Conventional Versus Sharia Money Market Mutual Funds: Which Performs Better During the Covid-19 Pandemic?

**Dina Yeni Martia,** **Muhammad Rois,** **Muliasari,** **Widya Amelia,** **Latifah Risqiana,** **Noverdi Radja Dwilega**

**Accounting Department, Politeknik Negeri Semarang, Semarang, Central Java, Indonesia**

*Corresponding Author Email: dinayenimartia@polines.ac.id*

**ABSTRACT**

This study aims to determine whether conventional money market mutual funds perform better than sharia money market mutual funds or vice versa during the COVID-19 pandemic in Indonesia. This research method is descriptive with a quantitative comparison approach. This study employed secondary data obtained from IDX, Indonesian Bank, and Pasar Dana website. The research employed the money market mutual funds data, Net Asset Value, BI 7 Days Repo rate during year 2020. Sharpe ratio utilized in this research to determine the money market mutual funds performance. Then, the result compared by using Independent sample T-test on SPSS. The result uncovers that in general the performance of conventional money market mutual funds performance superior the sharia money market mutual funds performance during covid-19 in Indonesia. However, both mutual funds average Sharpe ratio show the negative number during 2020. Moreover, there are no significant difference between conventional and sharia money market mutual funds returns during the period 2020. The high different return on the maximum return due to some conventional mutual fund perform exceptional during 2020.

**Keywords:** Money Market Mutual fund performance, pandemic covid-19, Conventional Money Market Mutual Fund, Sharia Money Market Mutual Fund

**INTRODUCTION**

Modern society is currently starting to invest to meet their needs. A wide variety of alternatives are available for investors to invest their money in. In addition to investing in bank deposits and tangible investments such as gold, investors can invest in the capital market. For prospective investors who do not have sufficient funds to invest in the capital market, then one alternative that can be done is to invest in mutual funds.

Mutual funds are an alternative investment for the beginner investor community. An investment manager will assist the transaction process, suitable for investors who lack the time and expertise to invest in mutual fund instruments. In addition, the ongoing COVID-19 pandemic situation around the world affects world economic conditions. On a macro basis, (Wuryandani, 2020) said the impact was already visible from the realization of economic growth in the first quarter of 2020, which was only 2.97 percent. The figure is far from the previous one, in the 4-5 percent area (CNN, 2020). As a result, global investors choose to sell risky assets, and their funds are placed in the safer instrument during the covid-19 pandemic (CNN, 2020). Plus, the performance of the JCI has not shown significant stretching as before the pandemic. Investors prefer to place their funds in money market mutual funds and mixed mutual funds.

Referring to the (Law et al., 1995), Article 1 paragraph (27) defines that Mutual Funds are containers used to collect funds from the investor community to be further invested in securities portfolios by investment managers. Mutual fund products available in Indonesia consist of two subcategories consisting of sharia mutual funds and conventional mutual funds. Based on (The National Sharia Council Fatwa No.20/DSN MU/IV/2001) defines that sharia mutual funds are mutual funds that are run based on the provisions and principles of Islamic Sharia. According to (Ratnawati & Khairani, 2012), In Indonesia, sharia-based mutual funds have their charm compared to conventional mutual funds, especially for the Indonesian people who are predominantly Muslim, because of the process and elements in it follow the laws of muamalah in Islam.

Research on the performance of conventional and Sharia mutual funds has been done previously. (Huda, Nazwirman, & Hudori, 2017; Lailiyah & Sulasmiyati, 2016) stated that Islamic equity mutual funds are superior to conventional equity mutual funds. On the other hand, (Esha, Heykal, & Indrawati, 2014; Iswanaji, 2016; Khalisa, 2018; Lestari, 2015; Sari & Riwayati, 2021; Zamzany & Setiawan, 2018) suggests that the performance results of conventional mutual funds are superior to Sharia mutual funds. Recent research done by (Sari & Riwayati, 2021) finds a non-significant difference in
performance between conventional and Sharia mutual funds. The research was conducted using various methods of performance appraisal; Sharpe, Treynor, and Jensen.

Based on research that has been done in Indonesia, most focus on a fixed income, equity and mixed mutual funds. There is still little to discuss the performance of money market mutual funds. The ongoing COVID-19 pandemic in Indonesia and the world certainly impacts higher future uncertainty and increases investment risk. Public awareness of future investments is increasing, as evidenced by the increasing number of investor IDs registered with the Indonesian Central Securities Depository or KSEI. Many new investors in the Indonesian capital market finally choose to entrust their funds to investment managers. In addition, investors also choose low-risk instruments, namely money market instruments.

This study compares the performance of conventional mutual funds and money market Islamic mutual funds based on Net Asset Value (NAV) to find out who has performed better during the covid-19 pandemic. The results of this study can be used as a reference in making investment decisions for investors who are interested in investing their capital in money market mutual funds. However, it should be noted that investors also need to pay attention to other factors in making their portfolio investment decisions.

LITERATURE REVIEW
Money Market
According to (Indonesia, 2017), the money market is one of the activities in the financial industry, which is an abstract meeting place where owners of short-term funds can offer to potential users who need them, either directly or through intermediaries. Short-term funds are funds raised by companies or individuals with a time limit of one day to one year, which can be traded in the money market. The money market has two primary functions in the economy. First, it is the liquidation function or the fulfillment of short-term funding needs of companies or institutions, financial and non-financial. The second function is the control function of a country in open market operations. One of the characteristics of money market investment is that the period required is shorter than the capital market, not tied to a particular place. Generally, supply and demand meet directly or indirectly (through a market broker).

Mutual Fund
Based on the operational basis, mutual funds are divided into two (Umam & Sutanto, 2017): 1) Conventional Mutual Funds and 2) Sharia Mutual Funds. Conventional mutual funds are mutual fund instruments whose existence is not based on the principles of Islamic law. Conventional mutual funds that do not follow Islamic law are the contract system, operations, investments, transactions, and profit-sharing. Conventional mutual funds are free to invest in various investment instruments issued by companies from various business fields. However, conventional mutual funds use muamalah contracts allowed in Islam, namely buying and selling and profit-sharing (mudharabah and musyarakah). Sharia mutual funds (Islamic Investment Funds) are mutual funds that operate according to the provisions and principles of Islamic law, both in the form of contracts between investors and investment managers and investment managers and investment users (Umam & Sutanto, 2017).

Sharia mutual funds are not much different from conventional mutual funds. The difference lies in the way it is managed, and the investment policy principles applied. The investment policy of sharia mutual funds is based on investment instruments with halal management methods. Halal means companies that issue investment instruments are not allowed to conduct businesses contrary to Islamic principles. For example, not committing usury (attractive money) and not using investment strategies based on speculation. There are three operational characteristics of sharia mutual funds according to (Umam & Sutanto, 2017) include: 1) having a sharia board in charge of providing direction to investment managers to always work under the provisions of Islamic Sharia; 2) the relationship between investors and companies based on mudharabah system, the first party as the investor prepares and provides all the capital, while the second party as the manager or investment manager manages the form of the investment that has been prepared; 3) business activities or investments are carried out on things that do not conflict with Islamic principle.

According to the Capital Market Law Number 8 of 1995 Article 1. Paragraph (27), "Mutual funds are a forum used to collect funds from the investor community to be further invested in securities portfolios by investment managers." Furthermore, the joint assets belonging to the investors are kept and administered by the custodian bank. According to (Indonesia, 2017), Money market mutual funds are mutual funds that only invest in domestic money market instruments; or debt securities issued with maturities of not more than one year. Money market mutual funds invest more than 80% in the money market instruments.

Net Asset Value (NAV)
According to (Indonesia, 2017), NAV or net asset value is the fair market value of securities or other assets of a mutual fund minus all obligations. NAB designates the total funds of a mutual fund product managed by the investment manager. NAV or unit of participation reflects the price per unit paid to invest by buying a unit of mutual fund participation or obtained if investors want to withdraw investment by reselling the unit owned. The NAV per unit for the first mutual fund product was IDR 1,000. The high and low NAV price per unit of a mutual fund does not determine the good or bad performance of the mutual fund, but rather the selection and management of the investment portfolio that determines the movement of the stock.

In the investment world, both the money market and the capital market, Mutual funds are considered a product with low risk. Hence, it becomes one of the most popular investment instruments. However, in line with the principle of "high-risk, high return, low-risk low return", the return offered is also lower, yet, this does not rule out the possibility of mutual funds to be a promising investment. It is sporadic that the NAV of money market mutual funds is below IDR 1,000 (Financial Services Authority Regulation No. 34/POJK 04/2019 Article 10 Paragraph 1) of the IPO value of the NAV of mutual fund products at a minimum of IDR 1,000). Although there is a possibility that prices may fall, with a predetermined initial value when compared to other investment products, both in the capital market and money market, mutual fund investment products are less risky.
**Sharpe's Method**

William Sharpe developed the Sharpe method, famous as the Reward to Variability Ratio (RVAR). This method is based on calculations based on the concept of the capital market line as a benchmark by dividing the portfolio risk premium by the standard deviation or based on the risk premium. The risk premium is the difference between the average performance and the average risk-free investment (Sharpe, 1966).

Sharpe's method assesses the performance of an investment portfolio based on a risk premium. The risk premium is the difference between the average performance generated by mutual funds and the average risk-free. Sharpe’s measurement is formulated as a ratio of risk premium to standard deviation (Sulistyorini, 2009) and (Sunaryo & S MB, 2019).

Testing using the Sharpe method is stronger than the Jensen and Treynor method Eq. (1). The Sharpe method looks at total risks, namely systematic risk and the risk of the mutual fund portfolio itself.

\[ sp = \left( \frac{R_p - R_f}{\sigma} \right) \]  

Where:
- Sp = Sharpe performance index.
- Rp = Portfolio return
- Rf = risk-free return
- \( \sigma \) = standard deviation

Standard deviation (\( \sigma \)) is the risk of mutual fund fluctuations caused by changes in earnings in each period. The higher the Sharpe’s ratio, the better the performance of the mutual fund.

Fluctuation risk is the risk of an investment that can be measured by the magnitude of the value of the spread (variance) or standard deviation of the expected rate of return. The greater the spread level, the riskier the investment (Keown, Scott, Martin, & Petty, 2001). Calculation of fluctuation risk Eq. (2), according to (Keown et al., 2001), can be calculated using the standard deviation formula as follows:

\[ \sigma = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}} \]  

**METHODODOLOGY**

This research is descriptive research with a quantitative comparison approach. According to (Sugiyono, 2008), quantitative methods are used by applying mathematical calculations using specific formulas for certain samples and populations to test a particular hypothesis. The data used is secondary data, including money market conventional and sharia mutual funds annual return, Net Asset Value, BI 7 Days Repo Rate. The data was obtained from the official website of Bank Indonesia, IDX, and also the Pasar Dana website.

The population used in this study is conventional money market mutual funds and Islamic money market mutual funds registered with the Financial Services Authority (OJK) in the study period. The sample used is 130 money market mutual funds consisting of 89 samples of conventional money market mutual funds and 41 samples of Islamic money market mutual funds.

Sampling was carried out using purposive sampling, which was selected based on specific criteria. 1) Conventional and sharia money market mutual funds in rupiah denomination registered in OJK during the observation period, 2) Data related to money market mutual funds are published in total during the observation period.

**Research Method**

The Independent Sample T-Test will be employed to compare the performance of conventional and Sharia money market mutual funds. Data processing in this study will use Microsoft Excel and the SPSS program.

The steps taken in analyzing the performance of mutual funds using the Sharpe method are as follows:
1) Collecting the return on each mutual fund;
2) determining the standard deviation of mutual fund returns;
3) determine risk-free investment returns;
4) calculating the money market mutual fund performance by using Sharpe method;
5) Performing a different T-test on the value of the Sharpe ratio; and
6) Analyzing the results of the tests.

**RESULTS AND DISCUSSION**

Sharpe ratio is a measurement of mutual fund performance based on a comparison between excess returns and risk (Sharpe, 1966). The excess return in question is the difference between the reduced portfolio return and the risk-free return. Meanwhile, the total risk of an investment portfolio can be seen from the standard deviation value. Therefore, the greater the standard deviation, the greater the risk in an investment. The total risk in question includes systematic risk (market risk) and the risk of the mutual fund itself. The high risk of mutual funds also depends on the type of mutual fund. Money market mutual funds have a lower risk compared to other types of mutual funds. Most money market mutual funds allocate their assets to money market instruments whose movements are relatively stable. The higher the Sharpe ratio, the better the performance of the mutual fund.
Table 1 Return and NAV Conventional and Sharia Money Market Mutual Funds

<table>
<thead>
<tr>
<th></th>
<th>Return</th>
<th>NAV</th>
<th>Sharpe</th>
<th>Sharpe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conventional</td>
<td>Conventional</td>
<td>Sharia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mutual Fund (%)</td>
<td>Mutual Fund (%)</td>
<td>Mutal Fund</td>
<td>Conventional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(IDR)</td>
<td>Fund (IDR)</td>
<td>Mutal Fund</td>
</tr>
<tr>
<td>N Statistic</td>
<td>89</td>
<td>41</td>
<td>89</td>
<td>41</td>
</tr>
<tr>
<td>Minimum</td>
<td>-79%</td>
<td>-5%</td>
<td>298.83</td>
<td>438</td>
</tr>
<tr>
<td>Maximum</td>
<td>122%</td>
<td>9%</td>
<td>3949.32</td>
<td>1549.08</td>
</tr>
<tr>
<td>Mean</td>
<td>3.87%</td>
<td>3.61%</td>
<td>1405.74</td>
<td>1145.54</td>
</tr>
<tr>
<td>St. Deviation</td>
<td>17.24%</td>
<td>2.45%</td>
<td>561.86</td>
<td>171.70</td>
</tr>
</tbody>
</table>

Source: data processed, 2021

Based on the sample selected, there are 89 conventional money market mutual funds and 41 sharia money market mutual funds available on the market during year 2020. The average return between conventional and mutual funds have no significant different, however, there are big number difference on the minimum and maximum return between them. As confirm in the Figure 1, several conventional money market mutual funds were outperforming and underperform the average of return. Besides, it was lower spread for sharia money market mutual funds performance.

The maximum of Net Asset Value conventional money market mutual fund doubled the Net Asset Value sharia money market mutual funds. The possibility due to the availability number of conventional money market mutual funds higher than sharia money market mutual funds. Hence, more possibility to reach the higher number. In other side, the average NAV have no significant difference. The average conventional mutual funds slightly higher than the sharia mutual funds.

![Mutual Fund Return](image)

Figure 1. Mutual Funds Return

The average performance measurement based on the Sharpe method both conventional and sharia money market fund are negative. It gives sign that the money market mutual fund affected by pandemic covid-19 in Indonesia. In the current economic condition due to the pandemic covid-19, conventional money market mutual fund survive more than the sharia. It can be seen from Figure. 2, that some conventional money market fund can beat the market and perform above the average number of mutual fund performance. While, sharia money market performance tends to move sideways. Performance of conventional and sharia money market mutual funds based on the Sharpe ratio value displayed on the Figure. 2
The performance of sharia money market mutual funds is more stable compared to the performance of conventional money market mutual funds during the COVID-19 pandemic. It can be seen from the graphs that the performance of the two types of mutual funds during 2020 tends to be low. Only certain mutual funds whose performance can exceed the average during the COVID-19 pandemic in Indonesia.

Differential tests were conducted to determine whether there is a difference in performance between conventional and sharia money market mutual funds. The results of the different independent sample t-test for conventional money market mutual funds and Islamic money market mutual funds using SPSS software are as follows:

<table>
<thead>
<tr>
<th>Method</th>
<th>F</th>
<th>sig</th>
<th>t</th>
<th>sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharpe</td>
<td>61.044</td>
<td>.007</td>
<td>2.742</td>
<td>.007</td>
</tr>
<tr>
<td>Return Mutual fund</td>
<td>1.179</td>
<td>.280</td>
<td>.090</td>
<td>923</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2021

Based on the results of the independent sample t-test, the Sharpe value is 0.007 less than 0.05, then H1 is accepted, so there is a difference in the performance of conventional and sharia money market mutual funds based on the Sharpe method. However, the return value is greater than 0.05, meaning that there is no difference between return conventional and sharia money market mutual funds.

CONCLUSION
The results of the independent sample t-test on the Sharpe method stated that there were differences in the performance of conventional equity mutual funds with Islamic money market mutual funds using the Sharpe method. The Sharpe ratio value in conventional capital market mutual funds is the highest, namely Batavia Dana Kas Gebyar, so that it has the best performance during the covid-19 pandemic. Meanwhile, PNM Plaza Money Market Sharia mutual funds had the best performance in 2020. Money market mutual funds that have better performance mean that these mutual funds have a ratio of excess mutual fund returns over risk-free returns with the greatest variability of portfolio returns compared to other mutual fund products.

Overall, there are differences in the performance of conventional and Islamic money market mutual funds based on the results of the Sharpe Method. This result is in line with the previous results conducted by (Huda et al., 2017; Lailiyah & Sulasmiyati, 2016) who found that conventional equity mutual funds were superior to Islamic mutual funds. However, there is no significant difference between the average returns of conventional money market mutual funds and Islamic money market mutual funds. Thus, the difference in performance between conventional and sharia money market mutual funds is possible as a result of the excellent performance of some conventional mutual funds. It can be seen from the maximum value of return and Sharpe ratio which has a very far above average spread.

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References


