

Venture vs Investment, Which Type of Financing was More Demanded By Agriculture, Forestry, and Aquaculture Sector?

Achmad Nur Iman^{*}, Akhmad Kusuma Wardhana, Sulistya Rusgianto, Ririn Tri Ratnasari

Department of Islamic Economy, Faculty of Economic and Business, Universitas Airlangga (60286), Indonesia

Abstract

COVID-19 creates uncertainty on business. SMEs in Indonesia need to take a loan to survive. Sharia banks could give credit financing based on Islamic law. This study has a purpose to observe if the total value of credit financing issued by sharia bank in Indonesia affects the total financing of agriculture, forestry, and aquaculture sectors. This study uses secondary data taken from ojk.co.id as the sample. The independent variable is credit financing use for capital venture and investment. Dependent variables are the total financing in the agricultural, forestry, and aquaculture sectors. Data is analyzed using the linear regression method. The data of each variable was also tested using a T-test to analyze if there were significant changes during the COVID-19 pandemic. Result showed that financing of capital venture has a moderate impact on the total of credit financing for agriculture and forestry sector, while investment is none. Moreover, the COVID-19 pandemic has no effect in changing the number of credits issued by sharia banks nor credit received by agriculture, forestry, and aquaculture sectors. Sharia bank implemented two pillars of maqashid, which are the protection of life and wealth in issuing credit financing. The total of credit issued by sharia banks in Indonesia affected Agriculture & forestry sectors for capital, but not for investment. Sharia bank implemented two pillars of maqashid, which are the protection of life and wealth in issuing credit financing.

Keywords: COVID-19, Agriculture, Aquaculture, Financing, Forestry, Microcredit, SMEs.

1. Introduction

Uncertainty in the business world, especially caused by the COVID-19 pandemic makes many companies struggle to survive. Many companies include big-scale ones suffer from profit loss because of the sharp decrease in product demand (Mafruchati, 2020a). Moreover, the implementation of a travel ban by certain countries causes the distribution of products overseas to be obstructed (Shammi et al., 2020).

Big companies have been trying to survive from bankruptcy during pandemics by doing either restructuring of organization, utilize technology more to replace the human power, or gain more capital venture (Mafruchati, 2020c). However small and medium enterprises or SMEs lack a capital asset to have access to the more technological device nor adequate human resources, they tend to choose the way to raise their capital venture (Lantowa & Machmud, 2020). SMEs either get the capital venture from inviting the investor to invest their fund or take a loan from a bank. SMEs in modern countries can manage to obtain investors well, but it would be a real problem in developing countries (SULILA, 2021).

Indonesia as developing countries has more than 200 million residents that have to be fed during a crisis caused by the pandemic of COVID-19. However, The economy of Indonesia has been plummeting into deficit at the start of the implementation of partial lockdown and social distancing (Golar et al., 2020). The total value of export also came into a sharp decrease during May 2020. As a result, many of the SMEs cut the cost by reducing their human power nor closing their branch market. The worst thing is SMEs cannot afford to meet the targeted profit to cover the operational cost and lead to bankruptcy. As a result, taking a loan from the bank is the priority for SMEs to cover the operational cost, so that the business venture can still give profit (Cao, 2021).

Sharia bank offers a more friendly way of proposing credit financing for SMEs than a conventional bank. Sharia bank in Indonesia is restricted by the regulation of Islamic law and prohibit the practice of interest (Bitar et al., 2018). Interest,

^{*} Corresponding author.

E-mail address: achmad.nur.iman-2020@feb.unair.ac.id

gambling, and high risk are fundamental parts that have to be avoided in economic activities to reach mutual prosperity in society. Sharia banks in Indonesia now are merged into one called Indonesian Sharia Banks. Because sharia bank does not charge any interest for giving a loan to the SMEs, they implement a profit share system to add the financial amount of money (Kalimullina & Orlov, 2020).

As a result, sharia bank could withstand more of the economic turmoil during the COVID-19 pandemic in Indonesia (Fauzan et al., 2020). Moreover, the huge demand for food material to overcome the pandemic makes the opportunity for the agriculture, forestry, and aquaculture sectors to raise their productivity. Since sharia law prohibits the practice of *gharar*, or high risk in economic activity, both the bank and the SME that propose the credit financing must meet the criteria of healthy business practice (Maulidizen, 2019). Based on the background above, this study has an objective to analyze if the total value of credit financing used by sharia banks in Indonesia affects the total financing of agriculture, forestry, and aquaculture sectors.

2. Literature Review

2.1. Principle of Maqashid Sharia for Base of Sharia Banks

Maqashid comes from the Arabic word “maqashid”, which means purpose, while sharia means a set of rules for humans based on holy Qurán and Hadith. Maqashid sharia itself means that set of rules that is important to guide the human to live happy both when they live and after death (Rusydiaana & Firmansyah, 2018). The implementation of maqashid itself in the economic system is to make sure that there is justice and prosperity for all from any economic activities. Maqashid also makes sure that there is no one-sided profit or accumulation of wealth under the misery of many people (Rahman et al., 2017).

Al-Syatibi divided maqashid into five pillars of protection, which are protection toward religion, life, mind, descendant, and wealth. Each of the pillars should be to ensure mutual prosperity (Muslim, 2017). In the sharia economic system, the pillars of religion should become the priority before targeting wealth, so that another pillar which is protecting human life can be sustained. Maqashid sharia has similarities with the principle of sustainable development goals where the aspect of human rights and equality are prioritized before individual interest (Dahlan et al., 2021).

Several studies have been conducted that maqashid was the reason behind the sustainability of Islamic banks against economic turmoil. Maqashid sharia prioritizes mutual prosperity over individual profit. Individual profit-oriented could lead to the unethical practice of business conduct which could create a monopoly and dirty competition in the market. That practice could worsen the economic situation when there was a disaster or global recession caused by a huge wave, such as in the COVID-19 situation (Muzakki, 2020).

2.2. Food and Agriculture in sustaining the Life during COVID-19 Pandemic

Agriculture sectors have become primary needs in sustaining the life of society besides medical sectors. The nutrient of society in a country should be well maintained. Otherwise, it could affect to immunity of society in facing COVID-19 (Naja & Hamadeh, 2020). As a result, the number of positive cases, along with the number of deaths would increase. Indonesia as an agricultural country has vast land for agriculture along with the forest that could be empowered in producing food commodities (Mafruchati, 2020b).

Rizou et al. stated in their study that vast agricultural sectors in Indonesia needed a huge amount of investment, either from investors or by proposing credit financing from banks. The delay of supply distribution in pandemics could lead to national health (Mafruchati, 2020d). Government should implement fiscal policy to support the agricultural sectors to keep running more productive than before to supply more demand from society. According to the study done by Rusydiaana and Firmansyah, sharia banks could become the solution for agricultural sectors, since they implement the principle of *mashed sharia* and prohibit individual profit over mutual benefit (Rusydiaana & Firmansyah, 2018). Based on that reason, this study proposed two hypotheses as follows:

H₁: Total of credits issued by sharia banks in Indonesia affected the number of credits received by agriculture & forestry sectors

H₂: Total of credits issued by sharia banks in Indonesia affected the number of credits received by aquaculture sectors

H₃: COVID-19 pandemic affected the total credit financing issued by sharia banks and received by two sectors above.

3. Research Method

This paper used secondary data as samples of the research. The secondary data have been taken from the website of the Indonesian Authority of Financial Service in www.ojk.co.id. The independent variables were credit financing issued by sharia banks for capital venture and investment. The dependent variables were the total of credit distributed by banking in Indonesia. Those credits were distributed toward agriculture & forestry, as well as aquaculture sectors. Besides those two sectors, this study also added the NPL or non-performing loan of sharia banks from January 2019 to March 2021 as a dependent variable (Himawan et al., 2021).

The data have been tabulated into several tables to see the differences in financing. The period of the samples has been started from March 2019 where the first quarter of the Indonesian economy began until March 2021. This study uses the data from the first quarter of the economic period in 2019 before COVID-19 hit the economic condition and compared them to the data of the first quarter of the economic report in 2021 when the COVID-19 seriously impacted the economic condition (Yunus & Mafruchati, 2011).

The data analysis was divided into two kinds, one was using Simple Linear Regression to observe the influence of independent variables toward dependent. Another was using the T-test to determine whether financing issued by sharia banks nor sectors where the credit was given has significant change during the pandemic of COVID-19. The data were analyzed using SPSS software (SINGH et al., 2021). The formula of linear Regression is as follows:

$$Y = a + bX$$

X = explanatory/independent variable and

Y = dependent variable

b = The slope of the line

a = intercept (the value of y when $x = 0$).

With the score of regression in analyzing the size effect of independent toward dependent variable, it could be viewed whether the capital financing issued by sharia banks in Indonesia already implemented the principle of maqashid sharia or not (Mawarid et al., 2021). The score of R^2 visualizes the influence of independent toward dependent which can be portrayed as follows:

Table 1 Category of influence of independent toward dependent variable based on R square score

R Square Category	Score
None	Below 0.3
Weak	>0.3 to 0.5
Moderate	>0.5 to 0.7
Strong	>0.7 to 1.0

The T-test was conducted with the degree of freedom of each variable was 7 (n-1) and the default alpha level of the one-tail test was 0.05. The T-value would be 1.41 and considered significant if the score of subjects was higher than 1.41. The formula was described as follows:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s^2(\frac{1}{n_1} + \frac{1}{n_2})}}$$

$x_{1,2}$ = means of a group being compared

s = standard deviation

$n_{1,2}$ = number of observations in each group

After the result is carried out, it is analyzed using the theory of maqashid sharia based on Imam As-Syatibi to observe if the result is related to the principle of maqashid (Rusydiaana & Firmansyah, 2018). This study used linear regression because there has been no study that has been involved to maqashid sharia used the quantitative method before. Moreover, many studies in the past have used the qualitative method if maqashid sharia topic has intertwined with finance, especially toward capital financing from banks to the venture (Mafruchati & Makuwira, 2021).

4. Results and Discussions

Table 2 shows that credit financing demanded more for capital venture than investment. There was an increasing demand during 2020 when the COVID-19 hit back for the first time, and decreased a bit in March 2021. But the

interesting fact is the demand for investment from credit financing has been increasing during the period in table 1, even though the number was still smaller compared to the demand for the capital venture.

Table 2 Financing by Indonesian Sharia Bank based on the purpose

Period	Capital Venture (Million Rupiahs)	Investment (Million Rupiahs)
19-Mar 2019	106.532	77.950
19-Sep 2019	107.572	84.271
19-Dec 2019	110.586	86.972
20-Mar 2020	111.164	87.216
20-Jun 2020	114.637	86.805
20-Sep 2020	114.569	85.244
20-Dec 2020	114.908	87.186
21-Mar 2021	111.019	87.806

Source: ojk.co.id

The characteristic of sharia banks which is different from the conventional bank in credit financing also becomes the point of increasing demand for investment. Sharia banks prohibit interest in issuing credit financing (Nugroho et al., 2019). Instead, it uses a profit-sharing system or mudharabah in charging the fee for credit financing to the proposed debtor (Zakiy et al., 2021). Moreover, mudharabah itself has many variances of contract financing which can give benefits to the debtor, such as musaqah, mukhabarah, and muzara'ah (Nienhaus, 2010). Mudharabah also has the principle of risk-sharing between the capital giver, which is the bank, and the business owner as receiver of funds (Nurdin & Yusuf, 2020).

The principle of sharia bank that prohibits the gharar or high risk and maysir or gambling can protect the money that clients entrusted to be deposited on the bank. Moreover, the money that is distributed as a capital venture for SMEs also protects the company from being collapsed (Liñán et al., 2019). SMEs can continue to run their business and sharing the profit with the sharia banks (Handriana, 2016). Moreover, the more SMEs sustained during the COVID-19, the more stable the national economy of Indonesia. In this case, the sharia bank implements one of the pillars of the maqashid sharia, which is the protection of wealth. Not only protecting the fund entrusted by the clients to the bank and SMEs but also protect the wealth of the society indirectly by creating a healthy local economy (Lantowa & Machmud, 2020).

Table 3 Total of financing based on the market sector in Indonesia

Period	Agriculture & Forestry (in Trillion Rupiahs)	Aquaculture (in Trillion Rupiahs)
19-Mar 2019	354.08	12.34
19-Sep 2019	370.14	13.78
19-Dec 2019	369.9	14.12
20-Mar 2020	383.09	14.5
20-Jun 2020	378.18	14.27
20-Sep 2020	386.28	15.35
20-Dec 2020	385.59	16.03
21-Mar 2021	390.5	16.5

Source: ojk.co.id

Table 3 shows that the total amount of financing for the agricultural & forestry sector keeps increasing until March 2021. The financing for the aquaculture sector also keeps increasing. This is due to the demand for nutritious food to maintain health, as well as to speed up recovery for the patients of COVID-19. Those 3 sectors in Table 3 are the main suppliers of food ingredients for society in Indonesia.

Moreover, during the outbreak of COVID-19, the Indonesian government implement the regulation of social charity given to the people who are heavily affected by economic or health conditions. Social charity is given in the form of main groceries for households (Prayoga, 2020). Those who are the low and middle-income class who are affected

heavily in economic conditions as a result of COVID-19 are given the priority to received social charity (Johnson, 2021). Around 5.9 households in Indonesia have been recorded as the list to receive social charity. The social charity itself is worth 600.000 rupiahs/household (Setiati & Azwar, 2020).

With the huge number of money spent on social charity in form of groceries for daily necessities must need the huge demand for food ingredients too from the agriculture, forestry, and aquaculture sectors (Caraka et al., 2020). This situation becomes the opportunity for the businessman and SMEs to get as much profit as they can from supplying the food materials at a reasonable price (Nurdin & Yusuf, 2020). To expand their market size, so that they can speed up their productivity, business owners propose credit financing for the capital venture from banks, either conventional or sharia banks. This will lead to the increasing demand for credit financing to the bank's report, especially in sharia banks (Nugroho et al., 2019).

The principle of the businessman that uses the opportunity to increase their market size is similar to the principle of maqashid protection of life. As long as they do not monopolize the supply and sell in the normal prize, their way in take advantage of the business opportunity is still acceptable based on maqashid (Zakiy et al., 2021). There is also hadith cited by Ahmad stated that monopoly, when the disaster comes, is forbidden.

"Whoever hoards things that Muslims need, intending to make it expensive (famine), then he is a guilty person (sinner) (HR. Ahmad).

Market monopoly during a disaster can harm society's life because it can affect the available supplies of main groceries needed by society. Monopoly is also prohibited in Islam because it can accumulate wealth over people's misery, which is categorized as *gharar*. Maqashid sharia ensures people conduct economic activity for the sake of mutual benefit for all (Rahman et al., 2017).

Table 4 T-value between types of financing toward market sector in Indonesia

Subject	T-value	Result
Capital Venture (Million Rupiahs)	0.09	Not significant
Investment (Million Rupiahs)	0.15	Not significant
Agriculture & Forestry Sector	0.07	Not significant
Aquaculture Sector	0.03	Not significant

Table 4 showed that all of the variables above had no significant changes during the pandemic of COVID-19. It could be seen that the T-value<1.41. it was surprising that COVID-19 did not affect so much toward the total of credit financing, either

Table 5 Score of R square between types of financing toward market sector in Indonesia

Financing model	Agriculture & Forestry Sector	Aquaculture Sector
Capital Venture (Million Rupiahs)	0.56	0.46
Investment (Million Rupiahs)	0.046	0.02

Source: Data processed

Table 5 shows that capital venture has a moderate effect on agriculture & forestry sector financing. But the capital venture has a weak effect on aquaculture sector financing, shown by a score less than 0.5. This is due to the land usage in society mainly used for agriculture. The product of the forestry sector owned by SMEs has gotten financing for capital at least 12.39% in 2021.

Table 5 also shows that credit financing for investment has no relation at all toward agriculture and the aquaculture sector. One of the reasons is because SMEs who manage the economic sector prefer to use the capital fund for supplying the raw material for the production process or buying tools to support the production process. Moreover, they rarely invest in each other SMEs, even they are in the same sector (Sanrego, 2017). The Agricultural, forestry and the aquaculture sector is the sector mainly focus on the supplying of food material that has the due date to get decomposed after being harvested (De et al., 2011). After being sold, they need to buy the seed for the agriculture and forestry sector, and hatchlings for aquaculture. They need to continue the process to reach the break-even point before can expand their market size (Sanrego, 2017).

Even though the agricultural sector is affected by the credit financing by sharia banks, it is not an absolute effect. The R square score is less than 0.7 means that the effect is only moderate, not strong. One of the reasons is because the agricultural sector in Indonesia covers a great range of land around the countries. Moreover, the capital fund of Sharia

banks in Indonesia is not as big as a conventional bank, only 10% than conventional banks (Rusydiaana & Firmansyah, 2018). Conventional banks have existed earlier than sharia banks in Indonesia (Maulanaa & Rusmitab, n.d.).

The system of the conventional economy cannot be completely replaced by the sharia system, instead, Indonesia implements a dual banking system where the sharia rule of economics is adjusted with the conventional economic system (Barata, 2019). As a result, sharia banks have a limited amount of capital assets than conventional banks, leading to the limited amount of credit financing that can be demanded too (Handoyo & Adnan, n.d.). The other problem is the sharia bank only has a few branch offices in Indonesia, and almost no sharia bank branch office is in remote areas and small villages. Even though sharia bank-issued credit financing for capital ventures for many businesses, lack of facility is the hindrance for business ventures in remote areas and small villages to propose for credit financing (Nahar et al., 2020).

Table 6 NPL Gross in Agricultural Sector Based on Region

Indonesian Region	%
Java	1,85
Sumatera	1,9
Borneo/Kalimantan	0,57
Sulawesi	2,67
Bali & Nusa Tenggara	2,66
Papua & Maluku	1,1

Table 6 shows that Sulawesi Island has the highest non-performing loan (NPL) in the agricultural sector. Bali has second-highest NPL is understandable, since most people need credit financing to make their tourism industries survive. The local economy of Bali people is heavily dependent on tourism activities (Kurscheid et al., 2017). As a result of travel warnings implemented by overseas countries along with the social distancing by the Indonesian government, the tourism industries in Bali have led to destruction since March 2020. To keep the industries moving, they don't have any choice instead demand credit financing from the banks or ask for investment (Harymawan, 2018).

Meanwhile, Sulawesi has the highest NPL caused by the increase of inflation rate, especially in South Sulawesi in the 4th quarter of the economic period. The interesting fact is the inflation rate in Sulawesi is affected because of the price of milkfish and wet prawns with more limited supply in the market. Moreover, the rising of the price of cigarettes after the implementation of the retail selling price of cigarettes also influences the inflation rate in South Sulawesi (Mawarid et al., 2021).

Borneo as the biggest island in Indonesia has the lowest NPL score. Borneo is self-sufficient from the palm oil sectors spread across Borneo Island. This will lead to a huge market profit that can overturn the credit from the banks in a single harvesting time (Djufri et al., 2021). After the payment of credit for the capital, the venture has been completely paid by the business owner, the palm oil industries will keep flooding the business owner with a huge sum of profit. As a result, the NPL is also lower too (Fajar & Umanto, 2017).

The ratio of NPL becomes the clue on how a bank distributes the asset to the potential business. According to the study by Elsa, Utami, and Nugroho, a good NPL ratio should be around 1 to 3%. If the bank has a high NPL ratio, even higher than 10%, it means that the intended bank has a problem collecting the debt or wrong management in distributing the asset into potential business. Table 5 shows that there is no NPL of more than 3% and less than 1% means that sharia bank in Indonesia manages the distribution of assets into the loan carefully (Elsa et al., 2018). Good NPL in sharia bank reflected the maqashid pillars, protection of wealth.

5. Conclusion

It can be concluded from the result above that loan that issued by sharia bank for capital venture has moderate impact toward the total of credit financing for agriculture and forestry sector. But because of the limitation of the asset fund of sharia bank, the impact is not optimal for those two sectors. However, a total of loans for capital ventures has a weak effect on the aquaculture sector. Loan or credit financing for investment has no relation at all toward a total of financing of three sectors. Business owners prefer to use the loan for operational costs, rather than investing in some business.

The result above also shows that sharia bank implemented two pillars of maqashid, which are the protection of life and wealth. Protection of life is reflected when sharia bank issued a great deal of credit financing for those three sectors, which are essential to overcome pandemics. Thus, the protection of wealth is reflected by implementing the concept of profit-sharing in giving the loan to those three sectors.

Acknowledgements

- **Declaration of Interest Statement**

The authors in this paper guarantee that there will be no conflict of interest related to the research process nor the funding.

- **Data Availability Statement**

All of the data taken are open source offered by ojk.co.id

- **Funding Statement**

There is no external funding and all of the expenses include APC will be paid by the authors. The data collected from ojk.co.id are open source for the public and approved by the Ethical Committee of Airlangga University.

References

- Barata, A. (2019). STRENGTHENING NATIONAL ECONOMIC GROWTH AND EQUITABLE INCOME THROUGH SHARIA DIGITAL ECONOMY IN INDONESIA. *Journal of Islamic Monetary Economics and Finance*, 5(1), 145–168.
- Bitar, M., Hassan, M. K., & Hippler, W. J. (2018). The determinants of Islamic bank capital decisions. *Emerging Markets Review*, 35, 48–68.
- Cao, T. (2021). The Study of Factors on the Small and Medium Enterprises' Adoption of Mobile Payment: Implications for the COVID-19 Era. *Frontiers in Public Health*, 9, 122.
- Caraka, R. E., Lee, Y., Kurniawan, R., Herliansyah, R., Kaban, P. A., Nasution, B. I., Gio, P. U., Chen, R. C., Toharudin, T., & Pardamean, B. (2020). Impact of COVID-19 large scale restriction on environment and economy in Indonesia. *Global Journal of Environmental Science and Management*, 6(Special Issue (Covid-19)), 65–84. <https://doi.org/10.22034/GJESM.2019.06.SI.07>
- Dahlan, M., Bustami, M. R., & Mas' ulah, S. (2021). The Islamic principle of ḥifẓ al-nafs (protection of life) and COVID-19 in Indonesia: A case study of nurul iman mosque of Bengkulu city. *Heliyon*, 7(7), e07541.
- De, M., Hussain, M. A., Alam, M. M., Mazlan, A. G., & Simon, K. Das. (2011). Impact of Sariakandi fish pass on fisheries diversity of Bangali river, Bogra, Bangladesh. *Aquaculture, Aquarium, Conservation & Legislation*, 4(5), 621–626.
- Djufri, F., Modding, B., Rahman, Z., & Baharuddin, D. (2021). The Effectiveness of Small Business Loans and People's Business Loans on Increasing Competitiveness through Small Business Financial Performance at PT. Bank Mandiri, Sulawesi Maluku, Indonesia. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(2), 194–203.
- Elsa, E., Utami, W., & Nugroho, L. (2018). A Comparison of Sharia Banks and Conventional Banks in Terms of Efficiency, Asset Quality and Stability in Indonesia for the Period 2008-2016. *International Journal of Commerce and Finance*, 4(1), 134–149.
- Fajar, H., & Umanto, U. (2017). The impact of macroeconomic and bank-specific factors toward non-performing loan: evidence from Indonesian public banks. *Banks & Bank Systems*, 12, № 1, 67–74.
- Fauzan, E. M., Harimurti, Y. W., Purbasari, I., & Yulianingsih, I. (2020). Regulation Village Funds as Cash Direct Aid for Poor People in Rural Area due to Covid-19 Pandemic in Indonesia. *ICETLAWBE 2020*, 23.

- Golar, G., Malik, A., Muis, H., Herman, A., Nurudin, N., & Lukman, L. (2020). The social-economic impact of COVID-19 pandemic: implications for potential forest degradation. *Heliyon*, 6(10), e05354.
- Handoyo, S., & Adnan, I. G. (n.d.). *DETERMINANTS OF BANK PERFORMANCE: EMPIRICAL STUDY ON SHARIA BANK IN INDONESIA*.
- Handriana, T. (2016). The role of relationship marketing in Small and Medium Enterprises (SMEs). *Jurnal Pengurusan (UKM Journal of Management)*, 48.
- Harymawan, I. (2018). Why do firms appoint former military personnel as directors? Evidence of loan interest rate in militarily connected firms in Indonesia. *Asian Review of Accounting*.
- Himawan, R. G., Primarizky, H., Mafruchati, M., Triakoso, N., & Maslachah, L. (2021). Green Tea Leaves Extract Effect on Histopathology of Mercury Chloride Induced Rat's Liver. *Pollution Research*, 40(1), 326–329.
- Johnson, R. S. (2021). *A comparison of Indonesia and Malaysia's COVID-19 public health policy response*.
- Kalimullina, M., & Orlov, M. S. (2020). Islamic finance and food commodity trading: is there a chance to hedge against price volatility and enhance food security? *Heliyon*, 6(11), e05355.
- Kurscheid, J., Stevenson, M., Durr, P. A., Toribio, J. L., Kurscheid, S., Ambarawati, I., Abdurrahman, M., & Fenwick, S. (2017). Social network analysis of the movement of poultry to and from live bird markets in Bali and Lombok, Indonesia. *Transboundary and Emerging Diseases*, 64(6), 2023–2033.
- Lantowa, F. D., & Machmud, J. (2020). Development of Micro, Small and Medium Enterprises (MSMEs) Based on Creative Economy (EKRAF) and Gig Economy in Gorontalo Regency. *Journal of Asian Multicultural Research for Economy and Management Study*, 1(2), 43–53.
- Liñán, F., Paul, J., & Fayolle, A. (2019). SMEs and entrepreneurship in the era of globalization: advances and theoretical approaches. *Small Business Economics*, 1–9.
- Mafruchati, M. (2020a). Curcumin vs Chloroquine in Coronavirus Global Pandemic: Trend analysis Study in Google. *Indian Journal of Forensic Medicine & Toxicology*, 14(4), 3138–3143.
- Mafruchati, M. (2020b). Duck meat, delicious yet low in unsaturated fat; comparative study between duck meat consumption in asean toward the number of covid cases. *Systematic Reviews in Pharmacy*, 11(10).
- Mafruchati, M. (2020c). More meat, more covid-19 cases? comparative study between usa and china in importing mutton. *Systematic Reviews in Pharmacy*, 11(9), 374–377.
- Mafruchati, M. (2020d). The Use of Dates against COVID-19, based on Effectiveness or Religion's Believe? Trends and Relevance Analysis in Big Data. *Vaccine*, 1, 0.
- Mafruchati, M., & Makuwira, J. (2021). Analysis of Three-Dimensional Protein Structure of CBAVD in Indonesia as a Basis for Immunotherapy to Ensure Maternal Health. *Pharmacognosy Journal*, 13(5).
- Maulanaa, M. R., & Rusmitab, S. A. (n.d.). *Bank Fundamentals and Equity Financing in Indonesia*.
- Maulidizen, A. (2019). Ibn Khaldun's Economic Thought; The Fair Tax And Its Relevance To The Modern Economy. *International Journal of Islamic Business and Economics (IJIBEC)*, 3(2), 73–89.
- Mawarid, M. M., Mafruchati, M., Suprayogi, T. W., & Widjiati, H. V. F. (2021). Potency of Kebar Grass (*Biophytum petersianum*) Extract to Histopathological of Mice (*Mus musculus*) Duodenum at Lactation Period Exposed to Carbofuran. *J Vet Marine Res*, 1(1), 1–9.
- Muslim, M. B. (2017). Ibn Khaldun: Managing Justice in Economy. *1st International Conference of Law and Justice-Good Governance and Human Rights in Muslim Countries: Experiences and Challenges (ICLJ 2017)*, 129–132.
- Muzakki, F. (2020). The Global Political Economy Impact of Covid-19 and The Implication to Indonesia. *Journal of Social Political Sciences*, 1(2), 76–92.
- Nahar, F. H., Faza, C., & Azizurrohman, M. (2020). Macroeconomic Analysis and Financial Ratios on Sharia Commercial Bank Profitability: A Case Study of Indonesia. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*, 3(1), 37–50.

- Naja, F., & Hamadeh, R. (2020). Nutrition amid the COVID-19 pandemic: a multi-level framework for action. *European Journal of Clinical Nutrition*, 74(8), 1117–1121.
- Nienhaus, V. (2010). Fundamentals of an Islamic economic system compared to the social market economy. *KAS International Reports*, 77.
- Nugroho, L., Badawi, A., & Hidayah, N. (2019). Discourses of sustainable finance implementation in Islamic bank (Cases studies in Bank Mandiri Syariah 2018). *International Journal of Financial Research*, 10(6), 108–117.
- Nurdin, N., & Yusuf, K. (2020). Knowledge management lifecycle in Islamic bank: the case of syariah banks in Indonesia. *International Journal of Knowledge Management Studies*, 11(1), 59–80.
- Prayoga, K. (2020). How Jokowi Communicates with the Public During Covid-19 Crisis: An Analysis of Tweets on Twitter. *Jurnal Komunikasi: Malaysian Journal of Communication*, 36(2).
- Rahman, F. K., Tareq, M. A., Yunanda, R. A., & Mahdzir, A. (2017). Maqashid Al-Shari'ah-based performance measurement for the halal industry. *Humanomics*.
- Rusyadiana, A. S., & Firmansyah, I. (2018). Efficiency versus maqashid sharia index: An application on Indonesian Islamic bank. *Shirkah: Journal of Economics and Business*, 2(2).
- Sanrego, Y. D. (2017). The Role Of Islamic Capital Market For Micro, Small, And Medium Enterprises (Msmes) Through Synergy Of Mutual Fund And Venture Capital Institution. *Journal of Islamic Monetary Economics and Finance*, 3(1), 81–112.
- Setiati, S., & Azwar, M. K. (2020). COVID-19 and Indonesia. *Acta Medica Indonesiana*, 52(1), 84–89.
- Shammi, M., Bodrud-Doza, M., Islam, A. R. M. T., & Rahman, M. M. (2020). COVID-19 pandemic, socioeconomic crisis and human stress in resource-limited settings: a case from Bangladesh. *Heliyon*, 6(5), e04063.
- SINGH, S. K., BASUKI, B., & SETIAWAN, R. (2021). The Effect of Non-Performing Loan on Profitability: Empirical Evidence from Nepalese Commercial Banks. *The Journal of Asian Finance, Economics and Business*, 8(4), 709–716.
- SULILA, I. (2021). The Influence of Structure, Resources, Disposition and Communication on Small-and Medium-Sized Enterprises' Empowerment Policy Implementation in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(6), 1213–1223.
- Yunus, M., & Mafruchati, M. (2011). Eimeria tenella Pathogenicity Attenuation Through The Serial Passage of Precocious Lines Toward Number of Schizont and Cecal Histopathology In Broiler. *Journal of Poultry Science*, 4(2), 41–43.
- Zakiy, F. S., Ridwan, A. M., & Supriyanto, A. S. (2021). Characteristics of Moslem Families Economy Based on Maqashid Sharia Perspective. *Journal of Islamic Economic Laws*, 4(1).