

## **An Empirical Analysis of Value and Growth Stocks Performance in Bursa Malaysia**



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**ABSTRACT:** This study compares the performance of value and growth portfolios in Bursa Malaysia from January 2011 to January 2021 using the book-to-price (B-P) and the earning-to-price (E-P) as valuation proxies. It also compares the performance within small and large market capitalisations. The results affirmed that the growth portfolios beat the value portfolios regarding return across the entire sample. When market capitalisation is considered, the results confirm that the growth effect is still present in the small-cap portfolios. However, the growth effect of large-cap portfolios varies depending on how they are constructed. The value effect is presented in portfolios created by applying the E-P; however, when the portfolio is constructed using the B-P, the value impact is replaced by the growth effect. Furthermore, except for the high E-P portfolio, the size effect is presented in all portfolios from the same category in Bursa Malaysia. As a result, whether the market is subject to the value or growth effect, the results will vary based on the ratios utilised when constructing the portfolio. Furthermore, the results indicate that the best diversification method for an investor in Bursa Malaysia is to establish a portfolio that contains both value and growth portfolios in various market capitalisations. The results of this research might be attributed to the research period, as Bursa Malaysia was affected by the market recovery from the 2007/2008 financial crisis and economic shocks during the beginning periods of the COVID-19 epidemic. Also, some Asian markets suffered disruptions in 2015 and 2016 as a result of the Chinese market's volatility.

**KEYWORDS:** Growth Portfolio, Value Portfolio, Bursa Malaysia, Portfolio, Size Effect.

### **I. INTRODUCTION**

The distinction of stocks into value and growth is one of the most basic principles in the financial market, which shapes the investment and management of portfolios (Penman & Reggiani, 2018). Value stocks are generally described by their low valuation ratios, which suggest that they might be undervalued (Glasgow, 2022). Whereas growth stocks have a higher value due to expected market and earnings growth (Chang et al., 2023). Many investors apply various ratios to differentiate the two categories, focusing the most on the metrics that directly affect how the investment will be approached. However, fund managers might employ both fundamental stock investment strategies: value or growth, for diversification. Stock classification comes with different vantage points and, as such, is evaluated with different ratios.

Book-to-price (B-P) ratio is one of the more common ones used in empirical research as a measure of a firm's fundamental value versus the market price (see, Guerard & Mark, 2021; Abate, Basile & Ferrari, 2024; Geczy & Guerard, 2024). It is especially relevant in long-term investment classification (Fama & French, 1992). It is particularly useful in cases where market imperfections and price changes make valuation difficult, as it is less prone to alterations than earnings-based metrics (Lakonishok, Shleifer & Vishny, 1994). The earning-to-price (E-P), on the other hand, assesses the willingness of investors to pay for a unit of earnings, making it straightforward (Basu, 1977). As earning amounts are updated from time to time, E-P reacts more sensitively to changes in economic conditions and market forces, depicting a current scenario of the performance of stocks. Using the E-P ratio is also wide in previous studies (see, Penman & Reggiani, 2018; AlAli et al., 2024; Yeh, 2024). In stock exchanges like Bursa Malaysia, where investor sentiment and earnings volatility play an important role in affecting prices, the E-P ratio indicates a clearer depiction of stock classification and anticipated returns.

Classification methods for stocks have an effective impact on investment choices, yet the utilization of various valuation measures in alternative emerging markets has yet to be investigated well. The B-P and E-P ratios are capable of yielding a more accurate measure of market valuation and earning potential compared to conventional approaches. Furthermore, market

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capitalization differentials (small-cap vs. large-cap) can affect share performance and risk-adjusted performance. The majority of previous studies have not focused much on the association between valuation ratios and market size, thereby diminishing our understanding of the behavior of the different segments of stocks in the Malaysian financial system.

The BP and EP ratios are utilised in this study to label stocks as value stocks and growth stocks from 1 January 2011 to 1 January 2021 on Bursa Malaysia. These two measures are informative in the emerging markets since they capture the extent of value pricing and possible earnings to be constructed upon it. Secondly, the research categorizes stocks based on the capitalization method (large cap vs. small cap) to study relative valuation of the various segments. This is a more in-depth analysis of the impact of market capitalisation on stock categorisation and subsequent return behaviour. This research period focusses on stock valuation patterns, market recovery following the financial crisis of 2007/2008, and economic shocks in the early phases of the COVID-19 pandemic. The overall goals of the present research are:

1. To contrast return differences between growth and value stocks with the B-P and E-P ratios.
2. To compare the performance of value stocks and growth stocks in small-cap and large-cap to observe what effect size has on stock returns.

## II. LITERATURE REVIEW

In 1970, Fama published his well-known paper on the efficient stock market hypotheses. Since then, many studies have appeared that test these hypotheses. Studies on efficient markets have yielded contradicting results, with evidence pointing to market inefficiency. Basu's 1977 publication is among these studies. Between April 1957 and March 1971, in terms of return and abnormal return, Basu concluded that stocks with a lower P/E outperformed stocks with a higher P-E in the US. Also, Banz (1981) found that stocks belonging to small-cap firms exhibited a higher return than stocks belonging to large-cap firms. Yen, Sun and Yan (2004) in their research on the Singapore stock market, found that value stocks consistently perform better than growth stocks in Singapore, regardless of whether they are measured by P-B, P-E, or price-to-cashflow ratios. This adds to the evidence that a value premium exists in Singapore; however, it may not last as long as in other nations.

By employing the book value-to-market value ratio (BVTMV) in Bursa Malaysia, Rohuma (2023) concluded that the performance of value and growth portfolios was identical. Still, when market capitalisation is considered, the results from the full analysis and the GFC confirm that the value effect occurs in both large-cap and small-cap categories. These results do not support the evidence reached by Vasconcelos and Martins (2019) who also used the BVTMV, but they indicated that growth portfolios had a better return than value portfolios. in Brazil from 1997 to 2017. This result is supported by Bevanda, Zaimović and Arnaut–Berilo (2021). However, the study of Vasconcelos and Martins (2019) might be arguable, since it excluded the stocks of all companies belonging to the financial sector, and value stocks are common in the financial industry (Jackson, 2025). This exclusion may have affected the result in some way, especially since the financial sector is known for its large market value.

In the Italian market, Gagliolo and Cardullo (2020) found that the return given by value stocks was significant and durable in small companies, whereas in large companies, the phenomena were restricted and only appeared in the early years of the twenty-first century. As a result, it appears that the value premium in the Italian market may represent a mispricing explanation. Bauman, Conover, and Miller (1998) conducted a study in 21 countries for 10 years. They employed four different valuation ratios to distinguish between value and growth stocks. The authors asserted that value stocks performed better than growth stocks on a total return and risk-adjusted return for the period, as well as in the majority of individual years and national markets. However, when growth stocks outperformed the value stocks, the difference was minimal. They also discovered a considerable size effect. Furthermore, value stocks outpaced growth stocks in every firm capitalisation category except the smallest. Moreover, according to Koner (2024), since 1934, investors have pursued value stocks as an investment strategy (Graham & Dodd, 1934). Compared to growth stocks, Gulen et al. (2011) emphasised that the return of value stocks is more crushed by recessions. Lakonishok et al. (1994) revealed that value stocks often outperform growth stocks when the market is down. Neves et al. (2021) concluded that the performance of value and growth stocks varies across different stages of GFC.

As noted from the previous studies, although there is a tendency for value stocks to outperform growth stocks in both developed and developing countries, especially in long-term study periods, some other studies have shown the opposite during short periods. Generally speaking, the debate among researchers about the performance of value and growth stocks has not ended and it is not expected to end. The differences between researchers may be due to the difference in the market being researched and/or the difference in the way of distinguishing value stocks from growth stocks and/or the difference in study periods and/or the difference in the economic conditions of the market during the study. Therefore, this study examines the performance of value and growth portfolios in Bursa Malaysia from 1 January 2011 to 1 January 2021. This is an attempt to help address the open topic of whether value or growth stocks perform better.

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## III. METHODOLOGY

The Taiwan Economic Journal, the Malaysian Central Bank, which is called Bank Negara Malaysia, and Bursa Malaysia are the main providers of the data in this research. During the study period, which extends from 1 January 2011 to 1 January 2021, this research used the monthly data on stocks listed on Bursa Malaysia instead of weekly or daily data, since it exhibited less market volatility. Moreover, to mitigate the impact of excessive values on the outcomes, this study employs the Winsorisation method described in Van Rensburg and Robertson (2003) to eliminate outliers. Hence, this research replaces 0.5% outliers at the top and bottom with the 99.5th and 0.5th percentiles, respectively. Moreover, the data for this research is lagged for three months; this is to avoid what is called the “look-ahead bias”. According to DeFusco et al. (2015), look-ahead bias is a sort of bias that happens when a study uses data that was not accessible or known during the period under consideration. Lagging data for a few months is common in financial studies (see Bektic et al., 2019; Rohuma & Alzwi, 2025).

This research employs the B-P and E-P ratios to differentiate between the value and growth of stocks. At the beginning of each month, stocks are sorted according to their B-P and E-P ratios. The stocks in the top 30% of these ratios are considered value stocks, while those in the bottom 30% are considered growth. According to B-P and E-P, the value and growth equally weighted portfolios are constructed for the entire sample. However, market capitalisation differentials (small-cap vs. large-cap) may affect stock performance. Hence, this research divided the stocks according to their market capitalisation into small and large caps to avoid the size effect. Hence, value and growth equally weighted portfolios are also constructed in the small and large-cap segments. It is worth noting that at the start of each month, any stock with the largest 50% market capitalisation is classified as a large-cap stock. While any stock in the bottom half is considered a small-cap stock. The rebalance date of all portfolios is conducted at the beginning of each month. Besides, for a fair comparison, this research excludes any stock that does not have book value, price value, or earnings value.

### Performance Evaluation

This research adopted the same method used by Hsieh (2015) in his study on the South African stock market. The reason for using the same method is that both markets are considered emerging markets with similar financial structures. This helps to recognise whether the results in both markets are the same or whether market-specific characteristics affect the findings. Therefore, the performance evaluation of the value and growth portfolios that are used in this research is as follows:

1. **Average Return:** The monthly arithmetic return is used to evaluate the portfolio's performance. It is equal to the total monthly returns during the period divided by the number of months for the same period.
2. **Standard Deviation:** The portfolio standard deviation reflects the dispersion of upward and downward returns relative to the portfolio's average return. The portfolio standard deviation measures the portfolio's entire risk (both systematic and unsystematic).
3. **Sharpe ratio (1966):** The Sharpe ratio calculates the additional return that a portfolio may generate for each unit of total risk represented by the standard deviation. Equation 1 shows how to calculate the Sharpe ratio for portfolio p:

$$SR_p = \frac{r_p - r_f}{\sigma_p} \dots\dots\dots \text{Equation 1}$$

Where,  $r_p$  is the monthly average return for a portfolio p;  $r_f$  is the monthly average return for the risk-free rate; and  $\sigma_p$  is the standard deviation for a portfolio p.

The reason for employing the Sharpe ratio instead of other risk-adjusted performance is because portfolios that are used in this research may not be well diversified as they are biased towards value or growth stocks, and hence, the unsystematic may not be avoided. Therefore, this research used the Sharpe ratio to measure risk-adjusted return rather than other measures that consider the beta coefficient. As mentioned earlier, the Sharpe ratio considers the total risk of a stock, both systematic and unsystematic while the Treynor measure, for example, takes only the systematic risk, which is measured by the beta coefficient.

Furthermore, the average return for value and growth stocks is also calculated in different economic regimes in bullish and bearish markets. The month where the return of the market proxy exceeded the return of the risk-free proxy is considered a bullish market, while the opposite is considered a bearish market. The researcher uses the return of the 3-month Treasury bills issued by Bank Negara Malaysia as the risk-free rate. Furthermore, it is fair to use a market proxy from the same pool that the sub-portfolios are constructed from. Hence, the return of all stocks in this research is considered as a market proxy. This study also uses the Pearson correlation test to examine the relationship between return movements of various types of value and growth portfolios. This helps to investigate whether different portfolios represent different investment styles. Finally, the research conducts a Sample paired t-test to determine whether the difference in average returns across various portfolios is statistically significant. The significant level of the previous two tests is at the 0.05 level.

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### IV. RESULTS

Panels (a) through (c) in Table 1 present the results of the risk and return characteristics and Sharpe ratio for value and growth portfolios during the entire sample, the small-cap segment, and the large-cap segment, respectively.

**Table I: Results of the Performance Statistics for Value and Growth Portfolios.**

<b>PANEL (a) Performance Statistics for Entire Sample.</b>					
<b>Performance Statistics</b>		<b>Value Portfolios</b>		<b>Growth Portfolios</b>	
	<b>Market Proxy</b>	<b>High B-P</b>	<b>High E-P</b>	<b>Low B-P</b>	<b>Low E-P</b>
<b>Return</b>	1.00%	0.76%	0.54%	1.70%	1.45%
<b>Std. Dev.</b>	3.954%	4.09%	4.33%	3.92%	5.15%
<b>Sharpe Ratio</b>	0.1931	0.1271	0.0706	0.3741	0.2361

<b>PANEL (b) Performance Statistics for Small Cap Portfolios.</b>					
<b>Performance Statistics</b>		<b>Value Portfolios</b>		<b>Growth Portfolios</b>	
	<b>Market Proxy</b>	<b>High B-P</b>	<b>High E-P</b>	<b>Low B-P</b>	<b>Low E-P</b>
<b>Return</b>	1.00%	0.89%	1.02%	1.87%	1.71%
<b>Std. Dev.</b>	3.954%	3.95%	4.26%	7.00%	4.81%
<b>Sharpe Ratio</b>	0.1931	0.1647	0.1844	0.2329	0.3059

<b>PANEL (c) Performance Statistics for Large Cap Portfolios.</b>					
<b>Performance Statistics</b>		<b>Value Portfolios</b>		<b>Growth Portfolios</b>	
	<b>Market Proxy</b>	<b>High B-P</b>	<b>High E-P</b>	<b>Low B-P</b>	<b>Low E-P</b>
<b>Return</b>	1.00%	0.38%	1.26%	1.69%	1.04%
<b>Std. Dev.</b>	3.954%	4.63%	5.17%	3.66%	6.11%
<b>Sharpe Ratio</b>	0.1931	0.0316	0.1973	0.3976	0.1310

The panels' results show that all portfolios had positive long-term returns despite experiencing losses as a result of economic disruptions, particularly in some Asian markets during 2015 and 2016, which were caused by the volatility of the Chinese market (Wang et al., 2019). At the end of the examination period, the early stages of the COVID-19 pandemic hurt all portfolios. The results in panel (a) emphasise that the growth effect is presented in Bursa Malaysia as the return of growth portfolios (low B-P, low E-P) outperforms their counterparts in value portfolios (high B-P, high E-P). This is also supported by higher Sharpe ratios. However, the higher return in a low E-P is accompanied by a higher risk as calculated by standard deviation compared to a high E-P. Accordingly, low E-P generates more returns per unit of risk than high E-P. By contrast, the higher return in low B-P is accompanied by a lower risk than high B-P. This is preferable for the investor who invests in low B-P, as this investment generates higher returns with lower risk, and hence, it generates the highest Sharpe ratio.

The results in panel (b) show that in the small-cap segment, the return of value portfolios (high B-P and high E-P) is lower than that of growth portfolios (low B-P and low E-P). However, the value portfolios are safer than growth portfolios due to their smaller standard deviation. The risk-adjusted return outcomes, as calculated by the Sharpe ratio, show that the value portfolios underperform the growth portfolios. Nevertheless, the results in panel (c) indicate that there are differences in the performance according to relative valuation proxies (B-P or E-P). For the portfolios that are constructed on the E-P, the value portfolio performs better than the growth portfolio in all performance measures (return, risk, and Sharpe ratio). On the contrary, the results in the same panel show that the growth portfolio enjoys a higher return, a lower risk, and a higher Sharpe ratio compared to the value portfolio when they are constructed on the B-P.

Based on the results of Table 1, it can be concluded that the growth portfolio outperforms the value portfolio in terms of return during the entire sample. When the market cap of the portfolios is taken into account, the result clearly shows that the growth effect is still evident in portfolios with small-cap portfolios. As for large-cap portfolios, the growth effect differs depending on the method of constructing the portfolios. In portfolios constructed based on the E-P, the value effect is present;

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however, when constructing the portfolio according to B-P, the value effect disappears in favour of the growth effect. Furthermore, the size effect is presented in all portfolios, except for the high E-P. Equally important, in the same portfolio category, the results in Table 1, except for the high E-P portfolio, show a clear size effect in Bursa Malaysia, since the return of the different types of small portfolios produces a higher return than large portfolio counterparts.

Table 2 shows the results of the difference in mean return between the value and growth portfolios as constructed on the B-P and the E-P. The mean difference is conducted by employing the Sample paired t-test.

**Table II: Results of the Mean Different Returns for Value and Growth Portfolios.**

Sample Paired t-test	Entire Sample			Small-Cap Portfolios			Large-Cap Portfolios		
	Mean Different	T	Sig. (0.05)	Mean	t	Sig. (0.05)	Mean	t	Sig. (0.05)
High B-P vs. Low B-P	-0.009	0.018	0.002*	-0.010	0.079	0.008*	-0.013	0.059	0.006*
High E-P vs. Low E-P	-0.009	0.029	0.003*	-0.007	0.062	0.006*	0.002	0.078	0.008*

\*Significant at the 0.05 level.

Regardless of whether the B-P or E-P ratios constructed the value and growth portfolios, the results in Table 2 indicate that for the entire sample and small-cap portfolios, the mean return of the growth portfolios is significantly higher in comparison to the mean return of value portfolios. In large-cap portfolios, the results also differ depending on whether the portfolio is constructed based on the B-P or the E-P. For the B-P portfolios, the results are like the results of the entire sample and small-cap portfolios, where the mean return of the growth portfolios is significantly higher than the mean return of the value portfolios. Yet, for the E-P portfolios, the results are the opposite, as the mean return of the value portfolio is significantly higher than the mean return of the growth portfolio. Hence, in five out of six portfolios in the table, the mean return of the growth portfolios is significantly higher in comparison to the mean return of the value portfolios.

To investigate whether the results may change according to different economic regimes, Table 3 shows the mean return of the growth and value portfolios for the entire sample as well as for the small and large-cap portfolios. The table also presents the significant difference in the mean return.

**Table III: Results of the Bullish and Bearish Market Returns for Value and Growth Portfolios.**

Portfolio Performance	B-P Portfolios			E-P Portfolios		
	High B-P	Low B-P	P. Value	High E-P	Low E-P	P. Value
<b>PANEL (a): Entire Sample</b>						
Mean Return: Bull	0.797%	1.755%	0.000*	0.471%	1.492%	0.024*
Mean Return: Bear	0.705%	1.637%	0.003*	0.638%	1.401%	0.019*
<b>PANEL (b): Small-Cap Portfolios</b>						
Mean Return: Bull	3.122%	1.958%	0.251	3.354%	1.764%	0.049*
Mean Return: Bear	-2.074%	1.744%	0.001*	-2.070%	1.638%	0.000*
<b>PANEL (c): Large-Cap Portfolios</b>						
Mean Return: Bull	2.784%	1.690%	0.153	3.991%	1.145%	0.008*
Mean Return: Bear	-2.800%	1.697%	0.000*	-2.368%	0.895%	0.000*

\*Significant at the 0.05 level.

As Table 3 clarifies, the results in the table are inconsistent in the bullish market. Only for the entire sample, the mean returns of the growth portfolios (low B-P and low E-P) generate higher significant mean returns than the value portfolios (high B-P and high E-P). However, for the value and growth portfolios within the small-cap portfolios and large-cap portfolios, the results show that the mean return for the value portfolios is higher than their growth counterparts. Still, it is only significant in the E-P

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portfolios. On the other hand, the results in the table are consistent through the period of the bearish market, where the growth portfolios (low B-P and low E-P) exhibited a higher mean return than the value portfolios (high B-P and high E-P) in the entire sample, the small-cap portfolios, and the large-cap portfolios.

Interestingly, despite the small and large cap portfolios' value portfolios having a negative return (loss) during the bearish market, the growth portfolios have positive returns in the same period. Moreover, when comparing the difference in the mean return in the bearish market, the results in the table for the entire sample, the small-cap portfolios, and the large-cap portfolios show that the mean return of the growth portfolios is significantly higher at a 0.05 level compared to the mean return of the value portfolios. Thus, the growth effect exists in Bursa Malaysia during the bearish period.

To investigate the correlation between return movements in different types of value and growth portfolios. Table 4 shows the return correlation matrix for value and growth portfolios throughout the entire sample, including large-cap and small-cap portfolios. Noticing that the Pearson correlation is used in this test.

**Table IV: Results of the Return Correlation Matrix for Value and Growth Portfolios.**

Portfolios			Market Proxy	Entire Sample				Large-Cap				Small-Cap				
				Value		Growth		Value		Growth		Value		Growth		
				High B-P	High E-P	Low B-P	Low E-P	High B-P	High E-P	Low B-P	Low E-P	High B-P	High E-P	Low B-P	Low E-P	
Market Proxy			1													
Entire Sample	Value	High B-P	0.023	1												
		High E-P	-0.050	0.939	1											
	Growth	Low B-P	0.025	0.898	0.858	1										
		Low E-P	0.089	0.955	0.821	0.881	1									
Large-Cap	Value	High B-P	0.960	-0.018	-0.090	-0.011	0.066	1								
		High E-P	0.923	-0.060	-0.137	-0.030	0.020	0.915	1							
	Growth	Low B-P	0.038	0.865	0.812	0.980	0.863	0.002	-0.013	1						
		Low E-P	0.118	0.904	0.755	0.859	0.967	0.102	0.055	0.847	1					
Small-Cap	Value	High B-P	0.970	0.079	0.009	0.078	0.127	0.909	0.883	0.080	0.162	1				
		High E-P	0.941	0.030	-0.046	0.020	0.086	0.874	0.899	0.019	0.114	0.961	1			
	Growth	Low B-P	-0.036	0.754	0.768	0.811	0.702	-0.052	-0.077	0.689	0.674	0.035	-0.002	1		
		Low E-P	0.080	0.955	0.831	0.872	0.986	0.052	0.010	0.849	0.915	0.118	0.081	0.707	1	



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It is noted from the results in the table that the market proxy has a high correlation with value portfolios in the large-cap and small-cap portfolios where the beta coefficient is between 0.923 and 0.970. Thus, the return movements between the market and value portfolios in different market capitalisations are high. This strongly suggests that these portfolios closely mirror overall market movements. By contrast, the correlation between market proxy and growth portfolios in the large-cap and small-cap portfolios is weak and even reaches a negative value (-0.036). This gives evidence that their return performance is different from the market proxy performance. Concerning the entire sample, the results show that the value and growth portfolios also have a weak correlation with the market. The reason is often that it contains all stocks, whether small or large-cap, as well as the growth effect.

Within the entire sample, the results in the table show that there are strong correlations across different portfolios, whether growth or value portfolios, where the lowest correlation value is 0.821. Hence, the return movements of the value portfolios move in the same direction as the return movements of the growth portfolios. This may give the impression that diversification according to value and growth portfolios may not have a significant impact on Bursa Malaysia in the entire sample.

Regarding the large and small-cap portfolios, there is a clear difference in the results whether the correlation is between portfolios of the same category (value portfolios or growth portfolios) or whether the correlation is between value portfolios vs. growth portfolios. Except for the value portfolios in the entire sample, value portfolios (high B-P, high E-P) show that the correlation in returns between them is strong. The same results can also be observed in the growth portfolios (low B-P, low E-P). As for the correlation between the growth portfolios on the one hand and the value portfolios on the other hand, the results show that the correlation coefficients between them are weak and even reach negative values. This result is expected since value and growth portfolios are structured in a reverse way. Value portfolios represent the top 30% of the B-P and E-P ratios, while growth portfolios represent the bottom 30% of the same ratios. The reason for the high correlation coefficients between value portfolios (high B-P, high E-P) and between growth portfolios (low B-P, low E-P) is often because the value portfolios and growth portfolios consist of the same stocks in each category.

From the results from the return correlation matrix, it can be noted that, in general, the best diversification for an investor in Bursa Malaysia is mostly to construct a portfolio combining value and growth portfolios in different market capitalisations, not to construct a growth and value portfolio regardless of the market size of the stock.

The last analysis in this research is the trade-off between the risk and return. This is to make the picture clearer regarding the risk and return for the different portfolios. Where each portfolio return is plotted against its risk. The X-axis represents the mean return while the Y-axis represents the risk as measured by the standard deviation. Figure 1 illustrates the risk and return trade-off for each value and growth portfolio in the entire sample as well as in the small and large-cap segments. The market proxy is also observed in this analysis.

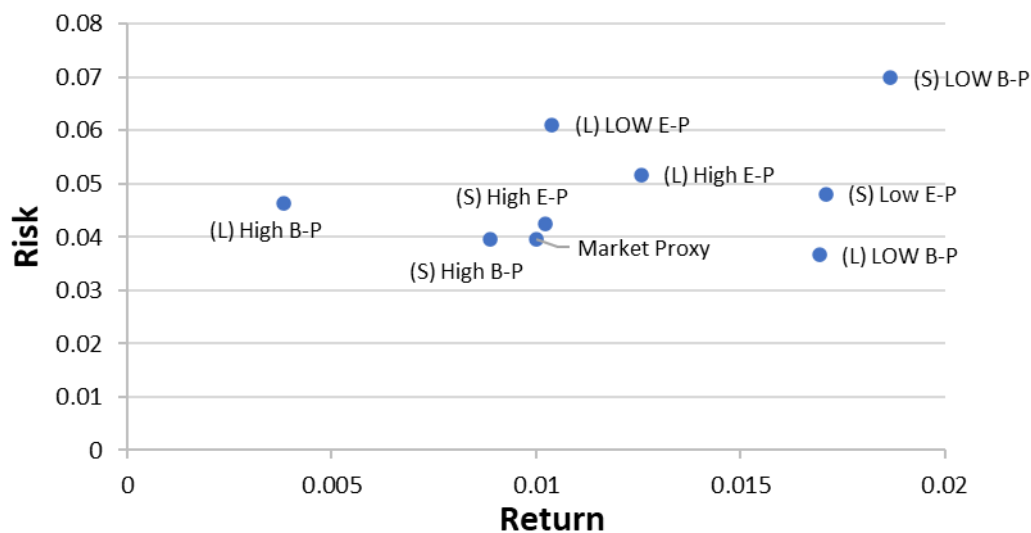


Figure 1: Risk and Return Trade-Off for Value and Growth Portfolios.

From the results in the figure, it is observed that the growth portfolios (low B-P and low E-P) in the small-cap category generate the highest return but are also accompanied by high risk, where the low B-P exhibited the highest risk compared to other portfolios. Hence, these portfolios have a chance to achieve a higher significant return, but with a higher risk. In the large-cap category, the low E-P exhibited a high risk with an average return. Conversely, the low B-P is considered the safest cushion as it has the lowest risk compared to other portfolios; its return is also considered high. Yet, for the small-cap portfolio, it is

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noted that the results of value portfolios (high B-P and high E-P) are comparable, as their risk and return are close. However, the results for the value portfolios in the large-cap portfolio are not consistent, as the high B-P has the lowest return with modest risk, while the high E-P enjoys an average return that is close to a high return but is accompanied by an average risk also close to a high risk.

Furthermore, in the same category, the figure shows a clear tendency for small-cap portfolios to achieve higher returns than large-cap portfolios. Thus, except for the high E-P portfolio, the size effect is confirmed in Bursa Malaysia since the small-cap portfolios of the same category enjoy a higher return than the large-cap portfolios.

Concerning the market proxy, the results indicate that it is almost in the middle of the figure in terms of return and risk. As such, it is considered a useful benchmark for the other portfolios. The market proxy is characteristic of a low-risk portfolio, as it is more diverse than other portfolios

## V. CONCLUSION

This study compares the performance difference in both value and growth portfolios on Bursa Malaysia from 1 January 2011 to 1 January 2021, utilising the B-P and the E-P as relative valuation proxies. This paper also makes a comparison of the value and growth portfolios within small and large market capitalisation. Thus, the value and growth portfolios are constructed in the entire sample and the small and large-cap segments. The results show that the growth effect is present over the entire sample and small-cap segment, and also in portfolios constructed on the B-P in the large-cap segment. This result, in general, is supported by Vasconcelos and Martins (2019); Bevanda, Zaimović and Arnaut–Berilo (2021); Bischof (2021); and Jackson (2025). However, for portfolios constructed on the E-P, the growth effect disappears in favour of the value effect.

Unlike the results of the study conducted by Lakonishok et al. (1994) and Chan and Lakonishok (2004), who asserted that value stocks outperform growth stocks during the bearish period, the results of this study conclude that the growth effect exists in Bursa Malaysia during the bearish period and in the bullish period in the entire sample. Contrary to the above results, during the bullish period in the small and large-cap segments, the value effect is presented, but only significant in the E-P portfolio. Therefore, there is a clear trend that the results differ depending on the portfolio composition method between growth and value portfolios. The portfolio formed using the B-P ratio has a clear tendency towards the growth effect, while the portfolio formed using the E-P ratio has a tendency towards the value effect. This result is similar to Andy's (2015) result. Therefore, at this point, the state of the Malaysian and South African financial markets is similar. Accordingly, the market-specific characteristics between the two countries do not affect the findings. On the other hand, Rahoma's (2023) study proved the existence of a value effect in Bursa Malaysia for portfolios formed using the BVTMV. Therefore, it can be concluded that whether the market is exposed to the value or growth effect, the result will differ depending on the ratios used when constructing the portfolio.

Furthermore, according to the findings, the greatest diversification strategy for an investor in Bursa Malaysia might be through building a portfolio that includes both types of portfolios, value and growth, in various market capitalisations. Along similar lines with the results of Andy (2015) and Rohuma (2023), the presence of the size effect is confirmed at Bursa Malaysia.

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