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THE EFFECT OF COVID-19 PANDEMIC ON THE PERFORMANCE OF ISLAMIC BANK IN INDONEISA

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Abstract

The Corona Virus Diseases (Covid-19) pandemic that hit the world resulted in a decline in the performance of most companies, including reducing the performance of the world economy. Banking as a business group was also affected because the decline in company performance had an effect on the decline in banks, including Islamic banks especially the probability effect. This is due to the large number of affected customer companies causing a decrease in financing which in turn reduces profitability. The purpose of this study is to examine the impact of the Covid-19 pandemic on the performance of Islamic banks in Indonesia. The performance of Islamic bank consist of capital adequacy ratio (CAR), non-performing financing (NPF), profitability as measured by return on assets (ROA), return on equity (ROE), and net operating margin (NOM)., operating expenses to operating income ratio (OEIR) and financing to deposit ratio (FDR). The population in this study were 13 Islamic commercial banks operating in Indonesia. From this population 12 banks were taken as samples and one bank was not taken because the data were incomplete. The data is taken quarterly, namely 4 quarters before the pandemic and 3 quarters during the pandemic. To test the hypothesis, the independent sample t-test was used. The results showed that the profitability as measured by ROE and NOM has a significant effect, as well as the financing to deposit ratio is also significantly different. Meanwhile, CAR, NPF, ROA, and OEIR were not affected by the Covid-19 pandemic.

Keywords: Capital Adequacy Ratio; Non-Performing Financing; Financing to Depoasit Ratio; Return on Equity

Abstrak

Pandemi Penyakit Virus Corona (Covid-19) mengakibatkan penurunan kinerja sebagian besar perusahaan, termasuk menurunkan kinerja perekonomian dunia. Perbankan sebagai kelompok usaha juga terkena imbasnya karena penurunan kinerja perusahaan berdampak pada penurunan perbankan termasuk bank syariah terutama kemungkinan efeknya. Hal ini disebabkan banyaknya perusahaan nasabah yang terkena dampak sehingga menyebabkan penurunan pembiayaan yang pada akhirnya menurunkan profitabilitas. Tujuan dari penelitian ini adalah untuk mengetahui dampak pandemi Covid-19 terhadap kinerja bank syariah di Indonesia. Kinerja bank syariah terdiri dari rasio kecukupan modal (CAR), non-performing financing (NPF), profitabilitas yang diukur dengan Return on Asset (ROA), Return on Equity (ROE), dan Net Operating Margin (NOM), Rasio Beban Operasional terhadap pendapatan operasional (OEIR) dan Rasio Pembiayaan terhadap Simpanan (FDR). Populasi dalam penelitian ini adalah 13 bank umum syariah yang beroperasi di Indonesia. Dari populasi tersebut diambil 12 bank sebagai sampel dan satu bank tidak diambil karena datanya tidak lengkap. Pengambilan data dilakukan secara triwulanan yaitu 4 triwulan sebelum pandemi dan 3 triwulan saat pandemi. Untuk menguji hipotesis digunakan uji independent sample t-

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test. Hasil penelitian menunjukkan bahwa profitabilitas yang diukur dengan ROE dan NOM berpengaruh signifikan, demikian pula rasio pembiayaan terhadap simpanan juga berbeda secara signifikan. Sedangkan CAR, NPF, ROA, dan OEIR tidak terpengaruh oleh pandemi Covid-19

***Kata Kunci**: Capital Adequacy Ratio; Non-Performing Financing; Financing to Depoasit Ratio; Return on Equity*

INTRODUCTION

At the end of 2019, the world was shocked by the discovery of a terrible disease outbreak that resulted in paralysis of the world economy. The disease outbreak is known as coronavirus. Coronavirus is one of the main pathogens that attacks the human respiratory system. Because this outbreak occurred in 2019, it is often referred to as coronavirus disease 19 (Covid-19). The Covid-19 case initially occurred in Wuhan, Hubei province, China in December 2019. There were five patients treated at Jinyinta Hospital, Wuhan who were initially suspected of pneumonia with Acute Respiratory Syndrome (ARDS) (Ren et al., 2020). After a careful diagnosis, it showed that there was a new coronacirus named 2019 novel coronavirus (2019-nCoV). In a short time, this virus spread to other provinces in China, Thailand, Japan and Korea (Huang et al., 2020).

Based on this incident, the WHO World Health Organization on February 11, 2020 officially announced the official name of the outbreak, which from 2019-nCoV became COVID-19 (WHO, 2020). COVID-19 can be transmitted from human to human and in general, respiratory viral infections can occur through: (1) contact (direct or indirect), (2) short-distance transmission (droplet) spray (droplet) and, (3) aerosols in transmission long distance (Moriyama, Hugentobler, & Iwasaki, 2020). This disease has spread to more than 180 countries, so WHO officially announced that COVIC-19 is a pandemic (WHO, 2020). As of June 2, 2020, there have been 6,194,533 confirmed positive cases of COVID-19 and 376,320 deaths from COVID-19 worldwide. Meanwhile, in Southeast Asia 283,845 confirmed cases of COVID-19 and 8,000 deaths due to COVID-19.

In Indonesia, the case of the Covid-19 outbreak was first announced by President Joko Widodo with a positive case that befell 2 people on March 2, 2020. The first case announced was greeted by the capital market with negative effects. Regulators have tried hard by issuing various policies, but they were still unable to withstand the collapse of the Jakarta Composite Index (IHSG). On that day, JCI closed 91 points (1.67%) at the level of 5,361. At that time the JCI trend was indeed bearish. The effects of the Covid-19 pandemic have occurred in almost all world exchanges, so that many stock prices have fallen(He, Sun, Zhang, & Li, 2020; Singh, Dhall, Narang, & Rawat, 2020; Shahabi, Azar, Faezy Razi, & Fallah Shams, 2020 and Anh & Gan, 2020).

Banking, both conventional and Islamic banks, is also facing challenges amid the Covid-19 outbreak (Disemadi & Shaleh, 2020; Labonte & Scott, 2020; and Ningsih & Mahfudz, 2020). AnIslamic Economics Observer who is also the founder of Karim Consulting, Adiwarman Karim, said that industry conditions could deteriorate earlier than the banking industry. Pandemic conditions can reduce the competitiveness of Islamic banks and people transfer their funds to conventional banks. In general, the challenges in Islamic banks during the Covid-19 pandemic were liquidity and the ratio of non-performing financing (NPF). The research object is Islamic banking, because it is unique in that its products are not allowed to be interest-based, so that during a pandemic, its management is heavier than conventional banks

The Covid-19 pandemic has indeed made the economy, including banking, experience a decline in performance. The impact of this epidemic has caused several countries to experience economic crisis and even recession (Wu & Olson, 2020). The impact of a pandemic is like the case of an economic recession, so banking management must be able to make the right strategy so that the effect is not too big. The impact of the economic crisis on Islamic banking has been analyzed by several previous researchers (Miniaoui & Gohou, 2013; Al-Deehani, El-Sadi, & Al-Deehani., 2015; dan Alqahtani., 2016). Muhammad & Triharyono, (2019) and Wahab N., Rosman R., (2017). They conducted research to determine the effect of the economic crisis on the performance of Islamic banks such as capital (CAR), NPF, profitability, and FDR.

Some researchers measure the performance of Islamic banks with a financial ratio called CAMEL, namely capital capital adequacy ratio (CAR), asset quality as measured by non-performing financing (NPF). Profitability is measured by return on assets (ROA), return on equity. (ROE), net operating margin (NOM) and the operating expenses to operating income ratio (OEIR), as well as liquidity as measured by financing to deposit ratio (FDR)

The Covid-19 epidemic has been felt by banks because of the increasing number of companies that have been affected, reducing their production and even experiencing bankruptcy, which makes channeling bank financing more difficult. With the decline in financing, it will further reduce the profitability of Islamic banks, including the decline in overall bank performance. Thus, researchers will test whether the Covid-19 pandemic has an effect on the performance of Islamic banks as measured by CAR, NPF, ROA, ROE, NOM, OEIR, and FDR. Researchers hypothesize that there are differences in the performance of Islamic banks before and during the Covid-19 pandemic. The performance of Islamic banks has decreased significantly during the Covid-19 outbreak.

RESEARCH METHODOLOGY

Population and sample

This study uses a population of 13 Islamic commercial banks in Indonesia. From this population, one bank was not taken as the sample because the data was incomplete. There are several quarters of data not available, so that the sample was taken as many as 12 Islamic commercial banks. To analyze differences in the performance of Islamic banks before and during the pandemic, data were taken 4 quarters before the pandemic and three quarters during the pandemic.

Research variable

The research variable is the performance of Islamic banks consisting of 7 Islamic bank performance indicators with the following measurements:

Table 1: Variable and Measurement

No	Variable	Symbol	Measurement
1	Capital Adequacy Ratio	CAR	Total Equity/Weighted Asset Based Risk
2	Non Performing Financing	NPF	Non perform financing/Total Financing
3	Return on Asset	ROA	EAT/Total Asset
4	Return on Equity	NPF	EAT/Total Equity
5	Net operating Margin	NOM	Net operating income/Operating income
6	Operaring Expense to Income Ratio	FDR	Total Financing/Third Party Fund
7	Financing to Deposit Ratio	NPM	Total Financing/Total Deposit

Source: Data Processed (2020)

RESULT AND ANALYSIS

Descriptive Statistics

To provide an overview of the sample company data, the following are the maximum, minimum and average values of the research data processed using the SPSS version 17.0 program.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CAR	84	12.01	346.43	41.892	69.67542
NPF	84	0.00	4.98	2.2589	1.50347
ROA	84	0.01	17.23	2.4765	4.34726
ROE	84	0.03	31.20	7.0824	8.15988
NOM	84	-0.97	14.97	1.7244	3.688
OEIR	84	40.36	204.50	91.5938	19.3355
FDR	84	68.05	181.84	89.61	16.94603
Valid N (listwise)	84				

Source: Data Processed (2020)

Based on the table above, the capital adequacy ratio (CAR) of Islamic banking is very good because it is above the minimum requirement of 8%. The minimum CAR is 12.10% and the maximum is 346.43% with an average of 41.89%. Non performing financing is also good because it is below the maximum requirement of 5% with a minimum value of 0.00% and a maximum of 4.98% with an average of 2.26%. Profitability as measured by ROA shows quite good because it has an average of 2.48% with a minimum value of 0.01% and a maximum of 17.23%. Meanwhile, profitability as measured by ROE shows a minimum value of 0.03% and a maximum value of 31.20% with an average of 7.08. Meanwhile, the net operating margin (NOM) shows a minimum value of -0.97% and a maximum of 14.97% with an average of 1.72%.

The operating expenses to operating income ratio (OEIR) shows an average of 91.59%, with a minimum value of 40.36% and a maximum of 204.50%. This shows that there are banks that are operating in a losing condition. The financing to deposit ratio (FDR) is very good because the average value is 89.61% with a minimum value of 68.05 but there are still Islamic banks whose FDR values far exceed the provisions, namely with a maximum value of 181.84, even though the recommended value is 85%

Group Statistics

To determine the effect of the Covid-19 pandemic on the performance of Islamic banks, data was taken from 4 quarters before and three quarters during the Covid-19 pandemic. The following is the average data for each variable before and during the Covid-19 pandemic:

Table 3: Group Statistics

	EVEN	N	Mean	Std. Deviation	Std. Error Mean
CAR	BEFORE	48	38.4750	58.25936	8.40901
	PANDEMIC	36	46.4481	83.17008	13.86168
NPF	BEFORE	48	2.2535	1.46281	0.21114
	PANDEMIC	36	2.2661	1.57699	0.26283
ROA	BEFORE	48	2.6650	4.66442	0.67325
	PANDEMIC	36	2.2253	3.93534	0.65589
ROE	BEFORE	48	7.5106	8.95488	1.29252
	PANDEMIC	36	6.5114	7.0447	1.17412
NOM	BEFORE	48	2.0800	4.21068	0.60776
	PANDEMIC	36	1.2503	2.83573	0.47262
OEIR	BEFORE	48	88.2360	14.44128	2.08442
	PANDEMIC	36	96.0708	23.88416	3.98069
FDR	BEFORE	48	129.7274	182.11561	103.70778
	PANDEMIC	36	84.1878	34.01801	5.66967

Source: Data Processed (2020)

Table 2 shows the difference of mean, standard deviation and standard error mean of each research variable before and during the pandemic. CAR had a mean of 38.48% before the pandemic and increased to 46.45% during the pandemic. This shows that during the pandemic, Islamic banks were not able to channel financing properly, so the funds were not absorbed. Meanwhile, NPF which shows financing problems did not experience significant fluctuations because before the pandemic 2.25% and during the pandemic increased 0.01% to 2.26%.

Profitability, both as measured by ROA, ROE and NOM, also decreased. ROA before the pandemic was 2.67% and decreased slightly to 2.23% during the pandemic, ROE also decreased from 7.61% before the pandemic to 6.51% during the pandemic. Meanwhile, NOM has decreased quite significantly, from 2.08% before the pandemic to 1.25% during the pandemic.

The level of efficiency as measured by the ratio of operating costs to operating income (OEIR) has increased quite sharply. The OEIR before the pandemic was 88.24%, increasing to 96.07%. This is one of the causes of the decline in the profitability of Islamic banks. Meanwhile, the financing to deposit ratio (FDR) has decreased from before the pandemic was very expansive with an average FDR of 129.73% to 84.19% during the pandemic. These results indicate that during a pandemic the ability to channel funds was greatly reduced, which may be because many companies were also affected by the pandemic, so they did not need funds to develop their businesses.

Hypothesis Result

To find out whether the performance of Islamic banking is affected by the Covid-19 pandemic, a different test will be carried out from the performance of Islamic banks. To determine whether there is a difference, use a significance level of 5% and 10%. The following table shows the results of different tests before and during the Covid-19 pandemic using the independent sample t-test.

Table 3: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
						95% Confidence Interval of the Difference	
		F	Sig.	Mean Difference	Std. Error Difference	Lower	Upper
CAR	Equal variances assumed	0.972	0.327	-7.97306	15.43027	-38.66878	22.72267
	Equal variances not assumed			-7.97306	16.21289	-40.40926	24.46315
NPF	Equal variances assumed	0.005	0.944	-0.01257	0.3335	-0.676	0.65086
	Equal variances not assumed			-0.01257	0.33713	-0.68458	0.65945
ROA	Equal variances assumed	1.632	0.205	0.43972	0.96308	-1.47616	2.3556
	Equal variances not assumed			0.43972	0.93992	-1.4305	2.30995
ROE	Equal variances assumed	3.234	.076*	0.99924	1.80665	-2.59477	4.59325
	Equal variances not assumed			0.99924	1.74619	-2.47462	4.4731
NOM	Equal variances assumed	3.187	.078*	0.82972	0.81292	-0.78744	2.44689
	Equal variances not assumed			0.82972	0.7699	-0.70208	2.36153
BOPO	Equal variances assumed	0.254	0.616	-7.83479	4.20082	-16.19156	0.52197
	Equal variances not assumed			-7.83479	4.49341	-16.84426	1.17467
FDR	Equal variances assumed	6.495	.013**	445.53967	347.55554	-245.98683	1137.0662
	Equal variances not assumed			445.53967	303.76069	-165.8874	1056.9667

Note: ***, **, * denote significant 1%, 5%, and 10%
Source: Data Processed (2020)

To find out the results of hypothesis testing, see the column Levene's test for equality of variances in the sign column. Capital as measured by the capital adequacy ratio (CAR) produces a significance value of 0.327 greater than the requirement, so that CAR does not differ between before and during the Covid-19 pandemic. These results indicate that Islamic banks maintain a good capital adequacy ratio, because capital is a very vital aspect for banks, so the government regulates the minimum bank capital at 8%. Banks are companies whose funds mostly come from public funds, so it is highly regulated by the government. Therefore, the bank will maintain adequate capital in order to maintain its performance. Aziz, Md Husin, Haider Hashmi, Manager, & of Khyber (2016) and Mughal, Scholar, & Administrative(2015) who compared the performance of Islamic banks with commercial banks stated that capital is very important so that it will maintain capital adequacy above the minimum requirement. Therefore, Islamic banking also maintains adequate capital in accordance with government regulations both before and during the Covid-19 pandemic.

The financing risk as measured by non-performing financing (NPF) shows a significance result of 0.944 above the required significance level, so that there is no difference in NPF between before and during the pandemic. In accordance with government regulations that non-performing financing (NPF) is a maximum of 5%, if it exceeds the provisions there will be administrative sanctions in the form of a decrease in the bank's health assessment (Labonte & Scott, 2020). Therefore, Islamic banks try to keep the NPF as low as possible. This is reflected in the average NPF value of 2.26% with a maximum value of 4.98%. Thus, it is natural that both before the pandemic and during the pandemic, the bank maintained its NPF. Therefore the Covid-19 pandemic has not affected banks in managing their financing risk. Uddin et al.(2017) revealed that under any circumstances, banks will maintain the NPF under the provisions, including banks that are restructuring in the form of mergers and acquisitions (Sufian & Abd. Majid, 2007).

Profitability as measured by return on assets (ROA) produces a significance value of 0.205 more than required, meaning that there is no difference in ROA before and during the pandemic. ROA is the ability of earnings compared to total assets (Bikker, 2010), so it is logical that there is no difference in ROA before and during Covid, because the comparison is total assets. We know that bank assets come from own capital and public funds and if you look at the CAR, there is a very large number which is shown in descriptive statistics with a maximum value of 346.43%, meaning that your own capital is too dominant. It can also be interpreted that banks are not able to mobilize public funds. This can be seen in the return on equity (ROE) which produces a significance value of 0.076 which is smaller than the significance requirement of 0.10. Also, the net operating margin (NOM) has a significance value of 0.078 which is smaller than 0.10. Thus, profitability as measured by both ROE and NOM differs significantly before and during a pandemic. ROE is the ability to generate profits with own capital (Bikker, 2010), so it is logical if there is a difference before and during a pandemic, this is because there are some Islamic banks that have very little own capital resulting in high ROE. In conventional banking and Islamic banks, there are often significant differences in the profitability of ROE and NOM (Mughal et al., 2015 and Uddin et al., 2017). ROE before the pandemic averaged 7.51% and decreased during the pandemic to an average of 6.51%. Likewise, profitability as measured by NOM also experienced a decline during the pandemic period from 2.08% before the pandemic to 1.25% during the pandemic. This shows that there has been a decline in profitability during the Covid-19 pandemic

The operating expenses to operating income ratio (OEIR) produces a significance value of 0.254 greater than 0.10, meaning that there is no significant difference in OEIR before and during the Covid-19 pandemic. These results indicate that banks are able to control their efficiency, because OEIR is an indicator of the size of a bank's efficiency, the higher the OEIR the lower the profitability. There are indeed very efficient Islamic banks that are very efficient which is shown with a minimum OEIR value of 40.36%, there are also those that are very not showing a maximum value of 204.50, but statistically the difference is not significant. These results indicate that the management of Islamic banks strives for the banks they manage not to lose money (Demirgüç-Kunt, Morales, & Ruiz Ortega, 2020). Azhari, Salsabilla, & Wahyudi(2020) also found that there was no significant difference in OEIR before and during the Covid-19 pandemic. OEIR is a variable that can be controlled by management so that during a pandemic Islamic bank management takes efficiency strategics.

Financing to deposit ratio (FDR) obtained a significance value of 0.013, lower than the required significance level of 0.05. Thus there is a significant difference in FDR before and during the pandemic. FDR shows that the financing provided, the higher the FDR, the greater the financing provided. Large financing will increase income which in turn will increase profitability (Disemadi & Shaleh, 2020). Prior to the Covid-19 pandemic, the FDR of Islamic banks was on average 129.72% and decreased to 84.19% during the pandemic. This shows that during a pandemic the ability of banks to channel financing decreased drastically, which resulted in decreased income and resulted in decreased profitability. These results also confirm that profitability as measured by ROE and NOM has also decreased significantly.

CONCLUSION

The Covid-19 pandemic has had a very serious impact on the economies of all countries in the world, including the banking industry, both conventional and Islamic banking in Indonesia. Specifically for Islamic banking, it can be concluded that the performance that was not affected in the sense that before and during the pandemic was not different was the performance stipulated by the government. Capital Adequacy Ratio (CAR) is set by the government at a minimum of 8%, non-performing financing (NPF) is set at a maximum of 5%, so there are no significant differences between these two variables before and during the pandemic.

Profitability as measured by ROA does not have a significant impact on the pandemic, likewise the ratio of operating costs to operating income (OEIR) also has no impact, meaning that Islamic bank management has tried to control on the efficiency side, because OEIR is more controllable by management. Meanwhile, the variables related to profitability decreased significantly before and during the pandemic. Return on Equity (ROE), net operating margin (NOM) and financing to deposit ratio (FDR) decreased significantly. FDR, as an indicator of the ability of

Islamic banks to channel financing, has decreased which of course reduces bank income so that in the end it also has an impact on lowering profitability. However, according to Nugroho et al., (2020) during the pandemic, Islamic banks are still well managed with moderate performance.

Management of Islamic banks is expected to pay attention to financing (FDR) because financing has a significant effect on profitability. If managed properly, a high FDR will be able to increase profitability and can also control CAR so that it is not too large (efficient).

This study has limitations in the form of data that is still small because the pandemic period is still around 3 quarters, so it only uses 3 quarters during the pandemic period and the four quarters before the pandemic. It is hoped that the next researchers can carry out replication by adding data for example with monthly data.

REFERENCES

Al-Deehani, T. M., El-Sadi, H. M., & Al-Deehani, M. T. (2015). Performance of Islamic banks and conventional banks before and during economic downturn. *Investment Management and Financial Innovations*, *12*(2), 238–250.

Alqahtani, F. (2016). Islamic Banking and the Global Financial Crisis Evidence from the Gulf Cooperation Council A thesis submitted in fulfilment of the requirement. *Working Paper*, (July). https://doi.org/10.13140/RG.2.1.2997.0163

Anh, D. L. T., & Gan, C. (2020). The impact of the COVID-19 lockdown on stock market performance: evidence from Vietnam. *Journal of Economic Studies*. https://doi.org/10.1108/JES-06-2020-0312

Azhari, A. R., Salsabilla, A., & Wahyudi, R. (2020). Performance analysis of Islamic bank social funds in the Covid-19: Evidance from Indonesia. *Islam in World Perspectives…*,1–7.Retrieved from http://seminar.uad.ac.id/index.php/iwos/article/view/4618

Aziz, S., Md Husin, M., Haider Hashmi, S., Manager, C., & of Khyber, B. (2016). Performance of Islamic and Conventional Banks in Pakistan: A Comparative Study. *International Journal of Economics and Financial Issues*, *6*(4), 1383–1391. Retrieved from http:www.econjournals.com

Badreldin, A. M. (2011). Measuring the Performance of Islamic Banks by Adapting Conventional Ratios. *SSRN Electronic Journal*, (January 2009). https://doi.org/10.2139/ssrn.1492192

Bikker, J. (2010). Measuring Performance of Banks: An Assessment. *Journal of Applied Business and Economics*, *11*(4), 141–159.

Dash, M. (2017). A Model for Bank Performance Measurement Integrating Multivariate Factor Structure with Multi-Criteria PROMETHEE Methodology. *Asian Journal of Finance & Accounting*, *9*(1), 310. https://doi.org/10.5296/ajfa.v9i1.11073

Demirgüç-Kunt, A., Morales, A., & Ruiz Ortega, C. (2020). Banking Sector Performance During the COVID-19 Crisis. *SSRN Electronic Journal*, (August). https://doi.org/10.2139/ssrn.3689789

Disemadi, H. S., & Shaleh, A. I. (2020). Banking credit restructuring policy amid COVID-19 pandemic in Indonesia. *Jurnal Inovasi Ekonomi*, *5*(02), 63–70. https://doi.org/10.22219/jiko.v5i3.11790

Hanif, M., Tariq, M., Tahir, A., & Wajeeh-ul-Momeneen. (2012). Comparative performance study of conventional and Islamic banking in Pakistan. *International Research Journal of Finance and Economics*.

He, P., Sun, Y., Zhang, Y., & Li, T. (2020). COVID–19's Impact on Stock Prices Across Different Sectors—An Event Study Based on the Chinese Stock Market. *Emerging Markets Finance and Trade*, *56*(10), 2198–2212. https://doi.org/10.1080/1540496X.2020.1785865

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., … Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*. https://doi.org/10.1016/S0140-6736(20)30183-5

Labonte, M., & Scott, A. P. (2020). COVID-19 and the Banking Industry : Risks and Policy Responses COVID-19 and the Banking Industry : Risks and Policy Responses.

Miniaoui, H., & Gohou, G. (2013). Did Islamic Banking Perform Better during the Financial Crisis ? : Evidence from the UAE. *Journal of Islamic Economics , Banking and Finance*, *9*(2), 115–130. https://doi.org/10.12816/0001605

Moriyama, M., Hugentobler, W. J., & Iwasaki, A. (2020). Annual review of virology seasonality of respiratory viral infections. *Annual Review of Virology*, *7*(September). https://doi.org/10.1146/annurev-virology-012420-022445

Mughal, M. K., Scholar, M. P., & Administrative, B. (2015). Comparison of Islamic and Conventional Banks Performance 2 . Aims and Objectives : 3 . Research Question : 4 . Literature Review, *5*(6), 37–46.

Muhammad, R., & Triharyono, C. (2019). Analysis of islamic banking financial performance before, during and after global financial crisis. *Jurnal Ekonomi & Keuangan Islam*, *5*(2), 80–86. https://doi.org/10.20885/jeki.vol5.iss2.art5

Ningsih, M. R., & Mahfudz, M. S. (2020). Dampak Pandemi Covid-19 Terhadap Manajemen Industri Perbankan Syariah: Analisis Komparatif. *Point*, *2*(1), 1–10. https://doi.org/10.46918/point.v2i1.576

Nugroho, L., Buana, U. M., Utami, W., Buana, U. M., Doktoralina, C. M., Harnovinsah, H., & Buana, U. M. (2020). COVID-19 AND THE POTENCY OF DISRUPTION ON THE ISLAMIC BANKING. *International Journal of Economic and Business Applied*, *1 No. 1*(September), 11–25.

Ren, L. L., Wang, Y. M., Wu, Z. Q., Xiang, Z. C., Guo, L., Xu, T., … Wang, J. W. (2020). Identification of a novel coronavirus causing severe pneumonia in human: a descriptive study. *Chinese Medical Journal*. https://doi.org/10.1097/CM9.0000000000000722

Shahabi, V., Azar, A., Faezy Razi, F., & Fallah Shams, M. F. (2020). Simulation of the effect of COVID-19 outbreak on the development of branchless banking in Iran: case study of Resalat Qard–al-Hasan Bank. *Review of Behavioral Finance*. https://doi.org/10.1108/RBF-06-2020-0123

Singh, B., Dhall, R., Narang, S., & Rawat, S. (2020). The Outbreak of COVID-19 and Stock Market Responses: An Event Study and Panel Data Analysis for G-20 Countries. *Global Business Review*.

https://doi.org/10.1177/0972150920957274
Sufian, F., & Abd. Majid, M.-Z. (2007). Bank Mergers Performance and the Determinants of Singaporean Banks' Efficiency: An Application of Two-Stage Banking Models. *Gadjah Mada International Journal of Business*, *9*(1), 19. https://doi.org/10.22146/gamaijb.5602
Uddin, M. S., Ahsan, M. K., & Haque, M. A. (2017). Comparisons of Financial Performance of Islamic Banks and Conventional Banks in Bangladesh. *ABC Research Alert*, *5*(2). https://doi.org/10.18034/abcra.v5i2.313
Wahab N., Rosman R., dhe Z. Z. (2017). How Efficient Were Islamic Banks During the Financial Crisis ? Empirical Evidence From Asian. *Intellectual Economics*, *11*(1), 44–62. https://doi.org/10.13165/IE-17-11-1-04
WHO. (2020). WHO Director-General's opening remarks at the mission briefing on COVID-19. [Online]. Available from: https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-mission-briefing-on-covid-19 [Accessed on 1st March 2020].
Wu, D. D., & Olson, D. L. (2020). The Effect of COVID-19 on the Banking Sector, 89–99. https://doi.org/10.1007/978-3-030-52197-4_8

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