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The Role of an Active Portfolio in the Exchange Traded Funds Era: Understanding *Outperformance* and *Underperformance* with *the Jensen's Alpha Model*

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Abstract

This research aims to analyze the role of active portfolios in the Exchange Traded era Funds (ETFs) and to understand the outperformance and underperformance phenomena that may occur in this context. In the era of ETFs, investors have easier access to a variety of investment portfolios that cover a variety of assets and investment strategies. Therefore, it is important to understand how active portfolios perform in this environment. The research method used in this research is the use of Jensen's model Alpha, which is used to measure portfolio performance by taking into account systematic risk factors. Stock price data, ETFs, and market indices will be analyzed to identify outperformance (above average performance) and underperformance (below average performance) of active portfolios. It is hoped that the results of this research will provide a deeper understanding of the extent to which active portfolios are able to outperform market indices in the era of ETFs. In addition, this research can help investors and fund managers make smarter and more effective investment decisions in an ever-evolving investment environment. It is hoped that this research will make an important contribution to the understanding of investment strategies in the era of ETFs, as well as provide valuable insight for investors and financial professionals interested in active portfolios.

Keywords: Portfolio Active, Exchange- Traded Funds (ETFs) Era, Outperformance and Underperformance, Jensen's Alpha Models.

INTRODUCTION

Exchange- Traded Funds (ETFs) have emerged as one of the most popular investment instruments in recent decades, resulting in significant changes in financial markets. ETFs are mutual fund products whose investment units can be traded on the stock exchange like ordinary shares (Miftahusni & Muharam, 2021). The advantages of ETFs include high liquidity, lower fees, and diversified exposure. This has made ETFs an attractive option for many investors, both individual and institutional.

However, in the context of the rapid growth of ETFs, active portfolios managed by investment managers seeking market outperformance continue to exist and be relevant. An active portfolio includes a number of stocks, bonds, or other financial instruments that are selected and actively managed by financial professionals with the goal of achieving optimal investment results. Although active portfolio management fees are typically higher than ETFs, active managers seek to generate alpha, that is, performance that outperforms the relevant market benchmark or index.

The main question that arises is to what extent active portfolios are able to achieve better performance than ETFs in an investment environment dominated by ETFs. Is the active portfolio capable of providing significant outperformance? And, how can we understand their performance in a more detailed and in-depth way?

This research will focus on the use of Jensen's metrics Alpha, which is used in portfolio analysis to measure the performance of active portfolios in an Exchange- Traded context Funds (ETFs), to answer these questions.

Jensen's Alpha considers the systematic risk taken by a portfolio and allows us to understand the extent to which an active portfolio has achieved outperformance or underperformance based on the risk taken.

This research aims to provide a deeper understanding of the role of active portfolios in the era of rapid development of Exchange- Traded Funds (ETFs). Thus, this research draws on a deeper understanding of the role of active portfolios. This will help investors, portfolio managers and financial decision makers make better investment decisions in the ever-changing investment environment.

STUDY REFERENCES AND FORMULATION HYPOTHESIS

Active Portfolio

An active portfolio is an investment approach in which the portfolio manager actively seeks to outperform the performance of a particular market or index. Some key characteristics involve intensive decision making, in-depth stock analysis, and more frequent transactions compared to passive portfolios. An active portfolio investment strategy involves in-depth fundamental analysis of a stock or other asset, including evaluation of financial performance, growth prospects, and company management. There is also a tendency for more active stock rotation, with more frequent buying and selling of shares compared to a buy-and-hold strategy.

Management, active portfolio managers use diversification to reduce stock or sector specific risks. Efforts are also made to manage market and specific risks through tactics such as dynamic asset allocation and the use of derivative instruments. The main goal of an active portfolio is to achieve a rate of return that exceeds the performance of the market or a specific benchmark, such as a stock or bond index. In this context, active portfolio managers often seek alpha, that is, excess returns that cannot be explained by systematic risk.

Exchange Traded Funds (ETFs)

Exchange- Traded Funds (ETFs) are investment funds that are traded on the stock exchange, similar to shares, and usually follow a certain index, this is different from stock mutual funds (Sovi & Syafrida, 2022). ETFs are collections of securities that aim to replicate, not only the performance, but also the risk level of a particular benchmark index. In accordance with the term " exchange traded ", ETFs provide flexibility for investors to buy and sell as long as the secondary market is still active (Miftahusni & Muharam, 2021). ETFs are traded like shares, have minimum purchases, and lower risk because they can be controlled and traded at any time. The main difference is There are participating dealers in ETFs. ETFs offer high liquidity, low fees, and ease of diversification.

Outperformance and Underperformance

The following are some general criteria used to compare the performance of stock portfolios:

a. Return

Return is the main criterion for assessing stock portfolio performance. Total return, average return, consistency of positive returns are important measures for comparing performance over time or between portfolios.

b. Risk

Risk is measured by the volatility (standard deviation of return) of the portfolio. The lower the volatility, the better in terms of risk management. Apart from that, drawdown and systematic risk (beta) are also important.

c. Risk Adjustment (Risk-adjusted returns)

Sharpe's method Ratio, Treynor Ratio and Jensen's Alpha is the most commonly used. Portfolio returns are evaluated by considering the risks taken.

d. Benchmarks

The performance of the stock portfolio is compared with the performance of benchmarks /market indices, such as IHSG, LQ45, S&P500. The aim is to see outperformance or underperformance of the market.

e. Transaction Fees

Transaction costs (buying/selling shares, broker fees) affect investors' net returns. Lower transaction costs indicate the efficiency of a stock portfolio.

Outperformance refers to the performance of an asset or portfolio that exceeds the market performance or benchmark used as a reference. It reflects investment results that are better than expected or compared to market averages. Conversely, underperformance occurs when the performance of an asset or portfolio is below the market average or benchmark, indicating less than satisfactory results.

Context financial, *outperformance* and *underperformance* are used to measure the extent to which an investment can achieve or not achieve the desired return goal. These two concepts provide an indication of the effectiveness of investment management and the ability of a portfolio or investment manager to produce results that exceed or fall short of market expectations.

Jensen's model Alpha

Jensen's Alpha is a metric used in portfolio analysis to measure the performance of an active

portfolio. This metric compares the actual performance of an active portfolio with the expected performance based on the systematic risk (beta) taken. Jensen's Alpha helps in determining the extent to which an active portfolio has outperformed or underperformed that could be expected in the face of a particular risk. Portfolio performance measures that include risk and return factors , one of which is the Alpha Jensen model (Ruma & Tawe, 2023). The Jensen model is a measurement method that considers the difference between the average rate of return on shares and returns based on *Capital Assets Pricing Model* (CAPM), which is often known as Jensen's Alpha (Nadeak *et al*., 2022).

Control Variables (Systematic and Specific Risk)

Systematic risk (also known as market risk) is the risk that cannot be avoided and is related to overall market fluctuations. This includes general changes in interest rates, inflation, or macroeconomic events. Specific risks (also known as unique risks) are risks that are specific to a particular asset or sector, and can be influenced by internal company factors or industry factors.

Systematic risk is non- diversified and originates from macroeconomic factors that affect all assets in a market. Specific risks can be reduced through diversification, as they relate to factors that influence a particular asset or sector. Systematic risk affects all assets in a portfolio, while specific risk can be addressed through diversification. Managing both can have significant implications for portfolio performance and stability.

Market Environmental Factors

Economic cycles play an important role in determining active investment decisions. During economic growth phases, investors may be more inclined to take risks by adopting more aggressive investment strategies. In contrast, during the recession phase, prudence and risk mitigation can be the main focus.

Changes in financial markets, such as high or low volatility, market liquidity, and dominant market trends, can influence active investment decisions. Active portfolio managers can adjust their strategies according to changing market conditions.

DEVELOPMENT OF RESEARCH HYPOTHESES

The Relationship between ETF Type and Active Portfolio Performance

Research could test whether the type of ETF used (e.g., stock ETF, bond ETF, or sector-specific ETF) has a significant impact on the performance of an active portfolio. This will help understand whether the type of asset underlying the ETF plays a significant role in the results of an active portfolio.

The Relationship between Risk and Active Portfolio Performance

Analysis can examine how risk levels, such as volatility or beta, affect the performance of an active portfolio. Do riskier portfolios tend to produce outperformance or underperformance?

Connection between factors _ Macroeconomics and Portfolio Performance Active

Research might examine whether macroeconomic factors such as interest rates, inflation, or economic growth influence the performance of active portfolios. For example, whether an increase in interest rates results in better or worse performance for the active portfolio.

Connection between Size Portfolio and Portfolio Performance Active

Research could evaluate whether active portfolio size has a relationship with performance. Do larger portfolios tend to perform better or worse?

Connection between Time Period and Portfolio Performance Active

Analysis can examine whether certain time periods affect the performance of an active portfolio. For example, does performance outperform during bull periods market than during a bearish market.

Connection between Index Portfolio Benchmark and Performance Active

Research may evaluate whether the choice of benchmark index has a significant impact on the performance of active portfolios. Do portfolios that reflect a particular index tend to achieve better results?

RESEARCH METHODS

Following This is the research method used:

1. Study of literature

Do study comprehensive library _ to literature and research previously related portfolio active, ETFs, outperformance and underperformance, and Jensen's Alpha model.

2. Application of Jensen's Alpha Model

Applying Jensen's Alpha model to measure and compare performance between portfolio active with ETFs and markets, with consider adjustment risk.

3. Analysis Statistics Inferential

Do testing statistics (mean difference test, linear regression, etc.) for test hypothesis study related to portfolio outperformance or underperformance active.

4. Case study Optional

Do studies case more deep to a number of portfolio active and ETF for understand factors specific influences _ performance.

5. Analysis Comparative

Compare results analysis between various portfolio active and ETF for understand consistent factors _ influential to performance.

6. Analysis Risk

Analyze contribution various type risks (systematic, specific, etc.) against performance portfolio active.

Data and analysis will be used to understand performance comparisons between active portfolios and ETFs in the context of systematic risk.

Alpha Model Jensen's

The Jensen Index method is an index that shows the difference between the actual rate of return obtained by a portfolio and the rate of return that would be expected if the portfolio were on the capital market line.

$$J = R_P - [R_{RF} + \beta (R_M - R_{RF})]$$

Information:

J = Jensen Index Results

R_P = Average portfolio return during the observation period

R_{RF} = Average risk-free investment return during the period observation

R_M = Market return

β = Beta or systematic risk

Table 1: Ticker, ETF Name and Benchmark Index

NO	TICKER	ETF NAME	REFERENCE INDEX
1.	LQ45X	Fund ETF LQ-45	LQ45
2.	XIIT	Fund ETF IDX30	IDX30
3.	XIJI	JII ETF Premier Sharia Mutual Fund	JII (JAKISL)
4.	XISI	Fund ETF SMINFRA18	SMINFRA18 (JAKINFRA)
5.	XISR	SRI-KEHATI ETF Premier Mutual Fund	SRI-KEHATI
6.	XBLQ	Mutual Fund Batavia Smart Liquid ETF	LQ45
7.	XBNI	Index Mutual Fund ETF MSCI Indonesia Equity Index	MSCI INDONESIA
8.	XPID	Pinnacle IDX30 ETF Index Mutual Fund	IDX30
9.	XSBC	Simas ETF IDX30 Index Mutual Fund	IDX30
10.	XPFT	Pinnacle FTSE Indonesia ETF Index Mutual Fund	FTSE INDEX
11.	XIHD	Premier ETF IDX High Index Mutual Fund Dividends 20	IDXHIDIV20
12.	XIPI	Pefindo ETF Premier Index Fund i -Grade	PEFINDO i -G

Source: idx.co.id, yahoofinance, investing.com (processed)

Population and Research Sample

The population in this study is all exchange-traded fund registered on the Indonesia Stock Exchange since exchange-traded funds. The sample used is 12 stock ETFs during the 2020-2022 period.

RESULTS RESEARCH AND DISCUSSION

The difference in the average performance of both stock mutual funds and ETFs is using 12 products each with a three years research period from 2020 to 2022 based on the Jensen method, as follows:

Table 2: Average Performance of Stock Mutual Funds and ETFs Based on the Jensen Method

Information	Sharpe's method		
	2020	2021	2022
ETFs	-0.0196	- 0.0 487	0.00 80
Stock Mutual Funds	0.0286	0.0 3 3 2	-0.0 2 4 5
Difference in Average Performance	-0.00 39	- 0.0 7 3 1	0.03 10

Source: author's processed data, 202 3

Likewise with method Jensen pointed out average ETF performance results in 2022 are more Good compared to stock mutual funds (0.0080 > -0.0245) with difference of 0.0310. In other words, the average performance of ETFs in 2022 is more Good compared to with market performance. In 2020 and 2022 performance stock mutual funds in effort outperform the market or IHSG more Good compared to ETFs. Data normality test results using Kolmogorov Smirnov Test on the following table:

Table 3: Normality Test Results

Mutual Funds		Kolmogorov-Smirnov[a]		
Jensen		Statistics	Df	Sig.
	ETFs	,145	24	0.098
	Stock Mutual Funds	.123	24	0.109

Source: author's processed data, 202 3

Table 3 shows that the results of sig from ETF data using the Jensen method where the sig value. ETF 0.0 98 > 0.05 so that ETF data based on the Jensen method is normally distributed and stock mutual funds have sig results of 0.109 > 0.05 so the data is normally distributed.

In the Jensen method, it has been indicated that the average performance of ETFs is better than the performance of stock mutual funds. On the normality test results shows that there is a significant difference in performance between ETFs and stock mutual funds based on the Jensen method. It can be concluded that H0 is accepted and H3 is rejected. This indicates that the average performance of ETFs and Equity Mutual Funds compared to market performance (IHSG) is a significant difference.

Research conducted by Lorencia & Taufiq (2020) and Aziqoh (2021) also shows that there is no significant difference in average performance between index mutual funds and stock mutual funds when compared with market performance (IHSG). Performance results ETF based on the Jensen method shows that the average ETF performance is negative. This is also in line with research conducted by Stefanus & Robiyanto (2020) that of the twelve ETFs tested, only two ETFs performed better than the market (IHSG). This is different from research on the United States stock market conducted by Chen, Estes, & Pratt (2018) which shows that the majority of ETFs in the health sector have positive alpha. Research conducted by Fan & Yan Lin (2020) showed that of the nine sectors tested there were no mutual funds that had positive alpha and there were several ETFs that could outperform the market.

CONCLUSION

Based on the results of research and discussion of comparative analysis of the performance of ETFs and Equity Mutual Funds using the Jensen method, the following conclusions are obtained:

1. Jensen method on the performance of ETFs and Stock Mutual Funds shows that the average performance of ETFs and Stock Mutual Funds compared to market performance (IHSG) is a significant difference.
2. Jensen method, it is recorded that in 2020 and 2022 the best stock mutual funds are Premier ETF Mutual Fund, while in 2021 it will be the Simas ETF Index Mutual Fund. The best ETF products recorded in 2020 and 2021 were the Pefindo i- Grade ETF Premier Index Fund and the Pinnacle FTSE Indonesia Index Mutual Fund, while in 2022 it was the Premier ETF Index Mutual Fund.
3. Even though the overall performance of ETFs cannot outperform stock mutual funds, ETFs have the potential to become a passive investment product that is developing in Indonesia which is in demand by investors because of its unique characteristics and advantages.

SUGGESTION

Based on the research results, here are several suggestions that can be implemented by various parties:

1. For Further Researchers

Future researchers can measure the performance of ETFs and Equity Mutual Funds using other methods with longer research years. Apart from that, future researchers can also compare the performance of ETFs and Mutual Funds that have similar underlyings, such as Sharia ETFs and Sharia Mutual Funds, ETFs with underlying debt securities (bonds) and Fixed Income Mutual Funds, and others.

2. For Investors

ETFs can be an investment alternative if investors have long-term investment goals with low transaction costs because ETFs are not subject to levy and final tax and management fees. Lower fees than mutual funds in general.

3. For Regulators

ETFs have become the favorite investment instrument with passive management in the United States with rapid growth. SRO (Self Regulatory Organizations), Investment Managers, Securities Companies can carry out massive and sustainable ETF intelligence or education efforts in order to increase the knowledge of potential and existing investors. Apart from that, summary information regarding an ETF product being traded is still very minimal on the broker platform.

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