

Analysis of the Effect of Inflation and Assets Under Management on the Performance of Equity Mutual Funds in Indonesia

Shafira Tasya Ramadhanti¹, Tri Siswantini²

^{1,2}Faculty of Economics and Business, National Development University Veteran Jakarta, Indonesia
shafira.tasya@upnvj.ac.id, trisiswantini@upnvj.ac.id

Abstract

The research entitled "Analysis of the Influence of Inflation and Asset Under Management on the Performance of Equity Mutual Funds in Indonesia" can be classified as a quantitative type of research which aims to prove the effect of inflation and asset under management on the performance of equity mutual funds in Indonesia. The object chosen in this study is stock mutual funds using a sample of 82 stock mutual fund products in the 2018-2020 period. The analytical method used is Panel Data Regression Analysis using the Eviews 12 program. The results found from this study are that inflation has a significant effect on the performance of stock mutual funds, while assets under management have no effect on the performance of stock mutual funds.

Keywords

equity mutual fund
performance; inflation;
asset under management



I. Introduction

The existence of the Covid-19 pandemic phenomenon has indirectly taught the Indonesian people the importance of knowledge and skills in managing finances effectively and efficiently. The existence of this phenomenon, supported by the times, demands the mindset of the people who inevitably become more advanced. Currently, many Indonesians know how to prepare for their future needs by doing financial planning. To prepare for future needs, a vehicle is needed. In the science of financial planning one of the vehicles to achieve financial goals is to invest according to the time period of the financial goals and risk profile (Saraswati & Nugroho, 2021).

Investment is an activity of investing or funding an asset with the intention of obtaining *return* a greater. Basically, there are two types of investment assets used by the public, namely real assets or fixed tangible assets such as property, land, gold, and financial assets or financial assets in the form of claims or ownership such as shares, deposits, bonds and other instruments that can be found in the market. money and capital market (Oktavia & Nugraha, 2018).

The capital market is a place for capital for private or government-owned companies as well as a forum for the public to invest in medium- and long-term financial assets such as stocks, bonds, mutual funds, derivatives, and other instruments (PT Bursa Efek Indonesia, 2019). Currently, the capital market in Indonesia has entered a development stage. The number of local investors from the Indonesian people continues to increase from year to year. This shows that an increasing number of people are starting to realize the importance of investment. On the Indonesia Stock Exchange itself, it was recorded that in the fourth quarter of 2020 the number of investors had touched 3.53 million people, an increase of 42% greater than in 2019 which was still at 2.48 million people (Safitri, 2020).

The high interest of the Indonesian people to invest in the Capital Market is due to the variety of investment instruments available. One of the most popular investment instruments in Indonesia today is mutual funds. This statement is supported by the report of the Chairman of the Indonesian Investment Managers Association (AMII) which reports that mutual fund investors have continued to increase since 2018. KSEI (Indonesian Central Securities Depository) reported that in 2018 the number of mutual fund investors was at 995,510 investors, then in 2019 it increased by 78.25% to 1,774,493 investors, and in 2020 it increased by 78.95% to 3,175,429 investors so that around 89% of investors in Indonesia are mutual fund investors.

The presence of mutual funds in the capital market is an alternative instrument for investors who have limited capital and knowledge but still want to implement portfolio diversification. Mutual funds are defined as investment instruments that are traded as a forum to collect investor funds which are then presented in the form of a portfolio of securities by experienced investment managers with the aim of making a profit (Rudiyanto, 2016). Investment managers in mutual funds have a role to develop investment portfolios for investors (Hermawan & Wiagustini, 2016).

Although mutual funds are used as alternative investment instruments for people who have limited capabilities and funds, there is still a need for benchmarks that can be considered for investors to make investment decisions (Rudiyanto, 2016). The benchmark of mutual funds is mutual fund performance. Performance appraisal of an investment asset is carried out to see how much the investment asset's ability to generate profits is. In mutual fund investment, the movement of Net Asset Value (NAV) is an indicator of its performance assessment (Anggara & Yulianto, 2020). NAV is obtained from the value of assets that have been deducted by all existing liabilities so that NAV reflects the investment value of the investor (Miha & Laila, 2017).

Based on this statement, it can be said that the growth of mutual fund performance can be seen from the growth of NAV. When the NAV has increased compared to the previous year, it can be indicated that the performance of the mutual fund has increased, and vice versa (Bella & Permady, 2019).

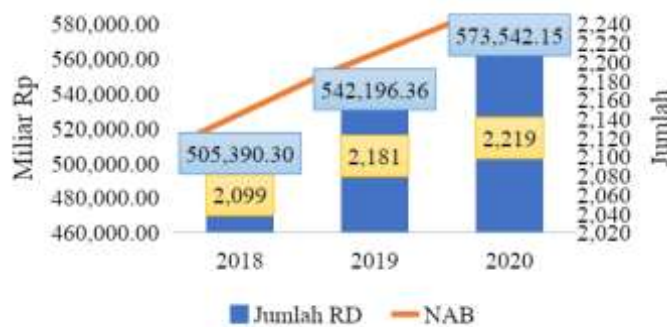


Figure 1. Graph of Total Mutual Funds and NAV (Mutual Funds 2018-2020)

Source: OJK (Financial Services Authority)

Based on Figure 1. It can be seen that the performance of mutual funds in Indonesia over the last three years has continued to increase, reflected in the increasing number of mutual funds in circulation followed by an increase in the number of mutual funds in circulation. NAV. In 2018 the number of mutual funds in circulation touched 2,099 with a NAV of Rp505,390,30 billion. In 2019 the number of mutual funds in circulation increased by 3.9% to 2,181 followed by an increase in NAV of 7.3% to Rp542,196.36 billion. In 2020, when the Covid-19 pandemic phenomenon that weakened the economy in Indonesia,

did not become a barrier to the growth of mutual fund performance in Indonesia. The number of mutual funds in circulation continued to increase by 17% to 2,219 followed by a 5.7% increase in NAV to Rp573,542.15.

In Indonesia today, there are many types of mutual funds that are present as an alternative to public investment, but there are four types of mutual funds that are widely known to the public, namely stock mutual funds, mixed mutual funds, fixed income mutual funds, and money market mutual funds (Setianto 2016). Risk in equity mutual funds is a benchmark for assessing the expertise of investment managers in managing funds. The risk in the high performance of mutual funds is expected to be able to provide a *return* that is no less high for investors (Bella & Permadhy, 2019).



Figure 2. Graph of Equity Mutual Fund Performance in Indonesia in 2018-2020
Source: OJK

The rapid growth of mutual fund performance in Indonesia is seen from the NAV performance and the number of mutual funds is not followed by the increasing performance of stock mutual funds in Indonesia. This inconsistent phenomenon can be seen starting from 2018-2020. The performance of equity mutual funds continues to decline. Based on data from the OJK as reflected in Figure 2. It was recorded that in 2018 the NAV of share mutual funds reached Rp. 143.80 trillion or experienced a performance growth of 18.99% from 2018. Then in 2019 the performance of equity mutual funds decreased drastically until -7.26%. The NAV generated by equity mutual funds in 2019 only touched Rp. 133.36 trillion. In 2020 there was an even more drastic decline of up to -8.53% with the NAV generated only amounting to Rp121.99 trillion.

When inflation occurs, the government will implement monetary policy by increasing interest rates to attract people to save in the money market, thereby reducing public interest in investing in the capital market. In addition, the increase in interest rates due to inflation also causes the interest debt burden to be paid by the company is also higher so that it can reduce company profits (Adyatmika & Wiksuana, 2018). So that when there is an increase in inflation, it will have a negative impact on the performance of stock mutual funds which will decrease, and vice versa (Evalina, 2020).

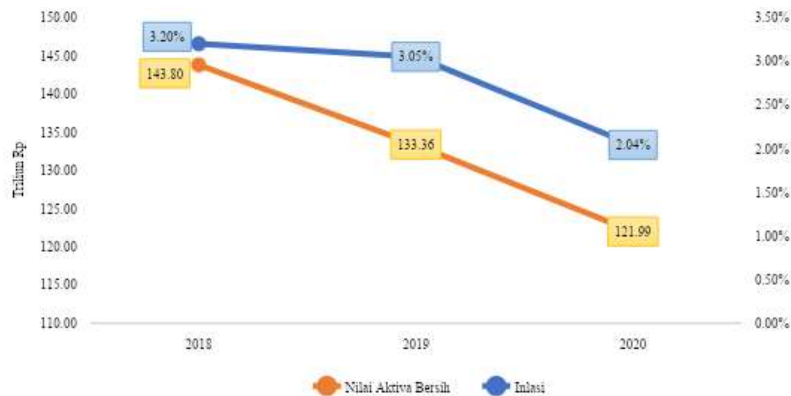


Figure 3. Graph of Inflation and NAV of Equity Mutual Funds in Indonesia in 2018-2020
Source: OJK and BI

Based on Bank Indonesia statistics, inflation in Indonesia from 2018 to 2020 continued to decline. In 2018 the inflation rate in Indonesia was at 3.20%, in 2019 there was a decrease in the inflation rate by 0.15% so that the inflation rate in Indonesia was only 3.05% and in 2020 the inflation rate decreased again by 1.01 % so that the inflation rate in Indonesia is only 2.04%. However, the decline in inflation was followed by a decline in the performance of equity mutual funds in Indonesia. In 2018 the NAV of share mutual funds was at Rp. 143.70 trillion, in 2019 the NAV of share mutual funds fell to Rp. 133.36 trillion, and in 2020 the NAV of share mutual funds decreased again to Rp. 121.99 trillion.

The current phenomenon is not in line with macroeconomic theory and several previous studies which state that inflation has a negative effect on the performance of stock mutual funds. Several previous studies that are in line with macroeconomic theory but different from the current phenomena include the research written by Sari (2019); Krishnamurthy, Pelletier, and Warr (2018); Pratama and Wirama (2018); Gusni, Silviana, and Hamdani (2018); which states that inflation has a negative effect on the performance of equity mutual funds. Meanwhile, Saputri and Ismanto (2020) in their research state that inflation does not affect the performance of stock mutual funds.

However, in a study written by Saputri and Ismanto (2020); Firdaus and Santoso (2018); Sanjaya et al. (2020); and Ginanjar and Kurniasih (2021) stated that AUM has no effect on the performance of equity mutual funds. This finding is different from the characteristics of equity mutual funds and other studies written by Asriwahyuni (2017); Devi and Sudirman (2021); and Pratama and Wirama (2018) which use the size of stock mutual funds as an indicator of investment decision making because it has a positive effect on the performance of stock mutual funds.

Based on the theoretical gap with the current phenomenon, and based on the gap in the results of previous research, the authors conducted a study entitled "Analysis of the Effect of Inflation and *Asset Under Management* on the Performance of Equity Mutual Funds in Indonesia".

II. Research Method

Research Population is the total number of objects or subjects that are the focus of research (Sugiyono, 2019). In this study, 274 equity mutual funds registered at OJK from 2018 to 2020 were used as the population. The sample is a piece of the overall characteristics possessed by a predetermined population. In this research, a non-probability sampling method was chosen *using a purposive sampling technique*. The criteria used to select the sample are equity mutual funds that can be traded by the general public through the 3 largest Mutual Fund Selling Agents (APERD) based on the number of users according to the Indonesia Stock Exchange report, namely Bibit.id, IPOT Fund, and Ajaib Investasi (Nurhaliza, 2021).

In this study, the type of data used is secondary data obtained from other parties (not the first party) in the form of documentary data (Sugiyono, 2019). In this study, secondary data is the type of data used and obtained indirectly or from the object or subject of the second source research (Moleong, 2021). The sources of data in this study were taken from the official websites, namely *www.ojk.go.id* and *www.bi.go.id* as well as supporting sources from *website IPOT Fund www.indopremiere.com*), Bibit (*www.bibit.id*), and *Magic Investment ()www.ajaib.co.id*. The returns and AUM data are obtained from *fund fact sheet* of each stock mutual fund sample, and inflation data and risk-free interest rates can be accessed on *the* official website of Bank Indonesia (*www.bi.go.id*).

Analysis techniques are analytical techniques used in this study. All data collected as research material will later be analyzed and then tested for hypotheses (Sugiyono, 2019). Stock mutual funds traded in the 3 largest APERDs for the period 2018 to 2020 are used as samples. To analyze the data on inflation and AUM used panel data regression analysis method. application tools are used *Eviews*. The use of panel data regression analysis method in this study is because the type of data studied is a combination of *cross section* data with *time series data*.

III. Results and Discussion

3.1 Description of Research

The object of research used in this study is a stock mutual fund product traded on APERD *online* with the largest users, namely Bibit.id, IPOT Fund, and Ajaib Investasi and actively traded during the period 2018 to 2020. *Purposive sampling technique* In this study, it was used to select samples with the following criteria:

Table 1. Distribution of Samples

No	Information	Number of Companies
1	Equity Mutual Funds registered since 2018-2020 at OJK	274
2	Mutual Fund Selling Agent (APERD) <i>online</i> in Indonesia	(171)
3	Mutual Fund Selling Agent (APERD) <i>online</i> in Indonesia which are not actively traded during the period 2018 to 2021	(21)
Total Sample		82

Source: Seeds, IPOT Fund, and Magic Investments

Based on predetermined criteria, the following is a list of stock mutual fund products traded on APERD *online* with the largest users, namely Bibit.id, IPOT Fund, and Ajaib Investasi and actively traded during the period 2018 to 2020:

Table 2. Equity Mutual Funds in Indonesia 2018-2020 Period:

No	Share Mutual Funds	Investment Manager
1	Architas Dynamic Shares	PT Architas Asset Management Indonesia
2	Ashmore Dana Ekuitas Nusantara	PT. Ashmore Asset Management Indonesia
3	Ashmore Nusantara Progressive Fund	PT. Ashmore Asset Management Indonesia
4	Avrist Equity-Cross Sectoral	PT. Avrist Asset Management
5	Bahana Dana Prima	PT Bahana TCW Investment Management
6	Bahana Icon Syariah	PT Bahana TCW Investment Management
7	Bahana Trailblazer Fund	PT Bahana TCW Investment Management
8	Batavia Stock Fund	PT Batavia Prosperindo Asset Management
9	Batavia Optimal Stock Fund	PT Batavia Prosperindo Asset Management
10	Batavia Sharia Share Fund	PT Batavia Prosperindo Asset Management
11	Batavia LQ45 Plus	PT Batavia Prosperindo Asset Management
12	BNI-AM Inspiring Equity Fund Share Fund	PT BNI Asset Management
13	BNI-AM Musahamah Sharia Share Fund	PT BNI Asset Management
14	BNP Paribas Infrastruktur Plus	PT. BNP Paribas Asset Management
15	BNP Paribas Pesona	PT. BNP Paribas Asset Management
16	BNP Paribas Pesona Syariah	PT. BNP Paribas Asset Management
17	BNP Paribas Solaris	PT. BNP Paribas Asset Management
18	Capital Optimal Equity	PT Capital Asset Management
19	Cipta Syariah Equity	PT Ciptadana Asset Management
20	Sharia Index	Danareksa PT Danareksa Investment Management
21	Danareksa Mawar	PT Danareksa Investment Management
22	Danareksa Mawar Focus 10	PT Danareksa Investment Management
23	Danareksa Mawar Commodity 10	PT Danareksa Investment Management
24	Danareksa Mawar Consumer 10	PT Danareksa Investment Management
25	Eastspring Investment Alpha Navigator Class A	PT Eastspring Investments Indonesia
26	Eastspring Investment Value Class A	PT Eastspring Investments Indonesia
27	FWD Asset Dividend Yield Equity Fund	PT FWD Asset Management
28	FWD Asset Sectoral Equity Fund	PT FWD Asset Management
29	Insight Wealth	PT. Insight Investments Management
30	Kresna Index 45	PT Kresna Asset Management
31	Majoris Indonesian Dynamically Allocation Shares	PT Majoris Asset Management
32	Majoris Indonesian Sharia Stocks	PT Majoris Asset Management
33	Mandiri Investa Attractive	PT Mandiri Investment Management
34	Mandiri Investa Attract Syariah	PT Mandiri Manajemen Investasi
35	Mandiri Investa Smart Bangsa	PT Mandiri Manajemen Investasi
36	Mandiri Investa Equity ASEAN 5 Plus	PT Mandiri Manajemen Investasi
37	Manulife Funds Class A Shares	PT Manulife Asset Management Indonesia
38	Manulife Leading Stock	PT Manulife Asset Management Indonesia
39	Manulife SMC Plus Shares	PT Manulife Asset Management Indonesia
40	Manulife Syariah Sectoral Trust Class A	PT Manulife Aset Manajemen Indonesia

41	Maybank Equity Fund	PT Maybank Asset Management
42	Mega Asset Greater Infrastructure	PT Mega Asset Management
43	Mega Asset Maxima	PT Mega Asset Management
44	MNC Equity Fund	PT MNC Asset Management
45	MNC Sharia Equity Fund	PT MNC Asset management ent
46	Panin Sharia Fund Shares	PT Panin Asset Management
47	Pinnacle Strategic Equity Fund	PT Pinnacle Persada Investama
48	PNM Sharia Equity	PT PNM Investment Management
49	PNM Aggressive Shares	PT PNM Investment Management
50	Pratama Shares	PT Pratama Capital Assets Management
51	Pratama Syariah	PT Pratama Capital Assets Management
52	Premier Equity Macro Plus	PT Indo Premier Investment Management
53	Principal Index IDX30 Class O	PT Principal Asset Management
54	Principal Indo Domestic Equity Fund	PT Principal Asset Management
55	Principal Islamic Equity Growth Syariah	PT Principal Asset Management
56	Principal SMART Equity Fund	PT Principal Asset Management
57	Principal Total Return Equity Class O	PT Principal Asset Management
58	Prospera Wisdom	PT Prospera Asset Management
59	Prospera BUMN Growth	PT Prospera Asset Management
60	Prospera SMC Shares	PT Prospera Asset Management
61	Smart Plans	PT Ciptadana Asset Management
62	RHB Alpha Sector Rotation	PT RHB Asset Management Indonesia
63	SAM Indonesian Equity Fund	PT Samuel Asset Management
64	Schroder 90 Plus Equity Fund	PT Schroder Investment Management Indonesia
65	Semesta Stock Fund	PT Semesta Asset Management
66	Sequis Equity Indonesia	PT Sequis Asset Management
67	Sequis Equity Maxima	PT Sequis Asset Management
68	Shinhan Equity Growth	PT Shinhan Asset Management Indonesia
69	Simas Danamas Shares of	PT. Sinarmas Asset Management
70	Simas Shares Growing	PT. Sinarmas Asset Management
71	Simas Shares Maksima	PT. Sinarmas Asset Management
72	Simas Featured Shares of	PT. Sinarmas Asset Management
73	Simas Syariah Featured	PT. Sinarmas Asset Management
74	Sucorinvest Equity Fund	PT Sucorinvest Asset Management
75	Sucorinvest Maxi	PT Sucorinvest Asset Management
76	Sucorinvest Sharia Equity Fund	PT Sucorinvest Asset Management
77	Syailendra Equity Opportunity Fund	PT Syailendra Capital
78	TRAM Consumption Plus Fund	PT Trimegah Asset Management
79	TRAM Infrastructure Plus Fund	PT Trimegah Asset Management
80	TRIM Kapital	PT Trimegah Asset Management
81	TRIM Kapital Plus	PT Trimegah Asset Management
82	TRIM Syariah	PT Trimegah Asset Management

Source: Seeds, IPOT Fund, and Magic Investment

Stock mutual fund products in the 2018-2020 period were used as objects of research because during the period The development of mutual fund investment occurs very rapidly in the Indonesian capital market. The number of mutual fund investors by the end of 2020 had reached 2.8 million investors, with 2.5 million of them investing through APERD Bibit, IPOT Fund, and Ajaib Investasi. This means that 89.28% of capital market investors invest actively through the APERD. So that 82 Equity Mutual Fund products were selected from the 3 largest APERDs as objects used in this study.

3.2 Descriptive Statistical Analysis

In analyzing the data by describing the data set without any general conclusions on each variable in the study, descriptive statistics were used. In this study, descriptive statistical analysis focuses on the *mean* (average), *maximum*, *minimum*, and *standard deviation* (level of deviation). Below are the results of descriptive statistical analysis of 82 stock mutual fund products for the period 2018 to 2020 that have been processed using Eviews12:

Table 3. Descriptive Statistical Results of

	KRDS	INFLATION	AUM
Mean	-0.925729	-3.60923	25.65626
Maximum	0.705354	-3.4428	29, 52574
Minimum	-7.21524	-3.89427	20.88486
Std. Dev.	0.753742	0.202906	1.747202
Observations	246	246	246

Source: Output Eviews12 (processed data)

Based on the data obtained in table 3 above, the following is the interpretation of descriptive statistics in this study:

a. Performance of Equity Mutual Funds (KRDS)

Equity funds listed at OJK and traded through APERD for the 2018-2020 period have an average minus performance value of -0 ,925729. The highest performance value of equity mutual funds is Prospera SMC Shares of 0.705354 in 2018. Meanwhile, the equity mutual fund with the lowest performance value is owned by Majoris Syariah Shares of -7,21524 in 2019.

Furthermore, the standard deviation value of the Equity Mutual Fund Performance Variable (KRDS)) based on the results of descriptive statistics is equal to 0.753742. The results show that the standard deviation number is greater than the KRDS average, meaning that the data is heterogeneous where the *minimum* and *maximum* have a large difference in equity mutual funds in 2018-2020.

b. Inflation The

transformation of inflation data recorded at Bank Indonesia has an average value of -3.609230. The largest inflation value occurred in 2018 with a figure of -3.442801. Meanwhile, inflation with the lowest value occurred in 2020 at -3,89427.

Furthermore, the standard deviation of the inflation variable based on the results of descriptive statistics is 0.202906. The results show that the standard deviation number is greater than the average so that the data can be said to be heterogeneous where the *minimum* and *maximum* have a large difference in equity mutual funds in 2018-2020.

c. AUM of Equity Mutual

Funds registered with the OJK and traded through mutual fund selling agents for the 2018-2020 period have an average AUM value of 25,65626. The highest AUM value for equity mutual funds is Ashmore Dana Ekuitas Nusantara in 2018 of 29,52574. Meanwhile, the equity mutual funds with the lowest AUM are owned by MNC Dana Syariah Ekuitas of 20,88486 in 2020. The AUM is above the *average* of 117 mutual funds or 60.98% of the total equity fund products.

Furthermore, the value of the standard deviation of the AUM variable based on the results of descriptive statistics is 1.747202. The results show that the *mean* AUM is greater than the standard deviation, which means the 2018-2020 AUM sample is in good condition.

3.3 Panel Data Regression Analysis Method

To get the best model from the panel data method in processing data, *the F Limit Test (Chow Test)*, test *Hausman* or *Lagrange Multiplier*.

a. Test (Chow Test)

F Limited is useful in seeing the best model related to its use in research, both between CEM and FEM. There is a hypothesis used for the implementation of the *F Restricted* were test as follows:

$H_0 = \text{CEM}$
 $H_{\text{accepted}} = \text{FEM}$

Based on this hypothesis, H_a is if the value of the probability of the *Cross Section Chi Square* test is < 0.05 and vice versa. The results are as follows:

Table 4. F Test Results Restricted (Chow Test)

Redundant Fixed Effects Tests			
Equation: MODEL_FEM			
Test cross-section fixed effects			
Test	Statistic	df	Prob.
Cross section F	0.960838	(61.182)	0.5616
Cross section Chi-square	68.677154	61	0.2334

Source: Output Eviews 12 (processed data)

Based on table 4. It can be seen that the number of *Cross Section Chi Square* in this study is $0.2334 > 0.05$. Then H_0 is accepted and the model chosen is the *Common Effect Model* (CEM). Therefore, from the results of the model test with the *Restricted*, the next step is the *Lagrange Multiplier* to choose the right model for this research.

b. Test Lagrange Multiplier

To get the best model between CEM and REM test *Lagrange Multiplier*.hypothesis that will be useful in the implementation of the Lagrange Multiplier test, which is as follows:

$H_0 = \text{CEM}$
 $H_a = \text{REM}$

From this hypothesis, H_0 rejected the probability value of *Cross Section* < 0.05 and vice versa. The following are the results of the test:

Table 5. Lagrange multiplier test results Lagrange multiplier test

for random effects			
Zero hypothesis: No effect			
Alternative hypothesis: Two-tailed (Breusch-Pagan)			
	Cross	Hypothesis Test (Second
-	15.22959	13.74343 1.486166 (0.2228)	0.0002 (0.0001)

Source: Output Eviews 12 (processed data)

From table 5, it can be seen that the probability number of the *Cross Section* for this research is $0.0002 < 0.05$. So it can be said if H_a is accepted and H_0 is rejected, so the model chosen for this research is REM.

c. Classical Assumption Test

Before analyzing the panel data regression model, it is necessary to test the classical assumption to ensure that the results of the regression equation and the model chosen are accurate, unbiased and consistent estimates. Based on the *F Retricted (Chow Test)* and the *Lagrange Multiplier*, the model chosen is the *Random Effect Model (REM)* and based on the descriptive statistical test the number of observations obtained is 246 so that the classical assumption test required is only the Multicollinearity test. There is a hypothesis that will be useful in the implementation of the multicollinearity test, which is as follows:

H_0 = multicollinearity problem found

H_a = no multicollinearity problem

From this hypothesis, H_0 rejected if the probability value $r > 0.08$ and vice versa. The following are the results of the test:

Table 6. Inflation Multicollinearity Test Results

INFLATION		:	
0.052859	1.0000	Source	AUM
1.0000	0.052859	Output	Eviews

12 (processed data)

From table 6, it can be seen that r inflation and AUM in this study are $0.052859 < 0.08$ So it can be said that if H_a is accepted and H_0 is rejected, then there is no multicollinearity problem in the data.

d. Panel Data Regression Model Used

F *Restricted* test and the *Lagrange Multiplier* that have been carried out, it can be concluded that the most appropriate model to be used in this study is the *Random Effect Model* (REM). So that the estimation results to see the effect of the independent variables and the available variables are as follows:

Table 7. Results of Panel Data Regression

Variable	Coefficient	Std. Error
C	-7.100761	1.049466
INFLATION	-1.528796	0.218441
AUM	0.025618	0.025368

Source: Output Eviews 12 (processed data)

Based on table 7 the output of the test results with panel data model using *Random Effect Model* (REM), the regression equation is obtained as follows:

$$\text{KRDS} = -7.100761 + -1.528796 (\text{INFLATION}) + 0.025618 (\text{AUM})$$

Based on the regression equation above, this research can be described as follows:

- The constant obtained based on the tests that have been carried out is -7.100761. With this constant value, it is said to be a variable inflation and AUM in the condition of *ceteris paribus* or is considered equal to null (0) then the Share Mutual Fund Performance (KRDS) decreases by 7.100761.
- The value of the inflation regression coefficient is -1.528796 where this value means that for every one unit change that occurs in this variable assuming other variables are constant or zero, the Share Mutual Fund Performance (KRDS) has decreased by 1.528796. Inflation variable regression results state that the coefficient has a negative value that inflation has a negative relationship with Equity Mutual Funds (KRDS) thereby increasing the decline in Equity Mutual Funds Performance (KRDS).
- AUM . regression coefficient value 0.025618 where this value means that for every one unit change that occurs in this variable assuming the other variables are constant or null, the Share Mutual Fund Performance (KRDS) has increased by 0.025618. The results of the regression of the AUM variable state that the positive value coefficient means that AUM has a positive relationship to the Performance of Equity Mutual Funds so that increasing AUM's performance will result in an increase in the value of Share Mutual Fund Performance (KRDS).

3.4 Hypothesis Testing

In this study, hypothesis testing was carried out in order to obtain results in this study using two types of tests, namely partial tests and coefficients of determination tests.

a. Partial Test (t Test)

The implementation of hypothesis testing in this study using the t test which has the aim of estimating the extent of the influence of an independent variable consisting of inflation and AUM in explaining dependence, namely Equity Mutual Funds. In the implementation process, the proposed test takes into account the t-test. The first criterion is to compare the probability value to the critical value. The following is the formulation of the hypothesis in the t test, namely:

H₀: The regression coefficient has no significant effect

H_a: The regression coefficient has a significant effect.

The basis for decision making is the influence test, seen from the t test by observing the comparison of the t value to t_{table} without paying attention to negative or positive numbers because negative or positive on the numbers depicted in t_{count} shows the relationship of the independent variable to the dependent variable. If the value of $t_{count} < t_{table}$, then H_0 accepted and H_{which} means that the independent variable has no effect on the dependent variable and if the value of $t_{count} > t_{table}$ then H_0 rejected and H_a is accepted which means that the independent variable has an effect on the dependent variable. The value of the t_{table} is known through the statistical table with a significance of 0.05 and the degree df is the number of observations (N) – the number of variables (K) = 246 – 3 = 243, then the degree df is 1.969774. In addition, the basis of decision making is testing the effect of hypothesis significance, then if the probability value is lower than the critical value or probability < 0.05 then H_0 is rejected and H_{which} means the independent variable has a significant effect on the dependent variable and if the probability value is higher than the critical value or probability > 0.05 then H_0 accepted and H rejected, which means that the independent variable has no significant effect on the dependent variable. Below are the results of the t-test using the *Random Effect Model* (REM) method.

Table 8. Results of t-test

Variable	t-Statistics	Prob.
C	-6.766074	0.0000
INFLATION	-6.998683	0.0000
AUM	1.009843	0.3136

Source: Output Eviews 12 (processed data)

From table 8, it can be seen that the relationship between the independent variables and the dependent variable partially can be explained as follows:

a. Effect of Inflation on Performance Equity Mutual Funds (KRDS)

Based on the t-test conducted, the inflation variable states a significance value of 0.0000 so that it can be seen that the value is $0.0000 < 0.05$ and the $t_{-6.998683}$, which means it has a negative relationship to the performance of stock mutual funds but value $6.998683 < 1, 969774$. Based on the test, H_a accepted and H_0 is rejected, so that it can cause inflation to be insignificant to the performance of equity funds.

b. Effect of AUM on Stock Mutual Fund Performance

Based on the t-test conducted, the AUM variable states the significance value depicted in the probability value is 0.3136 so that it can be seen that the probability value is higher than 0.05 and the resulting t_{count} is only 1.009843 where the value of t_{count} is lower than $t_{table_{1.009843}}$ or $. < 1.969774$ Based on the test, H_0 accepted and H_a is rejected, which means AUM does not have a significant effect on the performance of stock mutual funds.

b. Test R^2 (Coefficient of Determination)

Test R^2 (Coefficient of Determination) is a measurement that aims to state how much the capacity of the dependent variable, namely Equity Mutual Fund Performance (KRDS), is explained by the independent variable consisting of inflation and AUM. In testing the coefficient of determination has a value between zero (0) to one (1). The value of the coefficient of determination that reaches one variable means that the independent has the capacity to produce almost all information on the dependent variable. Below are the results of the R^2 test (Coefficient of Determination).

Table 9. R2 Test Results^{0.170316}

-squared	0.163487
Adjusted R-squared	R

Source: Output Eviews 12 (processed data)

R2 test table^{The} (Coefficient of Determination) describes the results of *Adjusted R-squared*. It is at 0.163487 or 16.35%. From the results of the R2 test it can be said that the inflation variable and AUM as independent variables are only able to explain 16.35% of the performance of equity funds as independent variables. So that the other 83.65% is explained by other variables that are not explained in this study.

3.5 Discussion

a. Effect of Inflation Stock Mutual Fund Performance

From the t-test calculation, it was found that inflation partially has a significant negative effect on the performance of stock mutual funds in Indonesia for the period from 2108 to 2020. The decline in inflation from 2018 to 2020 was caused by the decline in the GNP level of the people in Indonesia. This causes people to prefer to fulfill their basic needs and invest in instruments with lower risks such as deposits.

The results of the research that have been carried out are similar to the research conducted by Sari (2019); Krishnamurthy, Pelletier, and Warr (2018); Pratama and Wirama (2018); Gusni, Silviana, and Hamdani (2018); which states that inflation has a negative effect on the performance of equity mutual funds.

b. Effect Asset Under Management (AUM) on Stock Mutual Fund Performance

In the t-test of the AUM variable and stock mutual fund performance, the results show that AUM does not have a significant effect on stock mutual fund performance. The amount of AUM managed by investment managers in a stocks will not have an impact on the performance of stock mutual funds and cannot be used as the only mutual funds for investors when they want to invest in equity mutual funds because the amount of AUM that is managed if there is no choice of funds then there will be no choice of funds in the portfolio the selection of funds provides an increase in mutual fund performance good stock too.

Similar research results by Saputri and Ismanto (2020); Firdaus and Santoso (2018); Sanjaya et al. (2020); and Ginanjar and Kurniasih (2001) stated that AUM has no effect on the performance of equity mutual funds.

c. Limitations of the Research

In the implementation and preparation of this research, of course, the researcher did not escape from the limitations. The still existence of the Covid-19 pandemic causes limited space for finding direct data reference sources. Almost all reference sources are accessed *online*. In finding reference sources *online*, high accuracy is needed to select accurate reference sources because there are too many inaccurate reference sources on the internet. In addition, the duration of the research work is also carried out in a very short period, so that researchers cannot use more variables because of the large number of research objects in a short time.

IV. Conclusion

Based on the results of the research and the implementation of hypothesis testing that has been done with panel data regression analysis, the conclusions obtained are:

1. Inflation using annual data converted into natural logarithmic has a significant effect on the negative relationship of Stock Mutual Fund Performance.
2. Asset Under Management by using year-end AUM data whose value is converted to natural logarithm is obtained, it does not affect the Performance of Equity Mutual Funds.

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