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Research Article

Growth vs Value: A GARCH-APT Approach to Analyzing IDX Market Indices

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Abstract
Value and growth investing strategies are often compared in the investment world. This study analyzes the differences in performance of the IDX Value30 and IDX Growth30 indices as a representation of these strategies in Indonesia from January 30, 2014, to September 30, 2022. Measurements were made using the Treynor Ratio, Information Ratio, and stock selection and market timing evaluations through the GARCH (1,1) model. In addition, the APT model was also used to test the influence of macroeconomic factors, such as inflation, IDR/USD exchange rate, and 5-year Government Bond Yield. The comparison of Treynor and Information Ratio was tested using the Mann-Whitney and independent sample t-test. The results show that both indices have positive performance ratios but are not significantly different. Neither show stock selection capabilities, but IDX Value30 has market timing capabilities. The IDR/USD exchange rate has a negative effect, and the 5-year Government Bond Yield positively affects IDX Value30, while there are no significant macroeconomic factors on IDX Growth30. This research provides a new contribution through a comprehensive analysis of IDX Value30 and IDX Growth30, which can be used as a reference for investment strategies in the Indonesian capital market.

Keywords: APT Model, IDX Growth30, IDX Value30, Market Timing, Value Investing

JEL Classification: G11. C58, G12

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1. Introduction

The capital market drives domestic economic growth. It functions as a means for companies to raise funds from investors for business development and expansion, working capital needs, etc., and as a means for investors to invest in financial instruments such as stocks, bonds, mutual funds, etc. The capital market brings together investors or parties with excess funds with issuers or companies that need funds (Santosa et al., 2022).

Both professional and individual investors hope to get a rate of return that can beat market performance, often called abnormal returns (Athanassakos, 2019). Two prominent investment style strategies (Penman & Reggiani, 2018). Value and growth are the two investment style strategies (Miller & Prondzinski, 2020). Value and growth strategies are now widely recognized as typical specializations of investment managers (Chan & Lakonishok, 2024). According to Schiessl (2024), value investing was initially developed by Professor Benjamin Graham from Columbia Business School and David Dodd in 1934, which became popular in 1949 after being published in a book entitled "Intelligent Investor." Meanwhile, the growth investing school was introduced by Thomas Rowe Price (G. Alfonso Perez, 2017). Then, Phil Fisher developed the concept of growth investing (Schiessl, 2024).

Value stocks are generally defined as stocks that are relatively low in value with a relatively stable business with a low growth rate, and this contrasts with growth stocks, which are stocks that grow high compared to the market as a whole. Furthermore, therefore, these stocks are desired by investors (G. G. Alfonso Perez, 2018)(Sihombing & Putra, 2024). In general, to find out value and growth stocks, investors often use several financial ratio indicators to assess them, such as the Price/Earnings (P/E), Price-to-Book (P/B), Price/Cash Flows (P/CF), Price-to-Sales (P/S) and Dividend Yields (DY=D/P) ratios. Stocks with low values for these ratios are often called value stocks, while stocks with high values are often called growth stocks (Schiessl, 2024). Value investing is an investment strategy by selecting stocks traded at a price lower than their intrinsic or book value (Miller & Prondzinski, 2020). The actual value of a company or asset with all aspects of its business, tangible and intangible (Schiessl, 2024).

Value investing seeks to maximize returns by finding undervalued stocks (Miller & Prondzinski, 2020). Graham and Dodd advocated a form of value investing that involves buying profitable but undervalued assets (Asness et al., 2018). However, even within the relatively strict set of rules that describe value investing, some degree of subjectivity characterizes this investment approach as a mix of science and art. The phenomenon called the 'Value Premium' is that value securities, i.e., securities or stocks with a high book-to-market ratio or a low price-to-earnings ratio, will outperform other securities or stocks when considering risk-adjusted market returns (Pettengill & Chang, 2014). Refer to it as the value-growth spread as a term that is the same as the value premium, namely as the positive difference between the returns obtained by a portfolio of value stocks and a portfolio of growth stocks.

The higher the value premium, the higher the return value compared to the growth so that investors will choose value stocks (Bird & Casavecchia, 2017). The concept of value investing, developed by Benjamin Graham and David Dodd, began to be implemented by practitioners in the past. It was considered an argument against the Efficient Market Hypothesis. Investors realize there is a possibility of obtaining abnormal returns from the market because market prices do not always reflect all the information (Perez, 2017).

Growth investing focuses on companies experiencing or may experience high growth rates and is a strategy of buying stocks with characteristics of companies that are expected to grow above the industry average (Perez, 2017). This Thomas Rowe Price investment style strategy can be characterized by a strong focus on well-managed companies operating in industries with substantial expansion. Thomas Price is interested in investing in companies that show increasing profits and dividends, which are expected to grow faster than the economy (Shradhanjali & Ananya, 2018).

Sharpe Ratio is a portfolio's excess return divided by its standard deviation, where the excess return is the actual return minus the return from the risk-free rate. The Treynor ratio is a metric that measures excess return per unit of market risk or systematic risk (Dash & Lall, 2018). Jensen's alpha measures the ability of a manager's portfolio or alpha return, which is the difference between the portfolio return and the expected rate of return. The information ratio measures excess return for risk compensation and the investor's skill in using knowledge and information to generate returns related to the benchmark (Ahmed & Khan, 2019).

This study contributes to the investment literature by comparing value investing and growth investing strategies in the Indonesian capital market using a comprehensive quantitative approach. Not only measuring performance using the Treynor ratio and Information Ratio, but this study also tests the stock selection and market timing capabilities through the GARCH (1,1) Henriksson-Merton model and expands it by including macroeconomic variables through the Arbitrage Pricing Theory (APT) model. The finding that the IDX Value30 index has market timing capabilities and is more responsive to certain macroeconomic factors than the IDX Growth30 adds a new understanding of the dynamics of investment strategies in the domestic market. Thus, this study adds theoretical insight and provides practical implications for investors and portfolio managers in developing investment strategies that are adaptive to Indonesian market conditions.

2. Literature Review and Hypothesis

Literature Review Definition of Capital Market

The capital market plays a role in the growth of a country's economy. The capital market bridges two parties, namely companies in obtaining investor funds for development, additional working capital, or expansion, and investors for investment in stocks, bonds, mutual funds, and others (Kasmiati & Santosa, 2019).

Basic Portfolio Theory

Several investment assets are managed into a portfolio. Risk diversification strategies can be implemented by using and managing a portfolio. A portfolio can consist of just one instrument or several different instruments, for example, a stock portfolio with several types of stocks in different business sectors or a portfolio consisting of various instruments, for example, a stock portfolio plus a bond portfolio and/or deposits selected with the provision that they will provide good returns. In addition to the return factor, investors must also pay attention to and calculate the risk factor (Subing & Apriansyah, 2024)(Bodie et al., 2024).

Portfolio Performance Theory

A collection or basket of assets investors own is often called a portfolio. If needed, the formed portfolio can be changed in content and composition or rebalanced according to needs in specified periods (Bodie et al., 2024). To carry out the rebalancing process, you can sell existing securities and use the proceeds to buy new securities. After the portfolio strategy is prepared and formed, periodic evaluations must occur. Measuring portfolio performance with a modern approach is a comprehensive evaluation of an investment by looking at or controlling the risk in the portfolio. There is no universally agreed procedure to be used to adjust risk to portfolio returns (Reilly & Brown, 2017).

Stock Selection and Market Timing Ability

Stock selection ability is the ability of portfolio managers to determine stocks that are expected to outperform market performance. Meanwhile, market timing ability moves funds through asset allocation between markets based on relative performance estimates. Namely, the portfolio is expected to generate a risk-free interest rate during a bearish market, namely when the market return is less than the risk-free interest rate. It is expected to generate a better return than the market when the market is bullish (Santosa, 2019). According to Manurung (2018), market timing ability is the ability of an investment manager's portfolio to predict the market, namely choosing the right stock portfolio when the market will rise and fall. The market is said to be rising (bullish) when the market return is greater than the risk-free rate or ($Rm>Rf$). The market is said to be falling (bearish) when the market return is less than the risk-free rate ($Rm<Rf$). Market timing ability is the ability of a portfolio manager to choose a stock portfolio with a beta above 1 ($\beta>1$) when the market is going up and sell it and buy stocks that have a beta of less than 1 ($\beta<1$) when the market is going down.

Hypothesis

To answer the research objectives, and based on existing empirical studies, this study will test sixteen hypotheses, namely:

H1: There is a difference in the average Treynor ratio between IDXV30 and IDXG30 H2: There is a difference in the average information ratio between IDXV30 and IDXG30 H3: Stock selection ability affects IDXV30 based on the Henriksson-Merton model
H4: Market timing ability affects IDXV30 based on the Henriksson-Merton model H5: Stock selection ability affects IDXG30 based on the Henriksson-Merton model H6: Market timing ability affects IDXG30 based on the Henriksson-Merton model H7: Stock selection ability affects IDXV30 based on the APT model
H8: Market timing ability affects IDXV30 based on the APT model
H9: Macroeconomic factors of inflation affect IDXV30 based on the APT model
H10: Macroeconomic factors of the IDR/USD exchange rate affect IDXV30 based on the APT model APT
H11: Macroeconomic factor 5Yr Govt Bond Yield affects IDXV30 based on APT model H12: Stock selection ability affects IDXG30 based on APT model
H13: Market timing ability affects IDXG30 based on the APT model
H14: Macroeconomic factor inflation affects IDXG30 based on the APT model
H15: Macroeconomic factor IDR/USD exchange rate affects IDXG30 based on APT model H16: Macroeconomic factor 5Yr Govt Bond Yield affects IDXG30 based on APT model

Research Framework

The framework of thought used compares the differences in performance and analyzes the stock selection and market timing capabilities of IDX Value30 and IDX Growth30, representing value and growth investing in Indonesia.

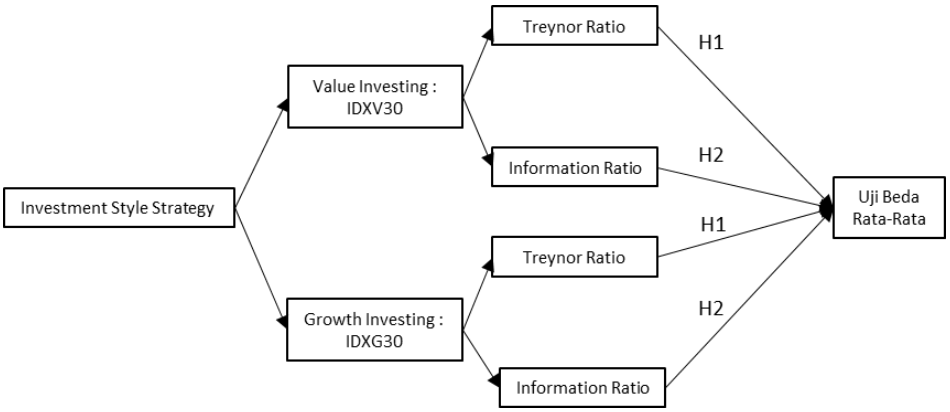

Figure 1. Research Framework I

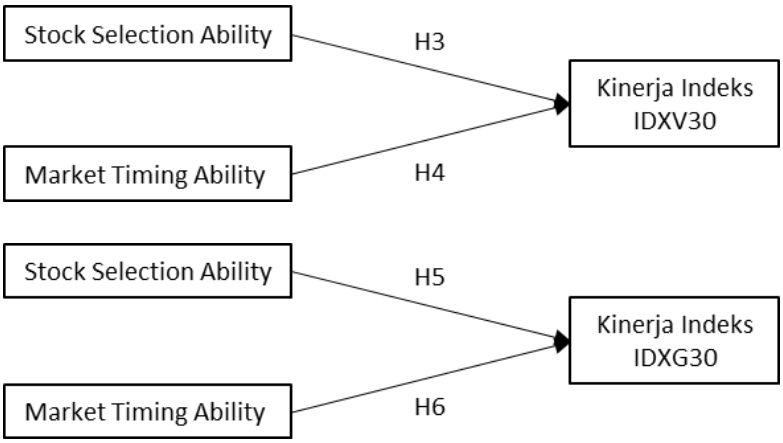

Figure 2. Research Framework II

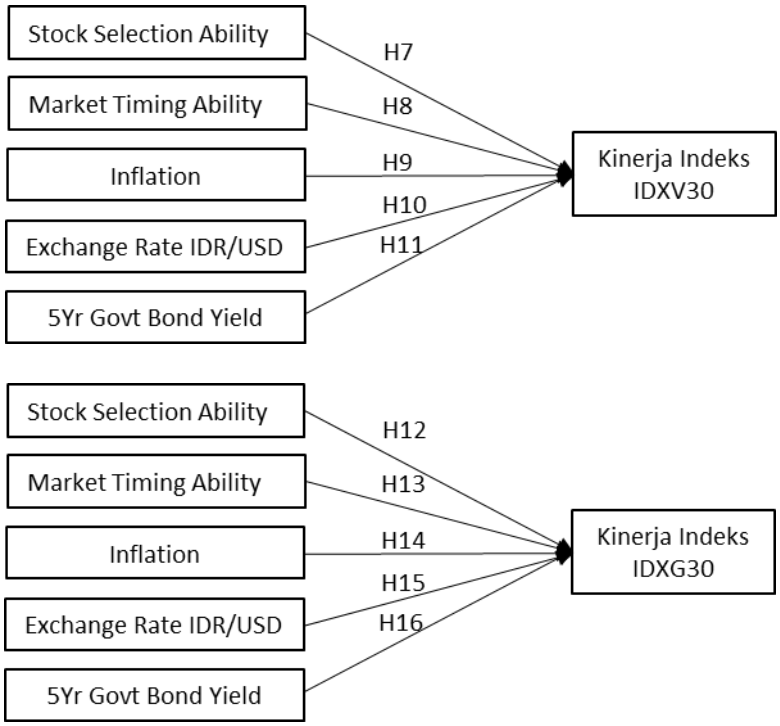

Figure 3. Research Framework III

3. Data and Method

Research Design

This research uses a quantitative approach to solving the existing problem formulation. To answer the problem formulation, the research was conducted by taking samples, namely the IDX Value30 and IDX Growth30 indices, representing value investing and growth investing, with a research period from January 30, 2014, to September 30, 2022. Then, the average Treynor and information ratios were calculated for 104 months. To obtain the average monthly Treynor ratio, the daily return data of the IDXV30 and IDXG30 indices, the daily average LPS interest rate, and the beta of IDXV30 and IDXG30 per month were used. To obtain the average information ratio, the daily return of IDXV30 and IDXG30 and the daily return of IHSG per month were used. The next stage is to compare the average Treynor ratio and information ratio to analyze and examine whether there is a difference and which is superior, value investing or growth investing. Then, the research continued by analyzing and reviewing the influence of stock selection ability and market timing of value and growth indexes to further explain the performance of the IDX Value30 and IDX Growth30 indices against the benchmark market or IHSG, especially in terms of stock selection ability and market timing. The model is used to study and analyze the influence of stock selection ability and market timing uses. After that, macroeconomic independent variables were added, namely inflation, IDR/USD exchange rate, and 5Yr Govt Bond Yield to expand the Henriksson-Merton model into the Arbitrage Pricing Theory model developed to see the influence of macroeconomic factors of inflation, IDR/USD exchange rate and 5Yr Govt Bond Yield.

Research Model

This research model consists of three models. The first model uses a mean difference test model to compare IDX Value30 against IDX Growth30 from its dependent variables, namely the Treynor ratio and information ratio. The second model is the stock selection and market timing ability model using the GARCH (1,1) method because if using Ordinary Least Square (OLS), heteroscedasticity problems will be found in IDX Growth30 with the Arch LM Test tool. The third model adds macroeconomic factors, namely inflation, IDR/USD exchange rate, and 5Yr Govt Bond Yield, to expand the Henriksson-Merton model into the Arbitrage Pricing Theory (APT)

Model to see the effect of inflation, IDR/USD exchange rate, and 5Yr Govt Bond Yield on the performance of IDX Value30 and IDX Growth30 with the GARCH (1,1) method because if using the Error Correction Model (ECM) then heteroscedasticity problems will be found in the long-term and short-term models of IDX Growth30.

The GARCH (1,1) model is used in this study because it can overcome the problem of heteroscedasticity found in the IDX Growth30 index data when using the Ordinary Least Square (OLS) and Error Correction Model (ECM) methods. The problem of heteroscedasticity, namely non-constant error variance, can cause regression estimates to be inefficient and unreliable. The GARCH (1,1) model is designed to handle time-varying volatility, making it very suitable for financial market analysis, whose volatility tends to change over time. By using GARCH (1,1), this study can accurately estimate the ability of stock selection and market timing and the influence of macroeconomic factors on the performance of the IDX Value30 and IDX Growth30 indices without being distorted by heteroscedasticity problems.

Data Processing Techniques
This study took samples of the IDX Value30 and IDX Growth30 indices from January 30, 2014, to September 30, 2022. This period was chosen because the Indonesia Stock Exchange formed IDX Value30 and IDX Growth30 on January 30, 2014, with a base value 100. Due to time, energy, and cost constraints, the last data taken was limited to September 30, 2022.

Types and Sources of Data
This study's type of data source is secondary data obtained from various reliable sources. The data used in the study is empirical data whose validity, reliability, and objectivity can be ascertained.

4. Results

Normality Test

Before conducting a difference test, it is necessary to ensure that the data is usually distributed. If the data is normally distributed, the difference test can be conducted using the Independent Sample T Test difference test method. If the data is not normally distributed, the difference test can be conducted using the Mann-Whitney difference test method. The following are the normality test results for the distribution of the Treynor ratio and information ratio data from IDXV30 and IDXG30 using the Kolmogorov-Smirnov Test method.

Table 1. Results of the Normality Test Using the Kolmogorov Smirnov Test on the Treynor Ratio and Information Ratio on IDXV30 and IDXG30

KS-Test Normality Test	Sig.	KS-Test Results	Hypothesis Testing Tools
Treynor Ratio			
IDXV30	0.200	Normally distributed	
IDXG30	0.004	Not normally distributed	Mann-Whitney Test
Information Ratio			Independent Sample t-Test
IDXV30	0.200	Normally distributed	
IDXG30	0.200	Normally distributed	Hypothesis Testing Tools

From the table above, the Sig. The value of the IDXV30 Treynor ratio is 0.200 > 0.05, so the data is normally distributed, but the Sig. The value of the IDXG30 Treynor ratio is 0.004 < 0.05, so the data is not normally distributed. Because one of the data is not normally distributed, the difference test uses the Mann-Whitney test. The Sig. value of the IDXV30 information ratio is 0.200 > 0.05, so the data is usually distributed, and the Sig. The value of the DXG30 information ratio is 0.200 > 0.05, so the data is also normally distributed. Because both data are normally distributed, the difference test uses the Independent Sample t-test.

Results of the Mann-Whitney Difference Test and Independent Sample T-Test

The Mann-Whitney difference test was conducted to test the Treynor ratio because one of the data groups was not normally distributed. The Independent Sample T-test was conducted to test the information ratio because both data groups were normally distributed.

Table 2. Results of the Difference Test of the Average Treynor Ratio and Information Ratio on IDXV30 and IDXG30

Variables	Difference Test Test Tools	p-value	Indeks IDXV30	Indeks IDXG30	Test Results
Monthly Average Treynor Ratio	Mann-Whitney	0.770	0.0003	0.0001	No significant difference
Monthly Average Information Ratio	Independent Sample t-Test	0.969	0.0095	0.0084	No significant difference

From the test results table above, after the Mann-Whitney difference test, the average Treynor ratio variable produces a p-value or Asymp Sig. (2-tailed) A value of 0.770> 0.05 means there is no difference in the average between the Treynor ratio IDXV30 and IDXG30. After the difference test with the Independent Sample t-test, the average information ratio variable produces a p-value or Sig. (2-tailed) A value of 0.969> 0.05 means there is no difference in the average between the information ratios of IDXV30 and IDXG30.

Heteroscedasticity Test

The heteroscedasticity test is conducted using the Arch LM Test.

Table 3. Heteroscedasticity Test Results of GARCH (1,1) Henriksson-Merton and APT Models on IDXV30 and IDXG30

Model	Indeks	*p-value Obs*R-squared*	Heteroscedasticity Test Results
Henriksson-Merton	IDXV30	0.4934	No heteroscedasticity
	IDXG30	0.7918	No heteroscedasticity
APT	IDXV30	0.9139	No heteroscedasticity
	IDXG30	0.6924	No heteroscedasticity

From the results of the heteroscedasticity test on IDXV30 with the GARCH (1,1) Henriksson-Merton and APT models, the p-value of Obs*R-squared ≥ 0.05 is obtained, so it can be concluded that the data is homoscedastic or there is no heteroscedasticity. From the results of the heteroscedasticity test on IDXG30 with the GARCH (1,1) Henriksson-Merton and APT models, the p-value of Obs*R-squared ≥ 0.05 is obtained, so it can be concluded that the data is homoscedastic or there is no heteroscedasticity.

GARCH (1,1) Henriksson-Merton Model Test Results

After passing the data stationary test, the next step is to test the GARCH (1,1) Henriksson-Merton model. To forecast market timing, a Dummy variable is used with the provision D = 1 if (Rm – Rf) > 0, namely, the market condition is rising or bullish, and D = 0 if (Rm – Rf) < 0, which means the market condition is falling or bearish.

Table 4. Results of the GARCH (1,1) Henriksson Merton Model Test

Index Performance (Rp-Rf)	Intercept		Rm-Rf		(Rm-Rf) *D	
	Coeff.	p-value	Coeff.	p-value	Coeff.	p-value
IDXV30	-0.0031	0.3782	1.3923	0.0000***	0.3510	0.0915*
IDXG30	-0.0003	0.8834	1.1231	0.0000***	-0.0397	0.7281

From the test results of the GARCH (1,1) Henriksson Merton model above, the intercept or α value or stock selection capability is -0.0031 for IDXV30 performance and -0.0003 for IDXG30 performance. However, when viewed from the significance value of the p-value from Bollerslev and Wooldridge, the α value on IDXV30 performance is not significant because the p-value is 0.3782> 0.05. The α value on IDXG30 performance is also not significant because the p-value is 0.8834> 0.05. The β1 coefficient of the variable (Rm-Rf) on the performance of the IDXV30 index is 1.3923, with a p-value from Bollerslev and Wooldridge of 0.0000 <0.01, it can be concluded that this variable (Rm-Rf) has a positive effect with a significance level of 1%. Furthermore, the β1 coefficient of the variable (Rm-Rf) on the performance of the IDXG30 index is 1.1231, with a p-value from Bollerslev and Wooldridge of 0.0000 <0.01, it can be concluded that the variable (Rm- Rf) has a positive effect with a significance level of 1%.

5. Discussion

Comparison of Average Treynor Ratio and Information Ratio

The data processing results show that the average Treynor Ratio and Information Ratio of IDXV30 are higher than IDXG30. This indicates that the average return of IDXV30 is higher than IDXG30, both against LPS interest rates and market returns. Treynor Ratio measures risk-adjusted returns by considering systematic risk (beta), while Information Ratio measures portfolio performance relative to the benchmark (IHSG). Positive values on both ratios indicate that both indices provide better returns than LPS interest rates and IHSG.

Beta Analysis and Relationship with Market Returns

The average beta of IDXV30 is higher than IDXG30, indicating that the movement of IDXV30 returns toward the market is more aggressive. Beats greater than one on both indices are based on the Security Market Line (SML) theory, which states that portfolios with higher betas will provide higher returns.

Significance of Average Differences and Subjective Factors

Although the average Treynor Ratio and Information Ratio of IDXV30 are higher, the difference is not statistically significant. This is due to the presence of the same stock constituents in both indices and the Indonesia Stock Exchange's subjectivity in portfolio formation. Emphasize that value investing involves a degree of subjectivity.

Comparison with Previous Research and Global Markets

The results of this study indicate that value investing (IDXV30) is not superior to growth investing (IDXG30) in the Indonesian capital market, like the findings of Rabbani and Muharram (2017). This contrasts with the global trend, where growth investing outperforms value investing (Cadamuro, 2023).

Factors Affecting Value Investing Performance

Lev & Anup (2022) identified accounting deficiencies and changes in economic fundamentals as causes of value investing failure. Arnott et al. (2021) also added that the definition of Book Value-price fails to capture important intangible assets.

Quantitative and Fundamental Analysis in Growth Investing

Kakebeeke (2020) explains the advantages of growth investing through increased profitability and low-interest rate conditions. However, the superior performance of growth investing in the long term is considered an exception. Maloney and Moskowitz (2021) argue that the relationship between value stock returns and interest rates is not very strong.

Outlook on the Future of Value Investing

Israel et al. (2021) stated that it is difficult to prove the death of value investing because fundamentals remain important in the long term. Weng & Butler (2022) indicated the revival of value investing since November 2020, supported by positive fundamental factors.

Analysis of the GARCH (1,1) Henriksson-Merton Model (Intercept/Alpha)
The insignificant intercept (alpha) value indicates that both indices do not have stock selection capabilities. These results align with the research of Amalia and Sihombing (2019) and Yana et al. (2017). Bialkowski et al. (2018) explained that market timing activities can cause the alpha value to be biased downwards.

GARCH (1,1) Henriksson-Merton Model Analysis (Beta 1)
A significant Beta 1 indicates that both indices are more aggressive than the JCI. These results are based on the SML theory, which states that portfolios with higher betas provide higher returns.

GARCH (1,1) Henriksson-Merton Model Analysis (Beta 2/Market Timing)
IDXV30 shows significant market timing ability, which is different from IDXG30. This result aligns with the research of Zimmermann and Zogg-Wetter (2020) and Amalia and Sihombing (2019). However, it also contradicts the results of Lucas et al. (2019) and Yana et al. (2017). Definition of Market timing according to Bodie et al. (2019) and Manurung (2018).

GARCH (1,1) Arbitrage Pricing Theory (APT) Model Analysis (Intercept/Alpha)
The APT model's insignificant intercept (alpha) value also indicates that both indexes lack stock selection ability. Adding macroeconomic factors causes the difference in alpha value with the Henriksson-Merton model.

GARCH (1,1) Arbitrage Pricing Theory (APT) Model Analysis (Beta 1)
A significant beta 1 in the APT model indicates that both indices are more aggressive than the JCI, although the value differs slightly from the Henriksson-Merton model.

GARCH (1,1) Arbitrage Pricing Theory (APT) Model Analysis (Beta 2/Market timing)
The beta 2 (market timing) value in the APT model is insignificant for both indices, in contrast to the findings in the Henriksson-Merton model for IDXV30.

GARCH (1,1) Arbitrage Pricing Theory (APT) Model Analysis (Inflation)
The inflation coefficient is positive but insignificant, contrary to Fama (2018). Research by Sofyani et al. (2019), Christian and Rustam (2018), and Nugraha et al. (2021) supports these results, while Assagaf et al. (2019) found a positive effect.

GARCH (1,1) Arbitrage Pricing Theory (APT) Model Analysis (IDR/USD Exchange Rate) The IDR/USD exchange rate significantly negatively affects IDXV30 but does not affect IDXG30. This result is consistent with Sivilianto & Endri (2019), Antonio et al. (2019), and Assagaf et al. (2019). Research supports the results that it did not have any effect on IDXG30. Wardani (2021) provides insight into stock movements influenced by foreign investors.

GARCH (1,1) Arbitrage Pricing Theory (APT) Model Analysis (5Yr Govt Bond Yield)
5Yr Govt Bond Yield has a significant positive effect on IDXV30 but does not affect IDXG30. These results are based on the discounted cash flow theory (Kakebeeke, 2020) and the findings of Maharditya et al. (2018). Research by Trinh et al. (2020), Andersson et al. (2018), and Lin et al. (2018) provide diverse views on the relationship between bond yield and stock returns.

6. Conclusion
Based on the results of the analysis of performance differences, stock selection, market timing, and the APT model using GARCH (1,1) on the IDX Value30 and IDX Growth30 indices during the period from January 30, 2014, to September 30, 2022, several main findings were obtained. First, there is no statistically significant difference in performance between the two indices based on the average

Treynor Ratio and Information Ratio, where both show positive values, indicating that both IDX Value30 and IDX Growth30 can provide better returns compared to LPS interest rates and IHSG returns. This shows that the superiority of growth investing strategies compared to value investing in the United States and Japanese capital markets in the 2007–2020 period did not occur in the Indonesian capital market. Second, based on the Henriksson-Merton GARCH (1,1) model, the two indices do not show the ability of in-stock selection. However, IDX Value30 shows the ability to market timing at a significance level of 10%, while IDX Growth30 does not show such ability. Third, the estimation results of the GARCH (1,1) APT model show that inflation does not affect the performance of both indices. The IDR/USD exchange rate has a significant negative effect on IDX Value30, while the 5-year government bond yield (5Yr Govt Bond Yield) only positively affects IDX Value30, both significant at the 1% level.

The implications of this finding indicate that investors in the Indonesian capital market cannot rely on value or growth investing strategies separately to gain performance advantages because both show relatively equal performance. However, IDX Value30 has advantages in terms of market timing and sensitivity to certain macroeconomic factors, such as exchange rates and government bond yields. Therefore, investors and portfolio managers who want to invest in the IDX Value30 index need to pay more attention to macroeconomic dynamics, especially fluctuations in exchange and medium-term bond interest rates. In addition, these results signal to regulators and market players the importance of developing instruments and strategies that are more adaptive to domestic conditions rather than simply adopting patterns from the global market.

Recommendation

Further research can be expanded by extending the observation period to capture the impact of long-term economic cycles and including additional macroeconomic variables using the GJR-GARCH or EGARCH models. In addition, daily return data on IDXV30 and IDXG30 is recommended to capture volatility more accurately, with LQ45 and BI7DRRR as references for market returns and risk-free rates. Research can also be directed to examine the constituents and weights of stocks in both indices to identify stocks that contribute the highest returns and the duration of their existence in the index.

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