COVID-19 and Its Impact on Islamic Equity Mutual Funds in Indonesia

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Abstract

The Islamic equity mutual funds, initially exhibiting a relatively high average interest, experienced a significant decline in Net Asset Value (NAV) in 2020 - 2021 due to the COVID-19 pandemic. Therefore, this study analyzed the impact of the COVID-19 pandemic on the NAV of Islamic equity mutual funds and the influence of macro and micro factors, such as inflation, exchange rate, Jakarta Islamic Index (JII) trading volume, and age of mutual funds. Data were collected from a sample of 11 companies registered with the Financial Services Authority from 2014 to 2021, using the purposive sampling technique to achieve this objective. Subsequently, the data collected were analyzed using the Panel Data Regression Method, and the Wilcoxon Signed Ranked Test. The results showed that the pandemic delayed economic activity, decreasing returns on sharia investment instruments, such as the NAV of Islamic equity mutual funds. JII, trading volume, and fund age were negatively affected compared to mutual inflation and exchange rate. This study provides information that regulators can use in formulating appropriate policies to minimize the adverse effects of Covid-19 on Islamic equity mutual funds, specifically in macroeconomic policies. Likewise, investment managers can consider internal factors when positioning Islamic equity mutual funds in the NAV.

Keywords: Islamic equity mutual funds, net asset value, panel data regression, COVID-19 pandemic

INTRODUCTION

Over the past few years, there has been a consistent upward trend in the investment of Islamic mutual funds. However, its equity mutual funds are still relatively small compared to other financial instruments, which have experienced significant growth on a global scale. According to the Malaysia International Islamic Finance Center in the Outlook Islamic Funds Industry, in 2015, the total NAV of global Islamic equity mutual funds was USD 60.2 billion, with 1,030 funds. This figure significantly increased in 2017 with a total NAV of USD 70.8 billion and 1,535 Islamic equity mutual funds. Naveed et al. (2020) stated that Islamic equity mutual funds have a level of risk from a systematic perspective and a decline lower than the conventional, with an increased NAV growth in Pakistan.

The development of reciprocal relations has received global attention from investors. According to Abdullah et al. (2007), this type of fund attracts investors seeking liquidity by diversifying their portfolios of various securities. The Islamic equity mutual funds managed by investment managers enable investors to gain varying NAV per participation unit. Notably, the NAV is the value of the entire mutual fund portfolio, indicating increased participation units (Nandari, 2017).



Figure 1. The Development of Islamic Equity Mutual Funds

Source: Financial Services Authority, 2021

In Indonesia, the NAV proportion and the number of Islamic equity mutual funds is still around 13% compared to the conventional. This fund type has a yearly growth with an 18.30% increase in 2019, totaling 66 funds in 2020. Similarly, the NAV increased by 89.83% in 2017, with a cumulative value of 6,2 trillion in December 2021.

The number of funds has grown significantly for the last eight years, with a 30% increase in 2014 to 63 additional ones in 2020. In 2019, the NAV experienced a substantial decline, amounting to 5.5 trillion or 10.79% of the total funds. Additionally, the NAV share is anticipated to undergo only a slight increase, hovering around 6 trillion from 2020 to 2021 (Financial Services Authority, 2021).

The NAV of a mutual fund is related to the placement of the portfolio investment instruments. Therefore, its movement depends on security and market value (Yazir & Suhardi, 2013). According to Waridah and Mediawati (2016), Islamic equity mutual funds place a minimum investment of 80% into a portfolio of equity securities that meet sharia principles with a high risk (Waridah & Mediawati, 2016). Masruroh (2014) stated that placing these funds on the stock market depends on their general performance, affecting NAV. Therefore, investors need to pay attention to market trends in the placement of these portfolio instruments.

In 2020, the prospect of Islamic equity mutual funds was under pressure due to the inception of the COVID-19 pandemic in the first quarter of 2020, which spread rapidly. The outbreak of the pandemic has led to a high degree of volatility in both the Indonesian and global capital markets, with prevailing negative sentiment among investors (Bintari & Kusnandar, 2020). Hindayani (2020) stated that a bad signal of economic uncertainty affects stock prices and company returns. The pandemic increased capital outflows and the resale of shares in sectors, negatively affecting the stock index (Abdulloh, 2020). Midesia (2020), Saputra (2018), and Sunaryo (2020) further explained that Islamic stock returns also decreased due to market reaction amid conditions of uncertainty, leading to higher risk. Sunaryo (2020) in the Jakarta Islamic Index (JII) reported that negative sentiment from investors due to the increasingly massive spread of the coronavirus decreased stock prices due to excess in its offerings.

Amaroh (2020) found a negative difference in the average abnormal return of the Jakarta Islamic Index before and after the pandemic. Maulana and Ardiansari (2018) stated that the rapid development of Islamic equity mutual funds prompted investors to choose alternatives based on portfolio performance. NAV is one of the benchmarks for investors to achieve returns in investing in mutual funds. Kusumastiti and Ryandono (2019) reported that investors need to consider the factors affecting the NAV of a mutual fund to minimize risk in the portfolio instruments.

Alqadhib et al. (2022) Performance of actively-managed Saudi Arabia mutual funds during the COVID-19 outbreak and examines the potential impact of COVID-19 growth on the measured performance. That new confirmed cases had a significant and negative impact on mutual fund unadjusted returns and risk-adjusted returns. Anshori et al. (2022) This study's results show that the performance of Islamic mutual funds during the early post-covid era has decreased. A study by Hapsari (2022) showed differences in the performance of Islamic stock mutual funds before and during the Covid-19 pandemic seen from the Net Asset Value.

The development of the Islamic capital market faces the threat of a global economic recession after the COVID-19 pandemic. The results showed that only Islamic mutual funds responded negatively to this global economic recession threat. Sharia mutual funds have experienced a decline since April, evidenced by a relatively low issuance of only 271 and a NAV

Amounting to 40,342.63 billion (Sholiha, 2022). Haryanto and Mawardi (2021), Covid-19 had a negative impact on the JCI and trading volume of the previous day. This study empirically confirms that the Covid-19 epidemic affects the Jakarta Composite Index (JCI).

Investors have experienced concerns about the performance of Indonesian Stock Exchange issuers due to the pandemic, which also affects the company's operational performance. The stock price of the LQ-45 companies before and after the pandemic experienced a significant decline (Rahmani, 2020). Sunaryo (2020) in JII showed negative sentiment from investors, where stock prices decreased due to excess offerings during the pandemic. This causes high volatility in both stock markets, with the Islamic more stable than the conventional (Erdogan et al., 2020).

The COVID-19 pandemic further caused a reaction in the capital market with an increase in the trading volume of sharia stocks at JII, which led to a decrease in sharia stock prices (Ryandono et al., 2021). Anisya (2021) stated that the negative sentiment received by investors related to information led to the decline in stock prices. Triono et al. (2021) reported that the decrease at LQ-45 led to a decline in trading volumes since the first case in Indonesia.

Ozili and Arun (2020) analyzed the impact of a pandemic on stock market indices on four continents. Stock indices were significantly impacted by the social isolation caused by COVID-19. He et al. (2020) investigated the effects and ripple effects on the stock markets of the eight most affected nations. The findings indicate that COVID-19 has a negative short-term impact on the stock market. Moreover, a two-way spillover effect was identified between Asian, European, and American nations.

According to Nafisah and Supriyono (2019), macroeconomic factors affect the portfolio of Islamic equity mutual funds. The NAV performance, such as inflation, exchange rates, and the Jakarta Islamic Index (JII), are also impacted. Meanwhile, JII illustrates the condition of the capital and money markets. Hussain (2017) stated that macroeconomic factors affect the performance of stock mutual funds in India and Pakistan, contributing to the volatility of mutual fund returns.

Year	NAV of Islamic equity mutual funds (In Trillion)	Inflation (%)	Exchange rate (IDR)	JII (Close Price)
2014	2.922	8.36%	12.502	691.04
2015	2.642	3.35%	13.864	603.35
2016	7.397	3.02%	13.503	694.13
2017	9.254	3.61%	13.616	759.07
2018	9.970	3.13%	14.553	685.22
2019	5.500	2.72%	13.970	698.09
2020	6.000	1.68%	14.175	630.42
2021	6.200	1.55%	14.340	588.03

Table 1. Inflation Growth, Exchange Rate, Jakarta Islamic Index, and NAV of Islamic equity mutual funds in 2014-2021

Source: Financial Services Authority and Bank Indonesia (2019)

Al-Abbasy (2012) and Khasanah and Darmawan (2018) reported that an increase in the inflation rate leads to decreased income with a rise in the company's operating expenses, thereby reducing dividends given to investors and NAV. According to Nandari (2017), the weakening movement of the exchange rate decreases the NAV performance of Islamic equity mutual funds, which is caused by the increase in the company's production costs and debt. Table 1 shows that the rupiah exchange rate moved stably and fairly from 2014 to 2021.

Darmawan and Nada (2019) stated that the Jakarta Islamic Index significantly influences the NAV. Most people invested at least 80% in equity securities, and the Index is a benchmark for the sharia stock index, as shown in Table 1. Chairani (2020) reported that the age of mutual funds and the trade volume, including micro factors, also affect the NAV of Islamic equity mutual funds. According to Hermawan and Wiagustini (2016), mutual funds with a longer life describe a good track record in managing securities portfolios for investment managers hence investors obtain the expected return. The trading volume reflects the high number of unit holders, which impacts the number of funds under management to save cost efficiency.

Based on the phenomenon described, this development study differs from previous findings, where the characteristics of Islamic equity mutual funds have the highest average interest compared to others. However, in 2020 - 2021, the NAV experienced a significant decrease due to the COVID-19 pandemic and the stock index. The phenomenon which impacts the NAV is combined with the inclusion of micro and macro factors. Furthermore, the comparison before and after the pandemic is rarely made by this study.

Therefore, this study aims to analyze the impact of the pandemic on the NAV of Islamic equity mutual funds and the influence of macro and micro factors, namely Inflation, Exchange

Rate, Jakarta Islamic Index, Trading Volume, and Age of Mutual Funds. The results are expected to contribute to stakeholders and investment managers by considering the various risk factors that increase the NAV of Islamic equity mutual funds.

METHOD

The purposive sampling technique with several criteria, such as Islamic equity mutual funds registered with the Financial Services Authority (OJK) from 2014 to 2021, mutual funds, and NAV for the last seven years with a total of 20 billion, were used to conduct this study.

The methodology comprised the panel data regression method and the Wilcoxon Signed Ranked Test. To isolate the effect of the pandemic on NAV, the analysis focused solely on data from 2020 and 2021. Meanwhile, monthly data on Covid-19 cases and the NAV were utilized in the regression analysis. Since the pandemic was a recent phenomenon, this approach was deemed appropriate to accurately assess its impact on the NAV of Islamic equity mutual funds. A panel data regression framework investigated the relationship between Covid-19 cases and the NAV. The Wilcoxon Signed Ranked Test was used to confirm the statistical significance of the findings.

According to Jaya and Sunengsih (2009), the panel data regression analysis method consists of a dependent variable with one or more independent variables as well as a combination of time series. The model consists of sector units (K), time units (T), and independent variables (P) (Falah et al., 2016).

 $Y_{ii} = \alpha + \beta_1 X_{110,11} + \beta_2 X_{210,11} + \beta_3 X_{310,11} + \beta_4 X_{410,11} + \beta_5 X_{510,11}$

First, the equation model is included in the 5 variables as follows:

NAVRDS_{it} = $\alpha + \beta_1$ Inflation_{10.11} + β_2 ExchangeRate_{10.11} + β_3 JII_{10.11}

+ β_4 AgeFunds_{10.11}+ β_5 Volume_{10.11}

Second, The equation model is included in the 1 variable as follows:

$NAVRDS_{ii} = \alpha + \beta_1 Covid-19_{10.11}$

The non-parametric statistical test method, such as the Wilcoxon Signed Ranked Test, was used to test the average difference of paired samples to determine the difference between one average and another with data abnormally distributed. To meet the prerequisites of this test, the sample data must exhibit dependency and be randomly conducted with a maximum sample size of 30 (Triola, 2015). Sulaiman and Darwis (2019) stated that the Wilcoxon Signed-Rank Test was performed to measure the significance level of the differences between two pairs of paired data with ordinal and cardinal scales.

RESULT AND DISCUSSION

Munandar (2017) stated that selecting an appropriate estimation model for three-panel data regression analysis is contingent on the assumptions about the intercept, slope, coefficient, and error term. Therefore, three models are typically employed for this purpose, namely the common, fixed, and random effect models.

Variable	Model 1: CEM	Model 2: FEM	
C	4.203.885	-6.351.532	
	(0.7565)	(0.6519)	
nflation	0,405227	0.236920	
	(0,2432)	(0.5578)	
Exchange Rate	0,73811	0.953434	
	(0,8277)	(0.7840)	
II	1.278.885	1.599.977	
	(0,0257)	(0.2000)	
/olume	1.127.810	1.155.660	
	(0.0000)	(0.0000)	
fund Age	0.258817	0.092268	
	(0.0385)	(0.6519)	
R-squared	0.752852	0.773659	
dj R-squared	0.737782	0.726504	
-stat	4.995.690	1.640.692	
Prob (F-Stat)	0.000000	0.000000	

Table 2. Panel Data Regression Model

After selecting the regression method above, a test is conducted to determine the right model. The initial stage involves utilizing the Chow Test to determine the most suitable techniques for panel data regression. Specifically, the goal is to determine when the Fixed Effect Model with a dummy variable is superior to the Common Effect Model without any dummy variables. The fixed effect model is better when the significance value is less than 0.05. Meanwhile, the common effect model is used when the significance value exceeds 0.05 (Munandar, 2017).

Table 3. Chow Test

	Statistic	d.f.	Prob.
Cross-s ection F	0.661883	10.72	0.7556
Cross-s ection F			
Chi –s square	7.73914	10	0.6543

The Chow test was used to determine the best model between the common and the fixed effect models for the panel data regression (Munandar, 2017). Using the common effect Model,

the result showed a probability cross section Chi Square of 0.6543 > 0.05. The NAV was affected by the common effects of all independent variables (0.000000). The variables with a significant influence are JII (0.0276), volume (0.0000), and fund age (0.0385). In contrast, the inflation (0.3291) and the exchange rate (0,8277) do not affect the NAV of Islamic equity mutual funds shares.

According to Nurjanah et al. (2022), an increase in inflation results in a decrease in the NAV of the mutual fund. The effect of inflation on investment is real, and liquid assets such as mutual funds are most at risk of being affected (Angelia, 2022). However, due to the instability in all aspects during the pandemic, the effect of CPI on NAV was insignificant.

Mankiw (2000) stated that high inflation is reflected in the general increase in the price of goods due to excess demand. This worsens the economy with a decline in the people's purchasing power and incomes. Therefore, this leads to inequality in income distribution and creates uncertainty in investment due to the disruption of political and economic stability, with a decrease in domestic savings. However, high inflation rates with a decrease in real income increase the demand for compensation provided for investors. Nations endeavor to maintain low inflation rates to uphold equilibrium between the supply and availability of goods and services for commercial enterprises. Nandari (2017) stated that the mild inflation rate, which was less than 10%, had a positive and significant impact on the economy, reflected in an increase in national income and investment activities. According to (Rachman & Mawardi, 2015), inflation is a continuous increase in the prices of goods in general. Inflation has the effect of decreasing purchasing power in society while people's income in real terms decreases. In the real economy, the high inflation rate affects a company's income, decreasing its stock price and ultimately impacting its net asset value.

Miha and Laila (2017) stated that the weakening of the exchange rate did not affect the NAV because most of the mutual funds' instruments did not contain portfolios of foreign investments. Therefore, investors do not emphasize their main focus on the movement of the rupiah exchange rate. Prasetyo and Widiyanto (2019) and Rachman and Mawardi (2015) stated that the devaluation of the rupiah exchange rate resulting from its reduced value has resulted in a surge in the prices of imported raw materials, causing a downturn in the performance of companies. This increased the flow of capital abroad because investors are less interested in the rupiah currency, which continues to decline, reducing the NAV.

The management of the rupiah exchange rate has effectively stabilized, particularly amidst the pandemic. The 2020 assessment of Bank Indonesia's monetary policy showed that the measured growth of the rupiah was attributable to the influx of foreign capital into the local

financial market, which bolstered investor confidence by demonstrating positive developments in the domestic economic landscape.

The effect of JII on NAV Islamic equity mutual funds is positively correlated. This suggests a unidirectional relationship between the two variables, whereby an increase in JII results in a corresponding increase in the NAV of Islamic equity mutual funds. Aviva (2017) and Nasikhah (2017) stated that JII positively and significantly affected NAV Islamic equity mutual funds with an index containing 30 high-liquidity Islamic stocks and market capitalization performance. Most Islamic equity mutual fund placements are in sharia shares and included in JII. Therefore, an increase in JII indicates that the company's performance is improving, leading to a rise in investment and NAV.

Rahayu (2017) and Saputra (2018) stated that a high trading volume indicates more investment units. Therefore, in managing portfolios, the funds issued are more efficient and minimize risk for investors and companies, which causes an increase in the NAV. According to Nagel (2005), the trading volume reflects demand activity in the market through the number of shares traded. The increased trading volume is a good signal for investors to place their funds, thereby increasing the managed mutual fund portfolio value. This makes companies more efficient in placing their mutual fund portfolios to increase investment returns, raising NAV Islamic equity mutual funds.

Mulyawan's (2017) studied shows that mutual funds with a longer age can make investors more confident in investing their funds because the managers have more experience indicating effective good securities portfolio management. According to Pambudi and Mahfud (2016), age positively affects the performance of mutual funds where companies are established at a mature age. In contrast, Syahid and Arfianto (2015) showed the opposite relationship between mutual fund age and the NAV, indicating younger funds in managing investors' portfolios on a small scale. This makes it easier for companies to maintain performance with capitalization and liquidity levels on a smaller scale compared to older age, where securities portfolio management is already on a large scale. Furthermore, Alim, Mai, and Setiawan (2021) stated that young mutual funds have a good adaptation ability to obtain the latest information on the times.

Panel Data Regression Equation

 $NAV_{it} = 4.203.885 + 0.405227Inflation_{it} + 0.73811ExchangeRate_{it} + 1.278.885JII_{it} + 1.127.810Volume_{it} + 0.258817FundAge_{it} + \epsilon_{it}$

The constant (C) value of 4.203.885 indicates that the independent variables of inflation, exchange rate, JII, mutual fund age, and trading volume in the i-th and t-t observations are constant. There is a rise in the NAV of Islamic equity mutual funds by0.405227, 0.73811, 1.278.885, 1.127.810, and 1.127.810 when inflation, exchange rate, JII, trading volume, and age in the i-th observation and the t-t period increases by 1%, respectively.

Wilcoxon Signed-Rank Test

Table 4. Wilcoxon Signed Ranked Test

NAVAFTERCOVID19 -
NAVBEFORECOVID19
-15.105 ^b
000

The Wilcoxon Signed Ranked Test showed that the significance value for the NAV of Islamic equity mutual funds before and after the pandemic is 0.000, which is less than 0.05, meaning H0 was rejected and H1 accepted.

Table 5. Panel Data Regression Model

Variable	Model 1: CEM	Model 2: FEM
С	0.843205	2.097331
	(0.0119)	(0.0139)
Covid-19	-0,218347	0.222075
	(0,0051)	(0.0078)
R-squared	0.693467	0.674763
Adj R-squared	0.646235	0.623657
F-stat	7.862004	7.772356
Prob (F-Stat)	0.005141	0.007851

Based on the Panel Data Regression Model, $NAV_{it} = 0.843205 - 0.218347$ Covid-19_{it}, the constant (C) value of -0.218347 indicates that the independent variables in the i-th and t-t observations are constant. However, when covid-19 in the i-th observation and the t-t period increases by 1%, there is a decrease in the NAV by 0.218347.

Table 6. Chow Test

	Statistic	d.f.	Prob.
Cross-s ection F	0.81012	10.418	0.5476
Cross-s ection F			
Chi –s square	9.25071	10	0.4135

The Chow test was used to determine the best model between the common and the fixed effect models for the panel data regression (Munandar, 2017). Using the common effect model, the result showed a probability cross-section Chi-Square of 0.4135 > 0.05. The NAV was affected by the common effects of all independent variables (0.005141). Partially, the variables with a significant influence are Covid-19 (0.0051).



Figure 2. NAV of Islamic Equity Mutual Funds Before and After the COVID-19 Pandemic

Figure 2 shows the difference in NAV of Islamic equity mutual funds before and after the pandemic. The total NAV from 2014 until 2021 of 18.03 (IDR trillion) obtained in 2014 was the highest at 4,004 (IDR trillion). In early 2020 since the first case of the pandemic in March 2020, the NAV decreased significantly to 1,25 (IDR trillion) with an increase of 204.31 cases. In the NAV of Islamic equity mutual funds in 2021, there is only a slight increase to 1,29 (IDR trillion) with slightly decreased data on Covid-19 125.03 cases. Moreover, the lowest point of NAV during 2014 - 2021 was in 2020 and 2021, with an 80% decrease in value.

The Covid-19 pandemic, incepted in Wuhan, China, at the end of 2019, was first recorded in Indonesia on 2nd March 2020. By 11th March 2020, it was declared a pandemic by the World Health Organization. This virus has a negative effect on the health sector and the stability of the country's economy, specifically in the investment trend in the capital market (Hindayani, 2020). Welley et al. (2020) stated that the pandemic made the Composite Stock Price Index movement fluctuate by dynamically moving overseas stock markets indices such as News York (NASDAQ), Hong Kong (Hangseng), and London (FTSE100). Internally, implementing Large-Scale Social Restrictions (PSBB) and Work from Home (WFH) policies disrupted the company's operational activities. Furthermore, the JCI decreased, causing negative sentiment from investors with increased share sales.

According to Irfan et al. (2021), the coronavirus outbreak is impacted globally. India has the major threat of this virus as the second largest country in terms of population. On 11th

March 2020, WHO announced Covid-19 as Global Pandemic. Indian stock market showed a downward slope after the WHO declaration, and the Jakarta stock exchange showed an upward slope. The downturn graph of the Indian stock exchange showed that the market negatively reacted to the WHO announcement.

From a serious health crisis, the pandemic has resulted in an economic crisis that affected the world's economic growth and societies (Panyagometh, 2020). Ali et al. (2021) reported descriptive statistics on COVID-19-related deaths and the returns and volatility of the stock indices. The Islamic stock index shows higher volatility than the conventional, while the average returns of both indices remained similar. The returns of the Islamic stock index vary from -7.84% to 12.81%, while the returns of the conventional vary from -6.58% to 10.19%. Therefore, Islamic investment instruments experienced quite fragile resilience during the pandemic.

Anisya (2021) declared that the negative sentiment caused stock prices to decline. Therefore, the performance of the capital market experienced significant differences before and after the pandemic. Triono et al. (2021) reported that the decline in stock prices led to a decrease in trading volumes after the country announced its first positive case. Spence (1973) argued that the signals from the market are formed to overcome uncertainty for investors in making decisions. This is reflected in the fluctuating movement of the JCI, which made most of the investors sell their shares on a massive scale due to a significant price decline. According to Fatimala (2021), there are differences in stock prices and trading volumes before and after the announcement in Indonesia. Mubarok and Arif (2021) showed a significant decline in the volatility level of the Islamic stock index due to pandemic, where stock prices were lower than in previous years.

Ashraf et al. (2020) stated that Islamic equity mutual funds could provide hedging benefits during declining capital market trends from 2007 to 2009. However, the pandemic significantly impacted the decline in real economic activity, reducing the performance of the capital market. This causes hedging benefits to be unavailable to investors in Islamic investment instruments, including sharia mutual funds, increasing the risk level return. Meanwhile, Yarovaya et al. (2020) stated that the performance of Islamic and conventional mutual funds in Malaysia, Pakistan, Saudi Arabia, Qatar, Kuwait, and the UAE was better regarding lower volatility levels than conventional mutual funds. Islamic investment instruments such as *Sukuk* (sharia bonds) also assist the country in responding and recovering from this pandemic. Therefore, Islamic equity mutual fund instruments can balance the cycle of real economic activity. Arif et al. (2021) stated that Islamic-based investments, including

Equity mutual funds, are strong safe-haven assets for conventional equity investors in G7 countries.

CONCLUSION

Islamic equity mutual funds have a fairly high average interest, which experienced a significant decline in 2020 due to the pandemic. The movement of the NAV with high volatility is affected by JII, trading volume, and the age of mutual funds. Meanwhile, inflation and the exchange rate were not affected, and the Wilcoxon signed ranked test was used to determine differences in the NAV of Islamic equity mutual funds before and after the pandemic. Furthermore, the cases of the pandemic have a positive effect on the NAV.

The pandemic has disrupted real economic activities due to the implementation of Large-Scale Social Restrictions policies, thereby putting various macroeconomics at risk of instability. In the capital market, a high increase in stock trading volume due to many selling activities is a bad signal for investors, significantly decreasing prices. Similarly, Islamic equity mutual funds instruments with volatility are placed in shares due to very high risk. Irrespective of several criteria, such as applying a non-halal debt and income ratio threshold, sharia investment instruments have high hedging benefits. This also leads to decreased returns, specifically the NAV of Islamic equity mutual funds.

Several macroeconomic and microeconomic factors reflected due to the pandemic on NAV need to be considered in making investment decisions. Furthermore, the stakeholders should minimize various risks of domestic macroeconomic conditions and strengthen the literacy aspect of sharia investment instruments, including Islamic equity mutual funds, to increase investor interest and achieve better performance.

Concerning the practical implication, this study benefits policymakers and investment managers of Islamic equity mutual funds. It provides information on formulating appropriate policies to minimize the adverse effects of Covid-19 on Islamic equity mutual funds, specifically in macroeconomic policies. Likewise, internal factors can be considered when deciding to place Islamic equity mutual funds in NAV with investment managers.

BIBLIOGRAPHY

- Abdullah, F., Hassan, T., & Mohamad, S. (2007). Investigation of the Performance of Malaysian Islamic Unit Trust Funds: Comparison with Conventional Unit Trust Funds. *Managerial Finance*, 33(2), 142–153. https://doi.org/10.1108/03074350710715854.
- Abdulloh, I. (2020). Pasar Modal Syariah Masa Depan Pasar Modal Indonesia. Dalam *Recovery Ekonomi Indonesia Pasca Covid-19: Peran Ekonomi Syariah*. Ikatan Ahli Ekonomi Islam Indonesia.

- Al-Abbasy, A. (2012). Micro and Macroeconomic Determinants of NAV of Islamic Equity Unit Trust Funds in Malaysia: Qualitative Approach. *International Journal Economics and Business*, 2(1), 19-37.
- Ali, M., Anwar, U., & Haseeb, M. (2021). The Impact of Covid-19 on Islamic and Conventional Stocks in Indonesia: A Wavelet-Based Study. *Bulletin of Monetary Economics and Banking, Special Issue*, 15-32. https://doi.org/10.21098/bemp. v24i0.1480.
- Alim, F. A., Mai, M. U., & Setiawan. (2021). Analisis Pengaruh Faktor Internal dan Faktor Ekternal terhadap Kinerja Reksa Dana Syariah Saham. *Journal of Applied Islamic Economics and Finance*, 1(2), 435-445. https://doi.org/10.35313/jaief.v1i2.2476.
- Alqadhib, H., Kulendran, N., & Seelanatha, L. (2022). Impact of COVID-19 on Mutual Fund Performance in Saudi Arabia. *Cogent Economics & Finance*, 10, 2056361, 1-22. https://doi.org/10.1080/23322039.2022.2056361.
- Amaroh, S. (2020). Covid-19 Outbreak and Capital Market Reaction: An Evidence from the Jakarta Islamic Index 70. *Share: Jurnal Ekonomi dan Keuangan Islam*, 9(2), 227-244. https://doi.org/10.22373/share.v9i2.7887.
- Anisyah, N. (2021). Analisis Perbedaan Kinerja Pasar Modal Sebelum dan Selama Pandemi Covid-19 di Indonesia. *Skripsi*. Universitas Muhammadiyah Palembang.
- Anshori, A. R., Maulida, I. S. R., & Himayasari, N. D. (2022). Analisis Perbandingan Proyeksi Kinerja Reksadana Syariah dan Konvensional Era Postcovid Berdasarkan Nilai Aktiva Bersih. *Jurnal Ilmiah Ekonomi Islam*, 8(02), 1455-1462. http://dx.doi.org/10.29040/ jiei.v8i2.4889.
- Arif, M., Naeem, M. A., Hasan, M., Alawi, S. M., & Taghizadeh-Hesary, F. (2021). Pandemic Crisis versus Global Financial Crisis: Are Islamic Stocks A Safe Haven for G7 Markets? *Economic Research-Ekonomska Istraživanja*, 35(1), 1707-1733. https://doi.org/10.1080/1331677X.2021.1910532.
- Ashraf, D., Rizwan, M. S., & Ahmad, G. (2020). Islamic Equity Investments and the COVID-19 Pandemic. *Pacific-Basin Finance Journal*, 73, 101765. 1-18. Https://doi.org/10. 1016/j.pacfin.2022.101765.
- Aviva, I. N. (2017). Pengaruh Jumlah Uang Beredar (JUB), Sertifikat Bank Indonesia Syariah (SBIS), dan Jakarta Islamic Index (JII) terhadap Nilai Aktiva Bersih (NAV) Reksadana Syariah Periode 2011-2015. Skripsi. STIE Indonesia Banking School.
- Bintari, V. I., & Kusnandar, D. L. (2020). Perbandingan Abnormal Return Saham Sebelum dan Sesudah Perubahan Waktu Perdagangan Selama Pandemi Covid-19. *Jurnal Pasar Modal dan Bisnis*, 2(2), 439-444. https://doi.org/10.37194/jpmb.v2i2.49.

- Chairani, S. (2020). Pengaruh Nilai Tukar Rupiah (Kurs), Jakarta Islamic Index (JII), Usia Reksadana, dan Volume Perdagangan Reksadana terhadap Nilai Aktiva Bersih (NAB) Reksadana Campuran Syariah. *Tirtayasa Ekonomika*, 15(1), 31-43. http://dx.doi.org/10.35448/jte.v15i1.6325.
- Darmawan., & Nada, L. (2019). Fund Age, BI Rate, Exchange Rate, dan Jakarta Islamic Index pada Net Asset Value di Islamic Equity Mutual Fund Indonesia. *Jurnal Manajemen*, 10(1), 1-11. https://doi.org/10.32832/jm-uika.v10i1.1750.
- Erdoğan, S., GediKli, A., & ÇeviK, E. İ. (2020). The Effects of the Covid-19 Pandemic on Conventional and Islamic Stock Markets in Turkey. *Bilimname*, *XLII*(2). 89-110. https://doi.org/10.28949/bilimname.799413.
- Falah, B. Z., Mustafid, M., & Sudarno, S. (2016). Model Regresi Data Panel Simultan dengan Variabel Indeks Harga yang Diterima dan yang Dibayar Petani. *Jurnal Gaussian*, 5(4), 611-621. https://doi.org/10.14710/j.gauss.5.4.611-621.
- Fatimala, G. S. (2021). Harga Saham dan Volume Perdagangan Saham Sebelum dan Setelah Pengumuman Pasien Pertama Covid-19 di Indonesia (Studi Kasus pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia). *Skripsi*. Universitas Mercu Buana Yogyakarta.
- Financial Services Authority (2021). Report on the Development of Indonesian Sharia Finance. https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/laporanperkembangan-keuangan-syariah-indonesia/Pages/Laporan-Perkembangan-Keuangan-Syariah-Indonesia-2021.aspx.
- Haryanto, A. M., & Mawardi, W. (2021). Impact of Covid-19 News on Performance of Indonesia Stock Market. Universal Journal of Accounting and Finance, 9(2), 226–231. https://doi.org/10.13189/UJAF.2021.090212.
- Hapsari, T. D. (2022). Analisis Komparatif Kinerja Reksadana Syariah di Indonesia Sebelum dan Saat Pandemi Covid-19. *Journal of Islamic Economics and Finance, 2*(2). 86-98. https://doi.org/10.28918/jief.v2i2.6243.
- He, Q., Liu, J., Wang, S., & Yu, J. (2020). The Impact of COVID-19 on Stock Markets. *Economic and Political Studies*, 8(3), 1–14. https://doi.org/10.1080/20954816. 2020.1757570.
- Hermawan, D., & Wiagustini, N. L. P. (2016). Pengaruh Inflasi, Suku Bunga, Ukuran Reksa Dana, dan Umur Reksa Dana terhadap Kinerja Reksa Dana. *E-Jurnal Manajemen* Unud, 5(5), 3106-3133.
- Hindayani, N. (2020). Analisis Reaksi Pasar Saham atas Peristiwa Covid-19 di Indonesia. Jurnal Ilmiah Manajemen, Ekonomi, dan Akuntansi, 4(3), 1645-1661. https://doi.org/10.31955/mea.v4i3.647.

- Hussain, N. (2017). Mutual Fund Performance; Funds and Country Specific Characteristics: A Comparative Study of Pakistan and India Equity Funds. *Journal of Poverty*, *Investment and Development*, 37, 18-24.
- Irfan, M., Kassim, S., & Dhimmar, S. (2021). Impact of Covid-19 on Islamic Stock Markets: An Investigation using Threshold Volatility and Event Study Models. *International Journal of Islamic Economics and Finance*, 4(1), 121-148. https://doi.org/10.18196/ ijief.v4i1.10480.
- Jaya, I. G. N. M., & Sunengsih, N. (2009). Kajian Analisis Regresi Dengan Data Panel. Prosiding Seminar Nasional Penelitian, Pendidikan dan Penerapan MIPA Fakultas MIPA, Universitas Negeri Yogyakarta.
- Khasanah, Y. N., & Darmawan, A. (2018). Pengaruh Risiko Inflasi, Risiko Suku Bunga, Risiko Kurs Valuta Asing, dan Leverage terhadap Return Saham Studi pada Industri Manufaktur Sub Sektor Otomotif dan Komponen yang Terdaftar di Bursa Efek Indonesia Periode 2006-2016). Jurnal Administrasi Bisnis, 57(1), 63-72.
- Kusumastiti, F., & Ryandono, M. N. H. (2019). Pengaruh Risiko Sistematis, Market Timing dan Ukurann Reksa Dana terhadap Kinerja Reksa Dana Pendapatan Tetap Syariah di Indonesia Periode 2014-1018. *Jurnal Ekonomi Syariah Teori dan Terapan*, 6(12), 2409-2421. 10.20473/vol6iss201912pp2409-2421.
- Mankiw, N. G. (2000). Makroekonomi Edisi ke Enam. Jakarta. Erlangga.
- Masruroh, A. (2014). Konsep Dasar Investasi Reksadana. *SALAM: Jurnal Sosial dan Budaya Syar-i*, *1*(1), 83-96. https://doi.org/10.15408/sjsbs.v1i1.1526.
- Maulana, F., & Ardiansari, A. (2018). Pemilihan Saham dan Waktu Perdagangan pada Reksadana Syariah Saham di Indonesia. *Management Analysis Journal*, 7(1), 12-23. https://doi.org/10.15294/MAJ.V7I1.17133.
- Midesia, S. (2020). Dampak Covid-19 Pada Pasar Saham Syariah Di Indonesia. *Jurnal Penelitian Ekonomi Akuntansi (JENSI)*, 4(1), 68–79. https://doi.org/10.33059/ jensi.v4i1.2663.
- Miha, C., & Laila, N. (2017). Pengaruh Variabel Makro Ekonomi terhadap Nilai Aktiva Bersih (NAB) Reksadana Syariah di Indonesia. Jurnal Ekonomi Syariah Teori dan Terapan, 4(2), 144-158. https://doi.org/10.20473/vol4iss20172pp144-158.
- Mubarok, F., & Al Arif, M. N. R. (2021). Pandemic Attack and Islamic Stocks Index: A Cross Country Analysis. *Jurnal Ekonomi Malaysia*, 55(1), 1–11. https://doi.org/10.17576/ JEM-2021-5501-2.
- Mulyawan, S. (2017). Kinerja Reksa Dana Syariah dan Beberapa Faktor yang Memengaruhinya: Studi di Pasar Modal Indonesia 2010-2013. *IJTIHAD: Jurnal Wacana Hukum Islam dan Kemanusiaan*, 16(2), 217-236. https://doi.org/10.18326/ Ijtihad.v16i2.217-23.

- Munandar, A. (2017). Analisis Regresi Data Panel Pada Pertumbuhan Ekonomi Di Negara Negara Asia. *Jurnal Ilmiah Ekonomi Global Masa Kini*, 8(1), 59-67. http://dx.doi.org/ 10.36982/jiegmk.v8i1.246.
- Nafisah, H., & Supriyono. (2019). Analysis of the Effect of Macroeconomics on Net Assets Value (NAV) of Sharia Mutual Funds in Indonesia. *International Journal of Islamic Business and Economics*, 4(1), 11-20. https://doi.org/10.28918/ijibec.v3i2.1661.
- Nagel, S. (2005). Trading Styles and Trading Volume. https://ssrn.com/abstract=785345.
- Nandari, H. U. D. R. A. (2017). Pengaruh Inflasi, Kurs Dan BI Rate Terhadap Nilai Aktiva Bersih (NAB) Reksadana Syariah Di Indonesia (Periode 2010-2016). *An-Nisbah: Jurnal Ekonomi Syariah*, 4(1), 51–74. https://doi.org/10.21274/an.2017.4.1.51-74.
- Nasikhah, A. (2017). Pengaruh Nilai Tukar Rupiah (KURS), Sertifikat Bank Indonesia Syariah (SBIS), dan Jakarta Islamic Index (JII) terhadap Nilai Aktiva Bersih (NAB) Reksadana Manulife Syariah Sektoral Amanah Tahun 2010-2016. *Skripsi.* IAIN Tulungagung.
- Nurjanah, Al., Hartini. T., & Azwari, P. C. (2022). Pengaruh BI Rate, IHK, dan JUB (M2) terhadap NAB Reksadana Pada Masa Pandemi Covid-19 di Indonesia. *AJournal Management, Business, and Accounting*, 21 (2), 174-183. https://doi.org/10.33557/ mbia.v21i2.1868.
- Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: Impact on The Global Economy. https://ssrn.com/abstract=3562570.
- Pambudi, Y. S., & Mahfud, M. K. (2016). Analisis Pengaruh Total Asset, Fund Age, Expense Ratio dan Portofolio Turnover terhadap Kinerja Reksa Dana Periode 2012-2014. *Diponegoro Jornal of Management*, 5(2), 38-46.
- Panyagometh, K. (2020). The Effects of Pandemic Event on the Stock Exchange of Thailand. *Economies*, 8(4), 1-21. https://doi.org/10.3390/economies8040090.
- Rachman, A., & Mawardi, I. (2015). Pengaruh Inflasi, Nilai Tukar Rupiah, BI Rate Terhadap Net Asset Value Reksa Dana Saham Syariah. Jurnal Ekonomi Syariah Teori dan Terapan, 2(12), 986-1001. https://doi.org/10.20473/vol2iss201512pp986-1001.
- Rahayu, T. O. (2017). Analisis Faktor Eksternal dan Internal yang Mempengaruhi Nilai Aktiva Bersih Reksadana Campuran Syariah. *Skripsi*. UIN Syarif Hidayatullah Jakarta.
- Rahmani, A. N. (2020). Dampak Covid-19 Terhadap Harga Saham dan Kinerja Keuangan Perusahaan. *Kajian Akuntansi*, 21(2), 252–269. https://doi.org/10.29313/ka.v21i2. 6436.
- Ryandono, M. N. H., Muafi, M., & Guritno, A. (2021). Sharia Stock Reaction Against COVID-19 Pandemic: Evidence from Indonesian Capital Markets. *The Journal of Asian Finance, Economics and Business, 8*(2), 697–710. https://doi.org/10.13106/ JAFEB.2021.VOL8.NO2.0697.

- Saputra, A. R. (2018). Pengaruh Sertifikat Bank Indonesia Syariah (SBIS), Nilai Tukar Rupiah dan Volume Reksadana terhadap Nilai Aktiva Bersih Reksadana Syariah Saham di Bursa Efek Indonesia Periode Januari 2013 – Desember 2017. Skripsi. UIN Raden Fatah Palembang.
- Sholiha, I. (2022). Perkembangan Pasar Modal Syariah Dalam Menghadapi Ancaman Resesi Ekonomi Global Pasca Pandemi Covid 19. *Al-Tsaman: Jurnal Ekonomi dan Keuangan Islam, 4*(02), 103-113.
- Sulaiman, A. Y., & Darwis, H. (2019). Perubahan Tingkat Likuiditas Saham dan Abnormal Return yang Dipengaruhi oleh Peristiwa Pemecahan Saham. *Jurnal Akuntansi*, 8(2), 135–145. https://doi.org/10.37932/ja.v8i2.73.
- Sunaryo. (2020). Pengaruh Volume Offer Saham Terhadap Harga Saham (Studi Empiris Pada Saham-Saham Jakarta Islamic Index di Bursa Efek Indonesia Periode Januari - April 2020) Kajian Penelitian Pada Kondisi Pandemi Virus Covid-19. *Kinerja: Jurnal Ekonomi dan Bisnis*, 2(2), 1-15. https://doi.org/10.34005/kinerja.v3i01.920.
- Syahid, N., & Arfianto, E. D. (2015). Analisis Pengaruh Stock Selection Skill, Market Timing Ability, Fund Longevity, Fund Cash Flow Dan Fund Size Terhadap Kinerja Reksadana (Studi Kasus: Reksadana Saham Periode 2010-2014). *Diponegoro Journal of Management*, 4(4), 1-11.
- Triola, M. F. (2015). Essentials of Statistics (5th ed). Pearson.
- Triono, B., Hendrayanti, S., Fauziyanti, W., & Estuti, E. P. (2021). Comparative Analysis of Trading Volume Activity During COVID-19. *Jurnal STIE Semarang*, *13*(1), 39-50.
- Waridah, W., & Mediawati, E. (2016). Analisis Kinerja Reksadana Syariah. *Jurnal Riset Akuntansi dan Keuangan*, 4(2), 1077-1086. https://doi.org/10.17509/jrak.v4i2.4043.
- Welley, M. M., Oroh, F. N. S., & Walangitan, M. D. B. (2020). Perbandingan Harga Saham Perusahaan Farmasi BUMN Sebelum dan Sesudah Pengembangan Vaksin Virus Corona (COVID-19). Jurnal Ilmiah Manajemen Bisnis dan Inovasi Universitas Sam Ratulangi, 7(3), 571-579. https://doi.org/10.35794/jmbi.v7i3.31514.
- Yarovaya, L., Mirza, N., Rizvi, S. K. A., Saba, I., & Naqvi, B. (2020). The Resilience of Islamic Equity Funds during COVID-19: Evidence from Risk-Adjusted Performance, Investment Styles and Volatility Timing. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3737689.
- Yazir, A. G., & Suhardi. (2013). Analisis Perbandingan Risiko dan Tingkat Pengembalian Reksadana Syariah dan Reksadana Konvensional. *Journal of Accountancy*, 1(1), 1-18.