar-Dasar Perbankan. PT Raja Grafindo Persada: Jakarta.

Kasmir (2014) Bank Dan Lembaga Keuangan lainnya, Raja Grafindo Persada, Jakarta.

Mishkin, F. . (2016). The Economics of Money, Banking, and Financial Markets. Columbia University.

OJK. (2017). Stabilitas Sistem Keuangan Perbankan. Retrieved from Otoritas Jasa keuangan:https://www.ojk.go.id/id/kanal/perbankan/stabilitas-sistem-keuangan/Pages/Ikhtisar.aspx

Otoritas Jasa Keuangan. (2020). Statistik Perbankan Syariah Indonesia 2020.

https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/statistik-perbankan-syariah/Default.aspx

Olson, D., & Zoubi, T. (2017). Convergence in bank performance for commercial and Islamic banks during and after the Global Financial Crisis. The Quarterly Review of Economics and Finance. https://www.sciencedirect.com/science/article/pii/S1062976916300412

Rusdiana, Nana. 2012. Analisis Pengaruh CAR, LDR, NIM, NPL, BPO, dan DPK Terhadap Kinerja Keuangan Perbankan. Skripsi Universitas Diponegoro Semarang: tidak diterbitkan.

Yuningsih, A., Alfiah, E., Fatmawati, U., & Bengkulu, S. (n.d.). KETAHANAN PERBANKAN SYARIAH INDONESIA TERHADAP FLUKTUASI KONDISI MAKROEKONOMI DAN KONDISIFUNDAMENTAL SAAT PANDEMI COVID-19.