Incorporating Growth to Value Investing

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Various investing strategies can basically be classified into two types, namely value investing and growth investing. In value investing investors search for stocks with price less than their intrinsic value. In growth investing investors search for stocks with high growth potential regardless of price. It is common for such stocks to have higher price compared to their intrinsic value. Thus value investing and growth investing are usually mutually exclusive. Various researches have shown that value investing strategies yield higher return compared to growth strategies. However the existence of large number of mutual funds and investors who follow growth strategy shows that this strategy is not without merit. This study develops a method where growth factor is incorporated to value investing and thus profiting from both high growth potential and low price. The result of this study will be interesting for stock investors and mutual fund.

Keywords - **Value investing, Growth investing, Stock return**

I. INTRODUCTION

In Stock investment, value investing and growth investing follows a very different strategy in attempt to earn superior return. In value investing, investors search for stocks that are sold below their intrinsic value. Due to correction of mispricing, in the future it is expected that the price will increase due to its convergence with the stock intrinsic value. Stocks are traded below their intrinsic value due to negative market sentiments that usually happen to companies that experience certain distress and fall out of favor in the market. Fama and French (1992) thus argued that value stock represents stocks that have higher risk, and hence should show higher return. Lakonishok, Shleifer, and Vishny (1994) found that higher return in value stocks are due to reversal of valuation error by investors. Valuation error happens when investors overreact to negative news about a company or extrapolate past negative performance, resulting in lower stock price. When overreaction and extrapolation are proved to be wrong, stock price returns to normal level. LaPorta (1996) and DeChow and Sloan (1997) expressed similar arguments. DeBond and Thaler (1985) found overreaction itself is quite common in stock market.

Growth stocks are associated with successful companies whose earnings, and stock price, are expected to continue growing. This type of stocks enjoys a good favor in the market. In growth investing, investors search for stocks with high growth potential regardless of price. Jegadeesh, Kim, and Lee (2004) shows that large number of analyst follows this strategy.

As value stocks are generally out of favor, while growth stocks are in good favor with the market, growth and value stocks are thus usually mutually exclusive. Interestingly, two strategies that are diametrically opposed can be both profitable and earn higher than average return. It is interesting then, to examine a method whereby both strategies can be fused into a single method. Value and growth, instead of being mutually exclusive, can complement each other. The method should yield a higher return compared to purely growth or value strategy.

II. METHODOLOGY

The object of the research is stocks from Kompas 100 in period of February 2010. Kompas 100 is a stock index consisting one hundred stocks from Indonesian Stock Exchange that are judged to be liquid and has good fundamental. The index is reviewed every six months, in February and August. The purpose in using this index is to weed out any small and inactive stocks.

This research consists of two parts. In the first part it is shown that both value investing and growth investing strategy works, in the sense that they provide above average return. In the second part, a method is developed where value investing is combined with growth investing strategy. The result of this method is then compared to the result of purely value strategy and purely growth strategy.

Value Investing Strategy

Most common parameters used in value investing strategy are Price Earning Ratio (PER) and Price to Book Ratio (PBR). The lower PER or PBR, the cheaper stock price compared to its intrinsic value, and thus a better choice of investment. In this research, PER is calculated by dividing stock price in the beginning of the year with net income of the previous year. PBR is calculated by dividing stock price in the beginning of year with book value of total asset of the previous year.

To check the effectiveness of value investing strategy, starting from beginning of 2010, PER of the one hundred stocks from February 2010 Kompas 100 index are calculated. The stocks are then shorted from lowest to highest PER. Twenty five of stocks with lowest PER are formed to a portfolio called Low PER. Twenty five stocks with highest PER are also formed to a portfolio called High PER. Annualized return are then calculated at the end of 2010, 2011, 2012, and 2013 for both portfolios,

and each of the results are compared. If value investing strategy is effective, Low PER portfolio should yield higher return compared to High PER portfolio. PER is calculated again at beginning of 2011, and the stocks are re-shorted using the new PER value. Annualized returns for both Low PER and High PER are again calculated for years 2011, 2012, and 2013 and compared. The process are repeated for the year 2012 (to check annualized return 2012 and 2013) and 2013 (to check annualized return 2013). The complete process will yield total of 10 comparisons between Low PER and High PER. The entire process is then repeated using PBR to replace PER.

Growth Investing Strategy

Parameter used in growth investing strategy is two years growth of Earning per Share (EPSg). Earning per share (EPS) is calculated as net income in previous year divided by number of shares. Thus 2010 EPSg is the annualized growth of 2008 EPS to 2010 EPS. As in previous case, starting from beginning of 2010, EPSg of the one hundred stocks from February 2010 Kompas 100 index are calculated. Some stocks with negative net income are taken out of the sample. The stocks are then shorted from highest to lowest EPSg. Twenty five percent of stocks with highest EPSg are formed to a portfolio called High EPSg. Twenty five percent of stocks with lowest EPSg are also formed to a portfolio called Low EPSg. Annualized return are then calculated at the end of 2010, 2011, 2012, and 2013 for both portfolios, and each of the results are compared. If growth investing strategy is effective, High EPSg portfolio should yield higher return compared to Low EPSg portfolio. EPSg is calculated again at beginning of 2011, and the stocks are re-shorted using the new EPSg value. Annualized returns for both High EPSg and Low EPSg are again calculated for years 2011, 2012, and 2013 and compared. The process are repeated for the year 2012 (to check annualized return 2012 and 2013) and 2013 (to check annualized return 2013). The complete process will yield total of 10 comparisons between High EPSg and Low EPSg.

Growth Incorporated Value Investing Strategy

Stocks from Low PER and Low PBR portfolios are ranked based on their EPSg. Some stocks with negative net income are excluded from the sample. Half of the stocks with highest EPSg are used to form portfolio of stocks with low PER and high growth called HG Low PER. Same process with Low PBR portfolio to form portfolio called HG Low PBR. The returns of HG Low PER are then compared to returns of Low PER and High EPSg. Returns of HG Low PBR are also compared to returns of Low PBR and High EPSg. If incorporating growth to value strategy is successful, HG low PER and HG low PBR portfolios should yield the higher return compared to low PER and low PBR portfolios (purely value strategy) and High EPSg (purely growth strategy).

III. RESULTS

A. Value Investing Strategy

Following tables show comparison between the return of Low PER portfolio and High PER portfolio. The results are divided into four tables, each for a particular year in which a portfolio is formed.

Table I

PER 2010 Portfolio

	1 year return	2 years annualized return	3 years annualized return	4 years annualized return
Low PER	90.74%	38.41%	31.39%	20.17%
High PER	46.99%	15.92%	8.45%	6.17%

Table II

PER 2011 Portfolio

	1 year return	2 years annualized return	3 years annualized return
Low PER	29.66%	25.40%	10.97%
High PER	3.73%	-10.52%	-6.34%

Table III

PER 2012 Portfolio

	1 year return	2 years annualized return
Low PER	40.69%	9.90%
High PER	1.59%	-1.11%

Table IV

PER 2013 Portfolio

	1 year return
Low PER	12.14%
High PER	-3.28%

All comparisons between Low PER portfolio and High PER portfolio show that Low PER portfolio yield higher return. The difference in return is somewhat decreasing in longer timeframe.

Following tables show comparison between the return of Low PBR portfolio and High PBR portfolio. The results are divided into four tables, each for a particular year in which a portfolio is formed.

Table V

PBR 2010 Portfolio

	1 year return	2 years annualized return	3 years annualized return	4 years annualized return
Low PBR	50.31%	36.39%	33.58%	22.08%
High PBR	41.52%	15.71%	9.64%	4.52%

Table VI

PBR 2011 Portfolio

	1 year return	2 years annualized return	3 years annualized return
Low PBR	23.00%	15.81%	6.58%
High PBR	2.87%	0.07%	-2.54%

Table VII

PBR 2012 Portfolio

	1 year return	2 years annualized return
Low PBR	19.47%	7.81%
High PBR	8.06%	0.06%

Table VIII

PBR 2013 Portfolio

	1 year return
Low PBR	2.30%
High PBR	2.54%

All comparisons between Low PBR portfolio and High PBR portfolio except one in PBR 2013 portfolio show that Low PBR portfolio yield higher return.

B. Growth Investing Strategy

Following tables show comparison between the return of High EPSg portfolio and Low EPSg portfolio. The results are divided into four tables, each for a particular year in which a portfolio is formed.

Table IX

EPSg 2010 Portfolio

	1 year return	2 years annualized return	3 years annualized return	4 years annualized return
High EPSg	96.66%	34.59%	24.90%	15.17%
Low EPSg	37.31%	22.94%	13.49%	5.63%

Table X

EPSg2011 Portfolio

	1 year return	2 years annualized return	3 years annualized return
High EPSg	27.90%	22.60%	11.39%
Low EPSg	-31.24%	-29.77%	-21.89%

Table XI

EPSg 2012 Portfolio

	1 year return	2 years annualized return
High EPSg	25.26%	11.18%
Low EPSg	15.51%	-3.74%

Table XII

EPSg 2013 Portfolio

	1 year return
High EPSg	6.34%
Low EPSg	-3.76%

All comparisons between High EPSg portfolio and Low EPSg portfolio show that High EPSg portfolio yield higher return.

C. Growth Incorporated Value Investing Strategy

Following tables show comparison among the return of HG Low PER portfolio, Low PER portfolio, and High EPSg portfolio. The results are divided into four tables, each for a particular year in which a portfolio is formed.

Table XIII

2010 Portfolio

	1 year return	2 years annualized return	3 years annualized return	4 years annualized return
HG Low PER	140.60%	41.17%	40.61%	27.26%
Low PER	90.74%	38.41%	31.39%	20.17%
High EPSg	96.66%	34.59%	24.90%	15.17%

Table XIV

2011 Portfolio

	1 year return	2 years annualized return	3 years annualized return
HG Low PER	43.22%	40.02%	18.32%
Low PER	29.66%	25.40%	10.97%
High EPSg	27.90%	22.60%	11.39%

Table XV

2012 Portfolio

	1 year return	2 years annualized return
HG Low PER	42.43%	18.45%
Low PER	40.69%	9.90%
High EPSg	25.26%	11.18%

Table XVI

2013 Portfolio

	1 year return
HG Low PER	15.54%
Low PER	12.14%
High EPSg	6.34%

All comparisons among the return of HG Low PER portfolio, Low PER portfolio, and High EPSg portfolio show that HG Low PER portfolio yield the highest return.

Following tables show comparison among the return of HG Low PBR portfolio, Low PBR portfolio, and High EPSg portfolio. The results are divided into four tables, each for a particular year in which a portfolio is formed.

Table XVII

2010 Portfolio

	1 year return	2 years annualized return	3 years annualized return	4 years annualized return
HG Low PBR	85.48%	42.07%	35.06%	23.49%
Low PBR	50.31%	36.39%	33.58%	22.08%
High EPSg	96.66%	34.59%	24.90%	15.17%

Table XVIII

2011 Portfolio

	1 year return	2 years annualized return	3 years annualized return
HG Low PBR	7.84%	30.07%	17.63%
Low PBR	23.00%	15.81%	6.58%
High EPSg	27.90%	22.60%	11.39%

Table XIX

2012 Portfolio

	1 year return	2 years annualized return
HG Low PBR	43.02%	26.59%
Low PBR	19.47%	7.81%
High EPSg	25.26%	11.18%

Table XX

2013 Portfolio

	1 year return
HG Low PBR	34.15%
Low PBR	2.30%
High EPSg	6.34%

All comparisons among the return of HG Low PBR portfolio, Low PBR portfolio, and High EPSg portfolio show that HG Low PBR portfolio yield the highest return.

IV. DISCUSSION

Tables 1 to 4 shows that Low PER portfolio yield higher return compared to High PER portfolio, supporting the effectiveness of value investing strategy with PER as its parameter. Tables 5 to 8 shows that Low PBR portfolio yield higher return compared to High PBR portfolio, supporting the effectiveness of value investing strategy with PBR as its parameter. Tables 9 to 12 shows that High EPSg portfolio yield higher return compared to Low EPSg portfolio, supporting the effectiveness of growth investing strategy with growth of EPS as its parameter.

Altogether results presented in tables 1 to 12 support the notion that both value investing and growth investing strategies are effective in getting higher than average return in stock investment. The result of incorporating growth factor to value investing strategy is presented in tables 13 to 20. When Low PER portfolio is separated into high growth and low growth, High Growth Low PER portfolio earns highest return compared to Low PER or High Growth portfolio. The result can be seen from table 13 to 16. When Low PBR portfolio is separated into high growth and low growth, High Growth Low PBR portfolio earns highest return compared to Low PBR or High Growth portfolio. The result can be seen from table 17 to 20.

V. CONCLUSION

It has been shown that value investing strategy, with PER or PBR used the parameters, is effective in earning higher than average return. Growth investing strategy, with 2 years growth of EPS as the parameter, is also effective. When the two methods are combined by selecting from Low PER and Low PBR portfolios stocks with high EPS growth, the portfolios formed result in even higher return.

REFERENCES

[1] Dechow, P., and R. Sloan. "Returns to Contrarian Investment Strategies: Tests of Naive Ex-pectations Hypotheses."J ournal ofFinancial Economics4 3 (1997): 3-27.

[2] DeBond, W. F. M., and R.H. Thaler . “Does the Stock Market Overreact?”” Journal of Finance, 40 (1985) 793-805.

[3] Fama, E., and K . French. "The Cross-Section of Expected Stock Returns."J ournal ofFinance 47 (1992): 427-65.

[4] Jegadeesh, N., Kim, J.,Krische,S.,&Lee, C. .”Analyzing the analysts: when do recommendations add value?” Journal of Finance 59 (2004): 1083–1124.

[5] Lakonishok, J. ;A. S Hleifer; and R . Vishny." Contrarian Investment, Extrapolation and Risk." Journal of Finance 44 (1994): 1541-78.

[6] Laporta, R. "Expectations and the Cross-Section of Stock Returns."JournalofFinance5 1 (1996): 1715-42.