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Alternative solution to achieve abnormal returns on the Indonesian Stock Exchange

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Abstract
Purpose: Investors continuously achieve abnormal returns (ARs) by adopting advanced strategies. Therefore, this study aimed to compare the performance of the IDX Value30 and IDX Growth30 indices, which represent value and growth investment strategies in Indonesia.
Method: The comparison in this study was conducted using return- and risk-adjusted variables represented by Information Ratios and Jensen's alpha. Based on this approach, Mann-Whitney and independent sample t-tests were performed using the SPSS program.
Results: Both the IDX Value30 and IDX Growth30 indices show positive abnormal returns. However, a comparison of returns, Information Ratios, and Jensen's alpha showed no significant differences between the IDX Value30 and IDX Growth30.
Limitations: The secondary data of IDX Value30 and IDX Growth30 indices were limited to the period from January 30, 2014, to September 30, 2022.
Contribution: IDX Value30 and IDX Growth30 could serve as references for investors and Investment Managers in executing value- and growth-investing strategies to outperform IHSG. Furthermore, Investment Managers could use these indices as benchmarks for issuing index funds or ETFs.
Novelty: This study uniquely compares the performance of value and growth investing using the IDX Value30 and IDX Growth30 indices, a comparison that has not been previously conducted.
Keywords: *IDX Growth30, Information Ratio, Jensen's Alpha, IDX Value30*
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1. Introduction

Capital markets provide infrastructure and mechanisms for investors to access investment opportunities (Ishak 2024). Investors should have a strong fundamental understanding in order to ensure informed stock selection decisions (Setiawan et al., 2023). Implementing meaningful decisions correctly is essential for achieving investment objectives, whereas incorrect decisions can lead to investment failures (Olayinka, 2022). The total returns obtained by investors from stock investments also include dividends and capital gains or losses (Rahmawati and Hadian, 2022). Therefore, investment decision-making and risk management are crucial for investors and portfolio managers. This process is facilitated in an efficient market in which stock prices accurately reflect potential risks. However, in an inefficient market, investors have the opportunity to discover effective investment methods (Khoa and Huynh, 2021).

Stock investors commonly use value and growth investing to achieve average abnormal returns. These two prominent investment strategies (Penman and Reggiani, 2018) generate abnormal returns when a

stock's price exceeds the market average (Indrayono, 2021). The term "Average Abnormal Return" refers to the average difference between actual and expected returns (Larasati & Kelen, 2021). Furthermore, the Capital Asset Pricing Model (CAPM) is used to calculate the expected return of a stock or an asset based on the risk (Hasan, Pelleng, & Mangindaan, 2019).

Value investing is an investment strategy that includes selecting stocks traded below their intrinsic or book value (Miller and Prondzinski, 2020). On the other hand, growth investing is based on the concept of investing in companies that are experiencing or expected to experience high growth rates. This further translates into selecting stocks with valuations above the intrinsic value (Perez, 2018).

Investors and experts often use the book-to-market ratio to sort stocks into value and growth categories (Khoa and Huynh, 2023). This is because Book value helps calculate whether a company is overvalued or undervalued compared to the market average (Soje & Tanko, 2024). Stocks with low price-to-earnings (P/E) and price-to-book (P/B) ratios are considered value stocks (Shradhanjali and Ananya, 2018). Growth stocks are overvalued stocks sold above the intrinsic value with impressive fundamentals such as high P/E, Price Earnings Growth (PEG), and P/E ratios, as well as higher profits and lower dividend yields (Akinde et al., 2019). These categories of investing gave rise to the widely known term value premium which refers to stocks with a high Book-to-Market or low P/E ratio outperforming others when considering returns or risk-adjusted variables (Pettengill, Chang, & Hueng, 2014).

Common approaches to measuring the portfolio performance of managers or investments include risk-adjusted return models such as Sharpe, Treynor, and Jensen's Alpha (Robiyanto, 2017) and Information Ratios (Venugopal & Sophia, 2020). Jensen's Alpha measures the ability of a portfolio manager above the expected rate. The Information Ratios assess the excess returns for risk compensation and investors' skills in using knowledge to generate returns relative to a benchmark (Ahmed & Khan, 2019).

The Indonesian Stock Exchange publishes two factor indices, IDX Value30 and IDX Growth30, which represent value- and growth-investing strategies in Indonesia. Publications on value premiums in foreign countries began with Fama and French (1998), who concluded that value stocks outperformed growth stocks in 12 of 13 countries from 1975 to 1995. Several studies on value premiums have been conducted in Asia, and Drew and Veeraraghavan (2001) find evidence of a value premium in Malaysia from December 1992 to December 1999. Yen, Sun, and Yan (2004) also concluded that value premium existed in Singapore from 1975 to 1997, particularly in the first two years after portfolio formation though it did not persist for five years. Furthermore, Brown, Rhee, and Zhang (2008) found evidence of value premium in Singapore, Hong Kong, and South Korea from 1990 to 2005.

A publication by Alfonso Perez (2017) found evidence of value premium in Thailand using the MSCI Thailand Value and Growth Indices with a sample from December 1999 to 2016. Another publication conducted by Perez (2018) did not find strong evidence of a value premium in the Philippines from 1998 to 2017 using the MSCI Philippines Value and Growth Indices. Similarly, Perez (2018) found no strong evidence of a value premium in South Korea from 1997 to 2016 using the MSCI South Korea Value and Growth Indices. A publication in China by Lam, Dong, and Yu (2019) found further evidence of a value premium with a sample from 1995 to 2015.

Gunawan, Sujana, and Suputra (2017) found higher Sharpe Ratios for value stocks compared to growth stocks in the Indonesian Stock Exchange from 2011 to 2015. Rabbani and Muharam (2016) further found no significant difference in returns and Sharpe Ratios between value and growth stocks in the Indonesian Stock Exchange from 2002 to 2015. On the other hand, Willim (2019) showed that value and growth stocks produced lower average returns and Treynor ratios than growth stocks on the Indonesian Stock Exchange.

In recent years, new doubts have evolved regarding the value factor, as the value premium has not materialized since the global financial crisis (Blitz & Hanauer, 2020). In the mid-2010s, the financial industry realized a significant decline in the value premium in the United States (U.S) and Japanese

stock exchanges (Cadamuro & Iwaisako, 2023). Over the past ten years, growth stocks in the U.S stock market have outperformed value stocks with average annual returns of 7.8% (DiCiurcio, Lepigina, Kresnak, & Davis, 2021). Value investing which is further defined by Fama and French (1998) with the high minus low book-to-market ratios (HML) has underperformed growth investing since 2007, leading to a 55% loss by mid-2020 in the U.S stock market (Arnott, Harvey, Kalesnik, & Linnainmaa, 2021). This raises questions regarding the viability of value investing, leading to debates and attention among investors and intellectuals (Israel et al., 2020). Therefore, this study aims to compare the performance of IDX Value30 and IDX Growth30, which represent value and growth investments in Indonesia. It further focuses on determining whether the global phenomenon of IDX Value30 exceeding IDX Growth30 occurs on the Indonesian Stock Exchange, based on the Information Ratio and Jensen's alpha performance metrics.

2. Literature review

2.1. Value and Growth Stocks

Value and growth stocks are contrasted in nature, and the difference between these two types of stocks lies in their intrinsic values (Shradhanjali & Ananya, 2018). Value stocks generally possessed low Price-to-Earnings (P/E), Price-to-Book (P/B), and Price-to-Cashflow (P/C) ratios while growth stocks showed high P/E, P/B, and P/C ratios (Schießl, 2014).

2.2. Value and Growth Investing

Value investing is a stock investment strategy in which investors favor stocks with low P/E ratios or similar metrics, whereas growth investing has the opposite effect (Alfonso Perez, 2018). According to Damodaran (2012), growth investing includes investments in companies based on how the market valued the growth potential of the organization rather than examining past investments. Value investors find undervalued assets and tend to invest in mature companies with substantial assets, even when their performance is low. On the other hand, growth investors believed that competitive advantage lies in assessing the value of growth and were more inclined to find bargains.

2.3. Value Premium

Value premium is often referred to as a value anomaly, and is used to describe the phenomenon in which companies with high book-to-market ratios outperform those with lower ratios (Sharma & Jain, 2020). Furthermore, two interpretations can be used to explain the value premium: the rational asset pricing approach and the behavioral finance perspective. Supporters of the rational approach argued that the value premium was compensation for bearing risk because value stocks are generally considered riskier. The behavioral finance approach suggests that value stocks generate superior returns because investors consistently overestimate future earnings of growth compared to value stocks. Furthermore, investors make systematic errors in predicting the future earnings growth of value stocks and exhibit pessimism about their prospects (Doukas et al. 2004).

2.4. IDX Value30 and IDX Growth30 Indices

This study used indices from the Indonesian Stock Exchange, namely, IDX Value30 and IDX Growth30, as the sample. The IDX Value30 measures the performance of 30 stocks with low valuation prices, high transaction liquidity, and good financial performance. On the other hand, the IDX Growth30 assesses the performance of 30 stocks with a trend of strong growth in net income and revenue relative to price, along with high transaction liquidity and good financial performance.

Based on this sample, the capped free-float-adjusted market capitalization weighting method is used to evaluate the IDXV30 and IDXG30 indices. During evaluation, the weight of each stock in the index was capped to a maximum of 15%. Table 1 lists the common selection criteria for the IDXV30 and IDXG30 portfolios.

Table 1. General Selection Criteria for IDXV30 and IDXG30

	IDXV30	**IDXG30**

Universe	- Constituents of the IDX80 Index	- Constituents of the IDX80 Index
Initial Eligibility	- Positive net income and equity - No extreme values of Price-to-Earnings (P/E) and Price-to-Book Value (PBV) ratios	- Positive net income - No extreme values of the Price-to-Earnings (P/E) ratio
Selection Process	- 30 stocks with the lowest P/E and PBV ratios	- 30 stocks with the highest P/E_{trend} and PSR_{trend} scores
Data for Selection	- P/E and PBV calculations for each stock refer to the latest Financial Statements published by the Issuer with net income calculated using the trailing 12 months	- P/E_{trend} and PSR_{trend} calculations for each stock refer to the latest and historical 3-year Financial Statements published by the Issuer with net income and sales calculated using the trailing 12 months

Source: https://www.idx.co.id/media/8851/panduan-indeks-idxv30-idxg30.pdf (2024)

2.5. Portfolio Theory

According to Reilly, Brown, and Leeds (2019), a fundamental assumption of portfolio theory reported that investors aimed to maximize the return on the total investment for a certain level of risk. Markowitz's (1952) portfolio model explains the expected return on portfolio assets and the risk measure. A portfolio comprising of all risky assets and diversification is essential for reducing risk. This risk occurs when the return on the investment differs from the expected return. The difference between future and present amounts is called the return, whereas the expected return is the anticipated investment for investors.

Bodie, Kane, and Marcus (2021) further assert two types of risk in stock investments: non-systematic (diversifiable and unique) and systematic (market and non-diversifiable). Non-systematic risk arises from the internal conditions of a company and can be eliminated through portfolio diversification. By contrast, systematic risk originates from macroeconomic or market conditions and cannot be eliminated, affecting all types of stocks without exception.

Based on this evidence, standard deviation or total risk refers to the risk associated with fluctuations in the price movement of a portfolio from one period to another. The standard deviation was used to measure both systematic and non-systematic risks. Market or systematic risk is referred to as beta, which describes the relationship between a portfolio and market returns. Furthermore, the Risk-Free Rate represents the return that investors would receive when investing in assets such as T-bills and money market funds. T-bills are widely used as a reference for risk-free assets because of their short-term nature, making bills less sensitive to fluctuations in interest rate changes.

2.6. Portfolio Performance Theory

Several indicators are typically used to measure portfolio performance by comparing returns and risks (risk-adjusted returns), including the following.

2.6.1 Information Ratios

According to Israelsen (2005), Information Ratios, originally called Appraisal Ratios, were first introduced by Treynor and Black (1973). The Information Ratio measures the difference in average portfolio returns against the portfolio benchmark, divided by the standard deviation of the difference in average returns. The average excess return in the numerator shows an investor's ability to use expertise and information to generate portfolio returns that differ from those of the benchmark. The denominator of the Information Ratio measures the amount of residual non-systematic risk investors take to achieve excess returns.

2.6.2 Jensen's Alpha

Khurram, Hamid, and Javeed (2020) asserted Jensen's Alpha ratio to measure risk-adjusted performance and was calculated as the average portfolio return above the return estimated by the CAPM. A greater alpha value suggests that portfolio performance consistently provides excess returns over the expected returns from the CAPM.

2.7 Theoretical Thinking Framework

This study uses the following theoretical framework:

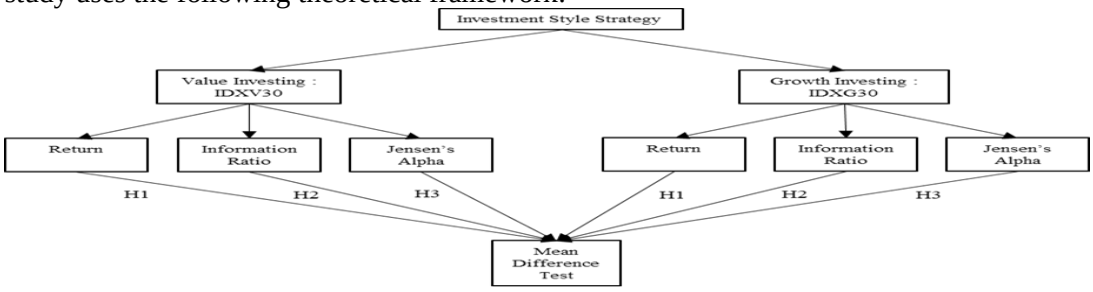

Figure 1. Theoretical Thinking Framework

2.8 Study Gap

Previous studies comparing value and growth investing in various countries have been conducted extensively, but this area remains relatively unexplored in Indonesia. Almost all previous studies on the Indonesian Stock Exchange used samples in the form of portfolios subjectively formed by experts. Consequently, this study aims to analyze the differences between IDX Value30 and IDX Growth30 based on Information Ratios and Jensen's alpha, a comparison that has not been done before.

2.9 Hypothesis

Hasnawati (2010) examined the average return between value and growth stocks through the formation of a portfolio using the P/E approach on the Indonesian Stock Exchange. The conclusion was that the return on value stocks was not higher than that on growth stocks. Similarly, Rabbani and Muharam (2016) examined the average return between value and growth stocks before and after the global financial crisis through the formation of portfolios using the P/E, P/B, and P/CF approaches on the Indonesian Stock Exchange. The study concludes that return value stocks do not differ significantly from growth value stocks. Nugroho (2017) further tested stocks listed on the Kompas 100 index through portfolio formation using P/E, Dividend Yield, and ROE approaches, leading to higher returns for value stocks than for growth stocks. Willim (2019) differentiates portfolios into small growth, small value, big growth, and big value categories, concluding that return value stocks are lower than return growth stocks. Based on these findings, we propose the following hypothesis:

$H1_0$: $\mu1 = \mu2$, and there is no difference in the average returns between IDXV30 and IDXG30.

$H1_a$: $\mu1 \neq \mu2$: There is a difference in the average returns between IDXV30 and IDXG30.

$H2_0$: $\mu1 = \mu2$. No average difference was observed in the Information Ratio between IDXV30 and IDXG30.

$H2_a$: $\mu1 \neq \mu2$: There is an average difference in the Information Ratio between IDXV30 and IDXG30.

Willim (2019) further proved that Jensen's alpha value stocks were lower than that of growth stocks.

$H3_0$: $\mu1 = \mu2$. There was no average difference in Jensen's Alpha between IDXV30 and IDXG30.

$H3_a$: $\mu1 \neq \mu2$ There is an average difference in Jensen's Alpha between IDXV30 and IDXG30.

3. Research Methodology

The study sample used the IDX Value30 and IDX Growth30 indices, which were launched by the Indonesian Stock Exchange, with data spanning from January 30, 2014, to September 30, 2022. The variables used included returns, information ratios, and Jensen's alpha for each index. This study further used secondary data in the form of IDX Value30 and IDX Growth30 index prices, and the LPS interest rate. The IDX Value30 and IDX Growth30 index price data were obtained from the Indonesian Stock Exchange and Bloomberg, whereas LPS interest rate information was sourced from the Lembaga

Penjaminan Simpanan website. The analytical method included comparing the average performance of returns, information ratios, and Jensen's Alpha between IDX Value30 and IDX Growth30.

The return of each index was calculated using the following formula:

$$RIndex_t = \frac{Index_t - Index_{t-1}}{Index_{t-1}}$$

Where $Index_t$ represented the closing index price of day t or month t; $Index_{t-1}$ denoted the closing index price of day t-1 or month t-1.

The return standard deviation is calculated using the following formula:

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

Where x_i represented the daily index return or monthly index return; $\bar{x}$ denoted the average daily or monthly return of the index; n served as the number of samples.

Subsequently, Beta was calculated using the following formula:

$$\beta_i = \frac{Cov(R_i, R_m)}{Var(R_m)}$$

Where $Cov(R_i, R_m)$ represented the covariance of return index i with market return, and $Var(R_m)$ denoted the variant of the market return.

The information ratios were calculated using the following formula:

$$IR_p = \frac{\bar{R}_p - \bar{R}_b}{\sigma_{p-b}}$$

Where $\bar{R}_p$ represented the average daily return index; $\bar{R}_b$ denoted the average daily return benchmark (IHSG); σ_{p-b} signified the standard deviation of the difference between the return index and return benchmark (IHSG).

Jensen's Alpha was calculated using the following calculation formula.

$$\alpha_p = \bar{R}_p - \left[\bar{R}_f + \beta_p(\bar{R}_m - \bar{R}_f)\right]$$

Where $\bar{R}_p$ represented the average daily index return; $\bar{R}_f$ denoted the daily average of the LPS interest rate; β_p signified the daily beta index; $\bar{R}_m$ served as the average daily market return (IHSG).

The return index data used in this study consist of daily and monthly return data. Daily return data were used to calculate the monthly Information Ratio and Jensen's alpha value. The average daily LPS interest rate during the study period was calculated as the average risk free rate. Furthermore, the standard deviation of the difference between the daily return index and the daily benchmark return was calculated and processed to obtain the monthly Information Ratio. The daily beta index per month was calculated and processed to determine Jensen's alpha value during the study period.

Based on this evidence, an average difference test was conducted using SPSS to compare the performance of the two indices. Each dataset was tested for normality using the Kolmogorov-Smirnov (KS) test before conducting statistical analysis and testing the hypothesis of the average difference. When the data were normally distributed after the KS test, an independent-sample t-test was used to test for significant differences between the averages of the two indices. When the KS test showed that the data were not normally distributed, the Mann-Whitney non-parametric test was used to test the hypothesis. When the estimated p-value was less than 0.05, H_0 was rejected and H_a was accepted.

4. Results and discussions

The IDX Value30 (IDXV30) and IDX Growth30 (IDXG30) indices were used as samples to represent the value and growth investing strategies on the Indonesian Stock Exchange. The study period spanned from January 30, 2014, to September 30, 2022. This period was chosen because the Indonesian Stock

Exchange established the IDX Value30 and IDX Growth30 indices, with a base value of 100, on January 30, 2014. The end date of September 30, 2022, was determined based on time, effort, and cost constraints. Table 2 presents the stock constituents, composition weights, and closing prices of shares in the IDXV30 and IDXG30 indices for September 30, 2022.

Table 2. Constituents, Weights, and Share Prices in the IDXV30 and IDXG30 indices as of 30 September 2022

IDXV30			IDXG30		
Ticker	**Weight %**	**Price**	**Ticker**	**Weight %**	**Price**
BMRI IJ	16.7605	9,425	BBCA IJ	16.1807	8,550
ASII IJ	15.0781	6,625	BBRI IJ	14.5953	4,490
ADRO IJ	11.5558	3,960	TLKM IJ	14.5320	4,460
UNTR IJ	11.1293	32,825	BBNI IJ	8.2804	8,975
INDF IJ	5.8956	6,025	ADRO IJ	6.4280	3,960
PGAS IJ	4.1167	1,755	UNTR IJ	6.1907	32,825
INKP IJ	3.8080	9,050	AMRT IJ	5.6719	2,390
ITMG IJ	3.6558	41,425	MDKA IJ	5.5789	3,940
PTBA IJ	3.6106	4,170	TOWR IJ	3.6929	1,235
BUKA IJ	3.1720	272	EMTK IJ	3.5110	1,520
CTRA IJ	1.8346	950	TBIG IJ	2.2204	2,830
JPFA IJ	1.7035	1,515	ITMG IJ	2.0335	41,425
GGRM IJ	1.6353	22,925	ESSA IJ	1.2446	995
BSDE IJ	1.5611	905	MAPI IJ	1.0703	1,060
MNCN IJ	1.5342	830	ISAT IJ	1.0190	7,250
PWON IJ	1.5161	452	BFIN IJ	0.9794	1,150
TKIM IJ	1.4469	7,375	PWON IJ	0.8434	452
BBTN IJ	1.4001	1,485	MEDC IJ	0.7205	915
MEDC IJ	1.2953	915	SMRA IJ	0.6601	595
INDY IJ	1.1846	3,000	INDY IJ	0.6589	3,000
SRTG IJ	0.9795	2,650	SIDO IJ	0.5967	710
TINS IJ	0.7815	1,335	HRUM IJ	0.5597	1,780
ENRG IJ	0.7539	256	SRTG IJ	0.5448	2,650
AALI IJ	0.7247	8,250	LPPF IJ	0.4838	3,850
LSIP IJ	0.6698	1,080	TINS IJ	0.4347	1,335
ERAA IJ	0.6660	414	ENRG IJ	0.4193	256
SMDR IJ	0.3970	2,240	ASSA IJ	0.2530	1,270
TAPG IJ	0.3929	655	SMDR IJ	0.2208	2,240
DSNG IJ	0.3822	484	DOID IJ	0.1995	376
DOID IJ	0.3587	376	AGII IJ	0.1756	2,350

Source: Bloomberg, Processed Data (2024)

The price movements of the IDX Value30 and IDX Growth30 indices between January 30, 2014, and September 30, 2022, are shown in Figure 2.

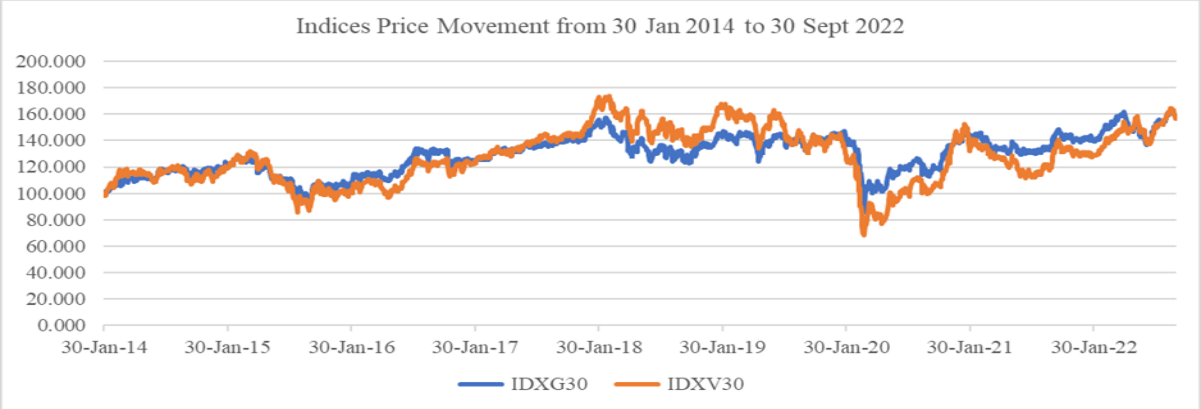

Figure 2. IDXV30 and IDXG30 Indices Price Movement from 30 Jan 2014 to 30 Sept 2022
Source: IDX, Bloomberg, Processed Data (2024)

4.1. Descriptive Statistics

Table 3 presents a comparison of the average monthly Return, Information Ratio, and Jensen's Alpha from the IDXV30 and IDXG30 indices for the period January 30, 2014, to September 30, 2022. The average IDXV30 monthly return was 0.00646873, which was higher than the average IDXG30 monthly return of 0.00548254.

Table 3. Return, Information Ratio, and Jensen's Alpha on IDXV30 and IDXG30

	Hypothesis	**Indices**	
		IDXV30	**IDXG30**
Return	H1		
Average Monthly Return		0.00646873	0.00548254
Standard Deviation of Monthly Return		0.064479751	0.045566361
Minimum Monthly Return		-0.282181	-0.170971
Maximum Monthly Return		0.150340	0.104258
Information Ratio	H2		
Average Monthly Information Ratio		0.00950138	0.00840702
Standard Deviation of Information Ratio		0.224616549	0.181156674
Minimum Monthly Information Ratio		-0.489832	-0.488838
Maximum Monthly Information Ratio		0.511388	0.520118
Jensen's Alpha	H3		
Average Monthly Jensen's Alpha		0.00003326	0.00000716
Standard Deviation of Jensen's Alpha		0.001518636	0.000876122
Minimum Monthly Jensen's Alpha		-0.004033	-0.002319
Maximum Monthly Jensen's Alpha		0.003412	0.002918

Source: Processed Data with SPSS (2024)

Data for the daily return index, daily return benchmark, and standard deviation of the difference between daily index returns and daily benchmark returns per month for the period January 30, 2014, to September 30, 2022, were processed to calculate the monthly Information Ratio. This calculation produced 104 monthly information ratio data points for each index. In addition, the monthly Jensen's alpha for each index was determined by processing the daily return data, daily average Risk-Free Rate, daily beta index, and daily market return (IHSG) per month. This process resulted in 104 monthly Jensen's alpha data points for each index using the average daily Risk-Free Rate of 0.000165964. During the study period, the average monthly Information Ratio for IDXV30 was 0.00950138 which was greater than the average monthly Information Ratio for IDXG30 showing 0.00840702. Similarly, the average monthly Jensen's Alpha for IDXV30 was 0.00003326, which was higher than the average monthly Jensen's Alpha for IDXG30, signifying 0.00000716.

4.2. Normality Test

Table 4 shows the results of the normality test using the KS test. For the IDXV30 monthly return, a significance value of 0.139 > 0.05 showed that the data were normally distributed. In contrast, the IDXG30 significance value of 0.001 < 0.05, indicated that the data were not normally distributed. Because one dataset was not normally distributed, the Mann-Whitney test was used to test the monthly return index hypothesis. Furthermore, the significance value of the KS test for the monthly Information Ratio for both indices was 0.200 > 0.05, implying that both datasets were normally distributed. An independent-sample t-test was used to test this hypothesis. The KS Test significance value for the monthly Jensen's Alpha of both indices also showed 0.200 > 0.05, indicating a normal distribution; thus, so for testing the hypothesis was tested using the Independent Sample t-test.

Table 4. Normality Test Using the Kolmogorov Smirnov Test on Monthly Returns, Monthly Information Ratio, and Monthly Jensen's Alpha on IDXV30 and IDXG30

Normality Test (KS Test)	Significance	Result of KS Test	Hypothesis Testing Tool
Monthly Return			
IDXV30	0.139	Normally distributed	Mann-Whitney Test
IDXG30	0.001	Not normally distributed	
Monthly Information Ratio			
IDXV30	0.200	Normally distributed	Independent
IDXG30	0.200	Normally distributed	Sample t-test
Monthly Jensen's Alpha			
IDXV30	0.200	Normally distributed	Independent
IDXG30	0.200	Normally distributed	Sample t-test

Source: Processed Data with SPSS (2024)

4.3. Hypothesis Testing

A hypothesis test was conducted on the average difference in monthly Returns, Information Ratio, and Jensen's alpha. The Mann-Whitney U test was used to evaluate the differences in the average monthly return. An independent sample t-test was used to assess differences in the average monthly Information Ratio and monthly Jensen's alpha.

Table 5. Difference Test Results for Average Monthly Return, Average Monthly Information Ratio, and Average Monthly Jensen's Alpha on IDXV30 and IDXG30

Variables	Test of Difference		Indices		Test Results
	Test Tool	p-value	IDXV30	IDXG30	
Average Monthly Return	Mann-Whitney Test	0.830	0.00646873	0.00548254	There was no significant difference
Average Monthly Information Ratio	Independent Sample t-test	0.969	0.00950138	0.00840702	There was no significant difference
Average Monthly Jensen’s Alpha	Independent Sample t-test	0.880	0.00003326	0.00000716	There was no significant difference

Source: Processed Data with SPSS (2024)

The tests conducted on the variables of average monthly returns, information ratio, and Jensen's alpha all produce p-values greater than 0.05. Therefore, H10, H20, and H30 are considered acceptable. There was no significant difference in the average monthly return, average monthly Information Ratio, or average monthly Jensen's Alpha between IDXV30 and IDXG30.

4.4. Discussion

Table 5 shows that the IDXV30 average monthly return is higher than that of IDXG30. This results from the more effective strategy for selecting value stocks in the IDXV30 portfolio compared to the strategy for selecting growth stocks in the IDXG30 portfolio. The average monthly Information Ratio value of IDXV30 is also higher than that of IDXG30 because of the greater difference between the

average IDXV30 Return and the average return benchmark (IHSG) compared to IDXG30. Consequently, the average Return of IDXV30 surpasses that of IDXG30. Based on the results obtained, Jensen's alpha monthly IDXV30 is higher than IDXG30, which is attributed to the higher Return of IDXV30, despite the average IDXV30 beta index being higher than the average IDXG30 beta index during the study period.

However, the hypothesis testing showed that there was no statistically significant difference in the average values. This insignificance may originate from several constituent stocks shared between the IDXV30 and IDXG30 portfolios, albeit with different compositional weights. Another potential reason is the limitation imposed by the Indonesian Stock Exchange, which capped the weight of the constituent stocks to a maximum of 15%. The subjective process of determining and selecting stock constituents in the IDXV30 and IDXG30 index portfolios of the Indonesian Stock Exchange may also play a role.

Lev and Srivastava (2019) suggest two main reasons for the failure of value investing. First, deficiencies in company accounting lead to systematic identification errors in value stocks, particularly growth stocks. Second, changes in economic fundamentals have significantly slowed the overhaul of value and growth stocks, negating previous gains from value investing strategies. The recent poor performance of value investing is attributed to the price-to-book-value definition, which fails to capture the importance of intangible assets and the falling valuation of value stocks relative to growth stocks (Arnott et al. 2021).

Kakebeeke (2020) conducted a study on the U.S stock market, explaining that quant and fundamental analysis could account for the advantages of growth investing. Quantitative data further show the increased profitability of growth stocks compared with value stocks. Additionally, the Discounted Cash Flow analysis suggests that reducing risk-free interest rates benefits growth stocks more than value stocks do. Kakebeeke suggested that the superior performance of growth stocks from 2007 to 2020 was an exception. Maloney and Moskowitz (2020) further argue that the relationship between value stock returns and interest rates is weak.

According to Israel et al. (2020), value investment is difficult to prove. Based on this evidence, fundamentals are crucial for generating stock returns, but there are periods when stock prices are less connected to fundamental information, leading to poor value-investing performance. These periods have occurred in the past, are now occurring, and are more likely to occur again in the future. However, predicting when the market will not correlate with fundamentals is challenging, thus complicating the application of value-investing strategies.

In November 2020, value began to outperform growth again, possibly signifying a milestone in the return of value dominance after 13 years of poor performance. This event showcased the late 1990s, after which value enjoyed sustained advantage. Positive fundamental catalysts, such as tighter monetary policy, large and coordinated fiscal stimuli, extreme positioning, widespread valuations, and strong profit-for-value trends, support this shift (Weng & Butler, 2022). These opinions provide insights into why the value premium phenomenon is absent in the Indonesian Stock Exchange, where value performance does not differ from growth during the period January 30, 2014, to September 30, 2022.

Respondent information typically includes statistical characteristics such as age, gender, experience, and educational level. Based on the data, the distributed, returned, unreturned, unprocessed, and processed questionnaires were as follows:

5. Conclusion

5.1 Conclusion

In conclusion, the data analysis and discussion showed that both the average Information Ratio and Jensen's Alpha for IDX Value30 and IDX Growth30 were positive. However, there was no significant difference in the average monthly Return, Information Ratio, and Jensen's Alpha between IDX Value30 and IDX Growth30. These results show that current global investment trends were not showcased on

the Indonesian Stock Exchange. Consequently, there is no significant difference between the strategies of value and growth investing in the Indonesian stock exchange.

5.2 Implication

The IDX Value30 and IDX Growth30 can serve as tools for investors to achieve abnormal returns. Investment Managers could further consider creating Exchange-Traded Funds (ETFs) or Index Funds based on IDX Value30 and IDX Growth30 or use these indices as benchmarks for implementing value and growth investing strategies on the Indonesian Stock Exchange.

5.3 Limitation

Due to constraints in time, resources, and costs, this study focused solely on analyzing differences in the performance of return, Information Ratio, and Jensen's Alpha between IDX Value30 and IDX Growth30 for the period from January 30, 2014, to September 30, 2022.

5.4 Suggestion

Future studies should extend the observation period to provide a more comprehensive analysis of the impact of changing interest rate trends on value- and growth-investment performance. Additionally, market timing and Arbitrage Pricing Theory (APT) models offer a more thorough examination of these investment strategies.

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