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Abstract. Enterprise Multiple is widely used by practitioners as a valuation measure (Loughran & Wellman, 2011). Furthermore, one component used in the calculation of enterprise multiple (EV/EBITDA) is the use of operating income before depreciation data as income variables. The data is accurate and difficult to manipulate (not even) in measuring the profitability of a company over net income. This study aims to analyse the influence of enterprise multiple on stock return towards non-financial companies listed in the Indonesian Stock Exchange from 2006-2015. The dependent variable used is stock return. The independent variable used is enterprise multiple which is proxied with EV / EBITDA. Enterprise Value (EV) is (value of equity + debt + preferred stock - cash). While EBITDA are Earnings Before Interest, Tax, Depreciation and Amortisation. This research takes the form of a quantitative research by using panel data regression test. The results show that firms with a low enterprise multiple values, have a higher stock return than firms with high enterprise multiple values. In addition, the portfolio established under enterprise multiple values (low minus high portfolios) in the Carhart 4 Factor Model is robust on non-financial companies listed on the Indonesia Stock Exchange 2006-2015 period.

Keywords: enterprise multiple, stock return, ev/ebitda, relative valuation

Abstrak. *Brand equity memberikan kontribusi yang siginifikan untuk penjualan dan keuntungan jangka panjang bagi sebuah produk. Pembentukan brand equity melalui media sosial menjadi penting seiring dengan perkembangan pesat marketing 3.0 saat ini. Penelitian ini mempunyai 2 (dua) tujuan yaitu 1) mengidentifikasi media sosial yang paling signifikan dalam pembentukan brand equity Dian Pelangi, dan 2) mengidentifikasi indikator-indikator yang paling menonjol pada pembentukan brand equity Dian Pelangi pada komunitas Hijabers. Paradigma yang digunakan pada penelitian ini adalah paradigma positivis yaitu melalui teknik pengambilan data melalui survey. Teknik sample yang digunakan adalah Four Sample One Object. Sifat penelitian adalah kuantitatif deskriptif pada 4 media sosial : Facebook, Twitter, Blog dan Website Dian Pelangi. Penelitian ini dilakukan melalui pendekatan Islamic Marketing Hasil penelitian menunjukkan bahwa platform media sosial Blog merupakan platform yang paling kuat pengaruhnya pada pembentukan brand equity Dian Pelangi, sedangkan indikator tertinggi pada brand equity Dian Pelangi adalah indikator benefit pada brand image, yaitu berupa informasi tentang warna yang sedang tren saat ini.*

Kata kunci: *enterprise multiple, stock return, ev/ebitda, relative valuation*

INTRODUCTION

The capital market in Indonesia is becoming increasingly attracting investors to invest. This is proven by Business Perspectives on Emerging Market 2012-2017 report issued by Global Intelligence Aliance, Indonesia ranked fifth from Top 30 Emerging Market. However, when compared to other emerging markets, especially in the Southeast Asian sector, Indonesia occupies the first position. So it can be said that Indonesia has a high economic potential.

In conducting investment activities, it can be ensured that investors will be taking potential risks into consideration. If investors want high return, investors must also be willing to carry a high risk. Due to this, investors are asked to obtain accurate information for financial indicators that can be used to reflect the company performance. This is done so investment decisions can be done timely and accurately. Quick and accurate investment decisions will impact on stock return for investors in investing capital.

According to Damodaran (2012), there are three approaches to finding the value of a firm: discounted cash flow, contingent claim and relative valuation. In fact, relative valuation is the most commonly used for company valuation. Enterprise Multiple (EV / EBITDA) is one of the multiple used for valuation measure using accounting data components obtained from the financial statements of each company. Enterprise Multiple is derived from the calculation of enterprise value (equity value + debt + preferred stock - cash) divided by operating income before depreciation (EBITDA). In summary, enterprise multiple (EV / EBITDA) is the ratio of the total market value of a company (capitalized and long-term liabilities less cash) divided by income before taxes, interest, depreciation, and amortization (Damodaran 2012) There are several studies that focus on evaluating the performance of stock portfolios formed from

multiple valuation measures for a company. The study in Indonesia was conducted by Ardiyansyah (2009) which measures the ratio of P / E, PBV, and EV / EBITDA in Indonesia Stock Exchange. The study was conducted on Non-Financial Companies listed in Indonesia Stock Exchange period 2003-2007 periods. The result of the study showed that it is possible to earn an excess return by investing in stocks with low EV / EBITDA, low PER, and high PBV ratios. There are also some research focusing on Enterprise Multiple or EV / EBITDA that is the research of Persson and Ståhlberg (2006) conducted in 2002 to 2006 in Swedish capital market shows that the portfolio formed by low EV / EBITDA and PER is delivering better performance from the market, however the EV / EBITDA portfolio has superior excess return compared to the PER portfolio. Recent study in US capital market conducted by Tim Loughran and Jay W. Wellman (2011) found that there is empirical evidence regarding the relationship of Enterprise Multiple and Average Stock Return. The period of their research was conducted in 1963-2009. Tim Loughran and Jay W. Wellman (2011) use Low Minus High (LMH) portfolios to project multiple enterprise values across companies. The results show that companies with Low (Enterprise Multiple) EM values tends to have higher stock returns than firms with high value (Enterprise Multiple) EM values.

This study was conducted to complement the previous study of new evidence of the relationship between Enterprise Multiple and Average Stock Return described by the use of accounting data of the previous year by the calculation of EV / EBITDA. In addition, the study also to test whether the method Tim Loughran and Jay W. Wellman (2011) can be applied to the stock market in Indonesia. Furthermore, the results of the Loughran and Wellman study are also robust using the Carhart 4 factor model where companies with low enterprise multiple (EM) will have higher stock return rates than firms with high enterprise multiple (EM). The study period is for 10 years from 2006-2015. The reason for taking the time period of the study due to the use of multiple linear regression method that requires a sample of data at least 10 years for reliable data. This study does not include a sample of financial firms because in a cross-sectional study of stock returns, it is important not to include financial firms in the sample (Fama and French, 1992). The results of this study demonstrate that firms with a low enterprise multiple values, have a higher stock return than firms with high enterprise multiple values. This result also robust by implementing the portfolio established under enterprise multiple values (low minus high portfolios) in the Carhart 4 Factor Model.

A number of literature from Indonesia and abroad have discussed topics related to enterprise multiple and stock return. The research included Fama and French (1992), Yusfi Ardiansyah (2009), Persson and Stahlberg (2002-2006), Jegadeesh and Titman (2001), and Loughran & Jay Wellman (2011), In Persson and Stahlberg research conducted between 2002 and 2006 in

the Swedish capital market, the portfolio formed based on the accounting data of PER and EV / EBITDA, with performance measurement performed by the CAPM method states that superior performance in the research is a portfolio formed by low PER or EV/ EBITDA values. Persson and Stahlberg also stated that it is possible to invest in undervalued stock by using EV / EBITDA proxy because it can provide greater ecxess return compared to other valuation measures, even after adjusting for risk.

In addition, the research on enterprise multiple valuation was also carried out by Yusfi Ardiansyah (2009) conducted on Non-Financial Companies listed on the Indonesia Stock Exchange in 2003-2007. The study states that it is possible to obtain excess return by investing in stocks with low EV / EBITDA, low PER and high PBV ratios. Investors are also advised to avoid portfolios formed based on high EV / EBITDA, high PER, and low PBV ratios, as they provide negative returns. The portfolio that provides the greatest excess return compared to other portfolios is the low EV / EBITDA portfolio. In each period, there are six portfolios formed, those are portfolios based on multiple high PBV, low PBV, high PER, and low PER, high EV / EBITDA and low EV / EBITDA.

Tim Loughran & Jay W. Wellman (2011) also found an increasing trend of practitioners using EM (enterprise multiple) as a valuation measure. EM (enterprise multiple) itself consists of (equity value + debt + preferred stock - cash) / EBITDA. The study states that EM (enterprise multiple) greatly affects stock returns. Companies that have low enterprise multiple value low tend to have high stock returns. Whereas, companies with high enterprise multiple values have low stock returns. In short, companies that have enterprise multiple value lows are superior to companies with multiple enterprise values. The study was conducted at non-financial companies listed on the New York Stock Exchange (NYSE), American Stock Exchange (AMEX), and NASDAQ firms.

Additionally, Fitch (2002) adds that enterprise multiple will be different for different industries. Therefore, enterprise multiple from several companies must be compared in the same industry, not to companies in different industries. Higher enterprise multiple will be found in industries that have high growth and low depreciation costs. Low enterprise multiple will be found in industries that have low growth and or have large capital expenditure that needs for maintenance.

According to Damodaran (2012), there are 3 approaches to assessing a company, namely: an assessment using discounted cash flow that relates the value of an asset to expected future cash flows, a contingent claim assessment based on the option of pricing model, and the relative valuation that calculates the value of an asset by comparing the same asset in a different company by looking at common variables such as book value, cash flow, income or sales (Damodaran 2002). One method of relative valuation

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is the measurement of EV / EBITDA which is the main focus of the company's valuation method in this study. Relative valuation is most commonly used. The advantages is that it is easy to use, time-efficient, and do not require many assumptions compared to discounted cash flow and contingent claim valuation methods. In addition, other advantages are key data in the form of different financial ratios available (McClure 2006). Another advantage is that this method is favoured in terms of current market mood, but in some cases this method can also be a problem. For example the risk to the whole industry, will be undervalued when relative valuation is used to evaluate a new company conducting initial public offering (IPO) (Damodaran 2012). While the weakness is that this method seems very simple and too direct for an assessment. Relative Valuation is calculated by inconsistent valuation estimation and without considering important factors below it such as risk assumption, growth, and cash flow potential. The lack of transparency of these assumptions can be problematic as long as it is possible to manipulate (Damodaran 2012).

Enterprise multiple (EV / EBITDA) will affect stock return. (the rate of return enjoyed by investors on a stock investment). Enterprise multiple (EV / EBITDA) sees a company in the same way as potential buyers, so, the debt goes into this count (Damodaran, 2012). Enterprise multiple (EV / EBITDA) will differ depending on the type of industry. To that end, enterprise multiple of several companies must be compared in the same industry, not to companies in different industries. Higher enterprise multiple is found within industries that have a high growth and low depreciation costs, which applies on the contrary on low value enterprise multiple (Fitch, 2002).

The advantage of using multiples is that this method is easy to understand and the variables used are usually easy to get (Damodaran 2012). When we use relative valuation, it needs to be understood that multiples are used to be defined and formulated in the same way in all comparable companies. The reality is that companies in the same industry cannot be directly compared. Companies within the same industry can be significantly different and this will affect the accuracy of the comparisons and multiples used. Therefore, it is important for companies that have the same underlying fundamentals (Mc Clure 2006). Differences in growth, risk, and cash flows among firms should be taken into account when deciding whether or not the company can be compared. All of these variables can affect a company's multiples. These differences can be dealt with in three different ways. The first approach is to create a subjective adjustment of multiple firms based on the average multiple of firms studied. If multiple companies have significant differences and if the differences cannot be explained by the firm's fundamentals such as growth, risk, or cash flow, then the company is said to be over- or undervalued. The second approach is to adjust multiple by entering the default variable, which is an important variable in determining a multiple. The adjusted ratio is compared between firms and it is assumed that these companies can be compared in all aspects. The third approach is used when firms are considered different when multiples are more than one variable and multiples are regressed against variables that are considered to have differences (Damodaran 2002). When using multiples, it is important for researchers to ensure that numerators and denominators are consistently defined. If the numerator is a measurement of the equity value (such as market price or equity value), then the denominator should also be a measure of equity value as well. This applies also to the measurement of firm value, such as EBITDA or book value of capital, used. For enterprise multiple, numerator (enterprise value), and denominator (EBITDA) is the measurement of company value (Damodaran 2012).

The advantages of using this ratio are; first, there are fewer companies that have negative EBITDA compared to companies that have negative earnings; second, there are some depreciation methods by companies (some uses straight line method, some use accelerate), which may cause a difference in operating income and net income, but will not happen in this valuation, third, this valuation can be compared very easily (Damodaran 2012). The disadvantage of using this ratio is when the company's EBITDA is negative, it will cause EV / EBITDA to become negative also. The price used to calculate Enterprise Value is the market price of the equity and market price of a company's obligations or obligations that may not be negative, and if the denominator becomes minus it becomes less relevant in this valuation (Persson and Ståhlberg 2006).

Firm size of a company viewed from its market capitalization. The size of a company is a benchmark of the size of the company by looking at the value of equity, sales value or total value of assets owned by the company (Riyanto, 1995). Fama and French's research (1992) found that small cap stocks tend to outperform large cap stocks. This anomalies' are often called small capitalization stocks premium or size effects is one of the anomalies accepted by almost all academics. In addition, small caps companies have advantages over large caps companies in flexibility, innovation, and space to grow. Book-to Market Ratio is a comparison between the book value of a company's stock and its market value in the capital market. Book-to Market Ratio is arguably the oldest anomaly found in investment studies. This anomaly is also called value effects. Research by Fama and French (1992) states that stocks with low book-to-market value tend to outperform stocks with high book-to-market value. In their study also appeared the term growth stocks (shares with high book-to-market ratio) and value stocks (shares with low book-to-market ratio).

Prior return is the return generated from the method of buys and hold strategy run by the investor. The buy and hold method is an investment method in which investors buy a certain number of shares and hold for a certain amount of time. Investors believe that this strategy can

generate returns as well as those generated by active management. Jegadeesh and Titman (1993) found that past winning stocks with performance measurements over the past six months had a tendency to exceed the performance of past losing stocks by twelve percent in a year. If stock prices react overreact or underreact to available information on the market, profitable investment strategies with stock selection based on past performances will persist. Jegadeesh and Titman's findings contrasted with Thaler and DeBondt (1985). The results of research indicate that stocks that initially provide high return (winner) will continue to increase. This is what gives rise to a momentum strategy. The momentum strategy explains that stocks with positive returns will continue to provide positive returns. This strategy refers to buying winner shares and selling loser stocks. This appears with the assumption of a return persistence as a form of underreaction. The results show that momentum can produce a significant positive gain for 3 months to 12 months.

In a study conducted by Loughran and Wellman (2011), to project the value of enterprise- multiple (EM) firms, the study would undertake the formation of low-minus-high enterprise multiple (EM) portfolios. The samples of each study will be sorted into a decile portfolio based on the enterprise multiple values observed in the annual period. Decile 1 is a portfolio of stocks with the lowest enterprise-level (EM) value, while decile 10 is the largest value-driven enterprise value (G) portfolio.

The 3 factor model developed by Fama and French (1993) has the ability to explain more anomalies compared to the CAPM model. However, market risk factors (beta share), size, and book to market ratio have not been able to explain the pattern of short term reversal (short term reversal). Jegadeesh and Titman (1993) discovered what is known as the momentum strategy. Rowenhorst (1998) examined the effects of momentum and effects of firm size (size effect) on 12 countries in Europe, using the same method used in the Jagadesh and Titman (1993) research which says the momentum phenomenon exists and does not arise by chance (Triani, 2013). Carhart (1997) developed a three-factor asset pricing model by adding a fourth factor of momentum anomaly (WML). The influence of momentum strategy in predicting stock return can be measured by calculating the difference between value weighted return of winners stock portfolio with value weighted return losers stock portfolio, denoted as WML (Winners Minus Losers). According to Carhart (1997), the four-factor model can explain the variation in portfolio returns based on past returns and is consistent with the equilibrium market model with four risk factors. Carhart's research states that the fourth factor is the momentum which will reduce the error pricing of portfolio returns (Triani, 2013).

RESEARCH METHOD

This research is conducted with reference to the research of Tim Loughran & Jay W. Wellman (2011).

Tim Loughran & Jay W. Wellman's examined evidence of a relationship between enterprise multiple and average stock returns derived from EV / EBITDA calculations with returns or monthly stock returns.

Below is the regression model used in this study:

$$R_{ij} = \alpha_{0j} + \alpha_{1j}\ln(Size)_{ij} + \alpha_{2j}\ln(BE/ME)_{ij} + \alpha_{3j}\ln(1+Prior)_{ij} + \alpha_{4j}\ln EM_{ij} + e_{ij} \quad (1)$$

Explanation :
R   : (Today's price-(Today's price-1)) + Dividen / (Today's price-1)
Size   : Number of Shares Outstanding x Shares Price
BE/ME   : Book Value of Equity / Firm's Market Value
1+Prior   : Monthly return of issuers 10 months back from period t
EM   : (Equity Value + Debt + Preferred Stock – Cash) / EBITDA
(Lougrhan & Wellman, 2011)

In this study, the dependent variable is stock return. The independent variable is enterprise multiple which is controlled by variable size, book-to-market, and prior return. In addition to the regression that has been mentioned above, the authors will also do a second regression, namely to investigate whether the portfolio that has been established based on the value of enterprise multiple (low-minus-high portfolio) already reflects the factors that affect the expected return of market factors, size factor, book-to-market factor, and momentum factor (Carhart, 1997). The equation of the Carhart four-factor method (Carhart, 1997). Can be written as follows:

$$R_{it} - R_{fi} = a_i + \beta_{0i}(R_{mt} - R_{ft}) + \beta_{1i}SMB_t + \beta_{2i}HML_t + \beta_{3i}WML_t + \varepsilon_{it} \quad (2)$$

Explanation :
$R_{it} - R_{fi}$: the rate of return of the mutual fund above the rate of return on the risk-free asset (excess return)
$R_{mt} - R_{fi}$: the difference between the rate of return of the market and the free interest rate risk (risk free)
SMB : The difference in the rate of return of small capitalized shares minus large capitalization shares
HML : the difference of the stock return on the ratio of book value to the high market minus the low book value to market share ratio
WML : the difference of the stock return on the ratio of book value to the high market minus the low book value to market share ratio

The first portfolio needs to be formed is the Low-Minus-High Portfolio. Every June during the study period (2006-2015) all samples are sorted into 10 deciles sorted by enterprise multiple values. Decile 1 is a portfolio of stocks with low value enterprise multiple value (value firms) and Decile 10 is a high growth enterprise multiple value portfolio (growth firms). After the decile order is based on the value of enterprise multiple, each decile will be represented with its return value. Then from each of the annual portfolio, we calculated the spread

value, the difference between the returns on decile 1 and deciles 10. This research contains 30 samples, therefore in each decile there will be 3 stocks each.

The next formations of portfolio are the Small-Minus_Big, High-Minus-Low and Winner-Minus-Loser portfolios. Small-Minus-Big is the difference in return between stocks that have small market capitalisation with stocks that have a large market capitalization. Shares of listed companies that have small market capitalization are measured in proportion of 50%. Meanwhile, stocks from issuers with large market capitalization were measured with a proportion of 50% (Fama and French, 1992). To calculate the SMB value, it can be formulated as follows:

SMB= ((SG+SN+SV))/3- ((BG+BN+BV))/3

Explanation :
SMB = the difference of stock portfolio returns that have small firm-size (S) with stock portfolio having big firm-size (B)
SG   = return of stock portfolio with a small firm size (S) and a low book-to-market (G)
SN   = return of stock portfolio with a small firm size (S) and a medium book-to-market ratio (N)
SV   = return of stock portfolio with a small firm size (S) and a high book-to-market ratio (V)
BG   = return of stock portfolio with a large firm size (B) and a low book-to-market (G)
BN   = return of stock portfolio with a large firm size (B) and a medium book-to-market ratio (N)
BV   = return of stock portfolio with a large firm size (B) and a high book-to-market ratio (V)

High minus low is the difference in return between companies that have a high book-to-market ratio with low book-to-market ratio. In the formation of this HML portfolio, stocks are divided into three (3) groups. The first group represents the proportion of 30% of issuers with high book-to-market ratio, the second group is the proportion of 40% of listed companies with medium book-to-market ratio, and the third group represents 30% of listed companies with book ratios to-market low (Fama and French, 1992). To calculate the value of HML, it can be formulated as follows:
HML= ((SV+BV))/2- ((SG+BG))/2
Explanation :
HML = the difference between stock portfolio returns that have high book-to-market ratios (V) and stock portfolios with low book-to-market (G)
SV   = return of stock portfolio with small firm-size (S) and a high book-to-market ratio (V)
SG   = return of stock portfolio with small firm-size (S) and a low book-to-market ratio (G)
BV   = return of stock portfolio with large firm-size (B) and a high book-to-market ratio (V)
BG   = return of stock portfolio with large firm-size (B) and a low book-to-market ratio (G)
Winner minus loser is the difference in return between companies that have high average returns and low average returns on the market. In the formation of this portfolio, stocks are divided into two groups. The first group represents a proportion of 30% of issuers with

high average returns, and the second group represents a proportion of 30% of issuers with a low average return on the market (Carhart, 1997). To calculate WML is formulated as follows:
WML= ((SW+BW))/2- ((SL+BL))/2
Explanation :
WML   = the difference between stock portfolio returns that have high average returns (W) with stock portfolios having low average returns (L)
SW   = return of stock portfolio with small firm-size (S) and a high return ratio on the market (W)
SL   = return of stock portfolio with small firm-size (S) and a low return ration on the market (L)
BW   = return of stock portfolio with a large firm-size (B) and a high return ratio on the market (W)

There are two hypothesis in this research. Tim Loughran and Jay. W. Wellman (2011) states that enterprise multiple greatly affects stock returns. Companies that have low enterprise multiple values should have high stock returns. Similarly, companies with high enterprise multiple values (high enterprise multiple value) appear to have low stock returns. In short, companies that have low enterprise value are superior to companies that have multiple enterprise values. Therefore, the first hypothesis in this research is:
H1: The existence of influence between enterprise multiple and stock return along with its negative relationship. Firms with low enterprise multiple (EM) values have higher returns than firms with high enterprise multiple (EM) values.

Tim Loughran and Jay. W. Wellman (2011) in his research showed that low minus high multiple enterprise (value minus growth) portfolios are robust in alternative multiple factor models (Carhart 4 Factor Model). Therefore, the proposed second hypothesis is :
H2: The low minus high enterprise multiple (value minus growth enterprise multiple) portfolio also has a significant effect in Carhart 4 Factor Models.

RESULT AND DISCUSSION

This study employs a sample of 30 non-financial companies with a period of observation for 10 years, namely 2006 to 2015. In order to perform multiple linear regression, monthly data is used for each variable. Therefore, the panel data in the study form 3450 observations as a whole. This study does not include a sample of financial firms in accordance with Fama and French (1992) and also Cooper, Gulen, and Schill (2008). as financial firms have different financial statements so that their valuations are also different from nonfinancial companies. This is important because in this study using variables derived from financial statements such as equity value, debt, cash and EBITDA (Reinhard, 2016). Table 1 summarises the descriptive statistics of the characteristics for all variables used in the study.

Table 1. Descriptive Statistics

	SR	SIZE	BM	PRIORRETURN	EM
Mean	0.022339	22.17969	-0.557189	0.162501	2.633251
Median	0.000000	22.11770	-0.729775	0.133530	2.635978
Maximum	2.040000	26.57301	2.970782	2.516455	6.324440
Minimum	-0.590000	16.45457	-2.766319	-1.724749	0.370476
Std. Dev.	0.134683	2.006748	0.894625	0.469338	0.707041
Skewness	2.177536	0.052500	0.877683	0.274652	0.086665
Kurtosis	23.76345	2.380239	3.976571	5.226361	3.470419
Jarque-Bera	64137.45	56.30578	574.9878	749.3242	35.81562
Probability	0.000000	0.000000	0.000000	0.000000	0.000000

Source : Primary Data, 2013

Based on Table 1, the dependent variable stock return (SR) has a mean or average of 0.022 with a standard deviation of 0.134. Thus, the average stock returns for all samples during this study period gave a positive return. Independent variable firm size which is proxies with stock price multiplied by number of shares has mean value equal to 22.179 with standard deviation equal to 2.006. The maximum value of firm size variables is 26,573 and a minimum value of 16,454. Thus if it compares the mean value with the median value of the firm size variable, the sample in the study tends to be included in the large firm size group. Companies that fall within the big firm size indicate that these companies have a large role in each sector. In terms of book-to-market variable, this variable has a mean of -0.557 with a standard deviation of 0.894, whereas the maximum value of the book-to-market variable is 2,970 and the minimum value is -2.766. If we compare the mean value with the median value, then it can be concluded that the average sample in this research is included in the low book-to-market group. In general, if the book-to-market ratio is more than 1, it can be said that the company's shares are undervalued. Conversely, if the book-to-market ratio is less than 1, then the share of the company is overvalued. Thus, it can be concluded that the average sample of firms in this study has overvalued shares, meaning that the stock price in the market is much higher than the fundamental value of the stock.

With regard to prior return variable which is represented by calculating the monthly stock return of the last 10 months, has a mean of 0.162 with a standard deviation of 0.469. Meanwhile, the maximum and minimum values are 2,516 and -1,724, respectively. Variable multiple enterprise is proxies with the company's EV / EBITDA. This variable has an average value or mean of 2,633 with a standard deviation of 0.707. Whereas, the maximum and minimum values of multiple enterprise variables are respectively 6,324 and 0.370. It is clear that if we compare the average value with the maximum value in this variable, it can be concluded that the average sample in this company has a high value of multiple enterprise.

Using regression technique, the model (1) used is

expected to answer the first hypothesis that is built, namely to analyze whether there is influence of multiple companies with stock return. Based on the prior model test that has been done for data panel, it can be concluded that the best model for regression model in this research is fixed effect. Based on the classical assumption test it is found that there is a problem of heteroscedasticity. In order to fix the problem of heteroscedasticity, we employ the panel data regression model using GLS method,

Table 2 is the regression output of model 1 from the data processing program.

Table 2. Model Regression test result

Variabel	A	Prob(T-statistic)	Prob (F-statistic)	Adjusted RSquared
C	-0.705	0.000	0.0000 **	0.0415
Size	0.037	0.000 **		
BM	0.077	0.000 **		
Prior Return	0.024	0.000 **		
EM	-0.023	0.000 **		

Note: ** Significant at 1 % level
Source : Processed by the Author

Based on Table 2 it is shown that the value of adjusted R squared from the regression result with the fixed effect method is 0.0415, indicating that the dependent variable of stock return can be explained by 4.15% by the independent variable. To see the effect of significance level of independent variable (independent) to dependent variable (dependent) altogether can be analysed by looking at test of F or at output of F-statistic. If the probability value of F-statistics $< \alpha$ is at a certain level of significance, then the F-test 0 is rejected. On the regression result it can be seen that the probability value of F-statistic $< \alpha$ 0.01 (0.00000 < 0.01). Therefore, it can

be concluded that according to F-test, H0 is rejected. Thus, it can be proved that the dependent variable has a significant influence on the dependent variable stock return. The next step in the analysis is the t-test, where the t-test is performed to examine the significant of regression coefficients. In the t-test if the probability value of the four independent variables of size, book to market, prior return, and EM (enterprise multiple) < α 0.01, then H0 is rejected and there is significant influence between independent variable to dependent variable. Table 2 shows the probability value of the size, book-to-market, prior return, and EM (enterprise multiple) variables < α 0.01 (0.0000 <0.01).

Thus, this regression model test shows that size, book-to-market, prior return and enterprise multiple (EM) have significant effect on stock return. The equation of the regression shows;

SR = -0.705 + 0.037 (SIZE) + 0.077 (BM) + 0.024 (1+PRIOR) -0.023 (EM)

Based on the regression result in Table 2, indicating that enterprise multiple variables remain significant and negatively related when controlled by size, book to market (bm), and prior return variables. This is consistent with the research conducted by Tim Loughran and J. Wellman who stated that there is a negative relationship between multiple enterprise variables on stock return, which if companied by low multiple enterprise values with a high stock return rates, has a high value of enterprise multiple. Thus, hypothesis 1 in this study is accepted.

Next, we conducted portfolio decile analysis based on Enterprise Multiple Value using Carhart 4 factor model. The following is a summary of the calculation of the value minus growth (low minus high) enterprise multiple portfolios obtained from the value of spread between return from decile 1 (value firms) − decile 10 (growth firms) for 2006 to 2015 period.

Tabel 3. Summary Performance of Low Minus High Portofolios Decile Year 2006-2015

Year	Value Minus Growth (D1-D10)
2006	0.003
2007	0.118
2008	0.143
2009	-0.110
2010	0.198
2011	-0.014
2012	0.062
2013	0.078
2014	0.000
2015	0.154

Source : Processed by the Author

In the Table 3 above, the trend of spread value (D1-D10) resulting from the low minus high portfolio tend to be positive. This indicates that the return of stock portfolio produced by decile 1 (D1) is higher than the

return of stock portfolio decile 10 (D10). Hence, it can be concluded that stock portfolios with low enterprise value tend to have higher returns compared to stock portfolios with high enterprise multiple values.

Table 4. Summary of Carhart Four Factor

time	Rm	Rf	Rm-Rf	SMB	HML	WML
2006	0.540	0.098	0.442	-0.029	-0.022	0.244
2007	0.495	0.080	0.415	0.167	-0.018	0.795
2008	-0.503	0.093	-0.596	0.040	-0.035	0.106
2009	0.763	0.065	0.698	-0.064	0.139	0.517
2010	0.438	0.065	0.373	-0.048	-0.032	0.389
2011	0.025	0.060	-0.034	0.034	-0.0007	0.109
2012	0.118	0.058	0.060	-0.097	0.0109	0.028
2013	-0.01	0.075	-0.091	-0.024	-0.034	0.250
2014	0.207	0.078	0.129	-0.003	-0.044	-0.044
2015	-0.123	0.08	-0.203	0.010	0.017	0.243

Source : Processed by the Author

Based on the Carhart 4 factor model, the following table 4 is a summary of the four factor Carhart calculations following the formation of the SMB, HML, and WML portfolios and market return (Rm) as well as risk free rate (Rf) described in the previous section of research method.

The Carhart four factor on table 4 will be used to run regression based on model 2

Carhart four factor model were employed to investigate the significant (robustness) of stock portfolios with low enterprise multiple have higher returns compared to stock portfolios with high enterprise multiple values after controlling for market (MKT), size (SMB), book to market ratio (HML) and momentum (WML). The folowing table is the result of regression of model (2) for carhart 4 factor model.

Table 5. Regression Result Summary of Model Carhart 4 Factor

Variabel	A	Prob(T-statistic)	Prob (F-statistic)	Adjusted
C	-0.0360	0.3116	0.0251*	0.7388
Size	-0.2320	0.0156*		
BM	-1.0005	0.0413*		
Prior Return	-1.5599	0.0121*		
EM	0.4823	0.0113*		

Note: ** Significant at 1 % level
Source : Processed by the Author

Based on the results of the regression on Table 5 by employing Carhart 4 factor model, all independent variable significantly influenced to the dependent

variable value minus growth (Decile EM). It can be observed that the probability value on t-statistic and f-statistic is < α 0.05. This is consistent with the research conducted by Tim Loughran and J. Wellman (2011) who stated that the variable value minus growth (Decile Enterprise Multiple) has significant effect after controlling for MKT (Market), SMB (Small Minus Big), HML (High Minus Low), and WML (Winner minus Loser). Therefore, hypothesis 2 in this study is also accepted. This result indicates that a low minus high portfolio established on the basis of enterprise multiple values have already considered the factors mentioned in the Carhart 4 Factor Model. Therefore, there is sufficient evidence to suggest that a low-minus-high portfolio can represent the performance of a company viewed from its return value.

This study has managerial implications which will be useful for corporate financial decision making. In line with Loughran and Wellman (2011) research, this study shows that firms with low enterprise-value values will tend to be followed by high stock returns, compared to companies with high enterprise-value scores. Therefore, in making financial decisions, the managerial company will pay more attention and manage well the components of EV / EBITDA in the fundamental value of the company. The components of the value of EV (Enterprise Value) include the value of equity, debt value, preferred stock, and cash. While the components of EBITDA are Revenue and Expenses (excluding tax, interest, depreciation, and amortization). Enterprise Value assesses the company by looking for market value from its balance sheet, which is the value of equity and debt value. The value of cash spent on the enterprise value calculation is intended to find the net value of the debt. While the value of EBITDA, trying to measure the company's performance in generating cash flow that really gets from the operational activities. The use of EBITDA in enterprise multiple computations is considered fairer than the use of earnings in measuring the firm's ability to create profits, since the value of EBITDA is free of distortion in the application of accounting methods (Setianto, 2015). For example earnings management, which policy can regulate in such a way that the reported earnings have a certain growth rate.

If linked to the current state of Indonesian capital market, most investors tend to wish for short-term profits, where investor's decision making are based on the growing rumours on the market. The results of the study is in accordance with the theory of overreaction, where investors will have an exaggerated reaction to a rumour or information about the issuer / stock coming from the market. Thus, investors will suddenly assume a share is worth undervalued or overvalued. In this study, enterprise multiple values are derived from the firm's fundamental value, which is considered fairer than the market information derived from the rumour. In addition, in this study the authors excluded a sample that has a negative EBITDA value and also excluded company that did not survive for 10 years in the Indonesia Stock Exchange. Accordingly, a stock portfolio established on the basis of enterprise multiple

values is proven as a company for 10 years having the ability to generate non-negative cash flows. Thus, according to the results of the study, these companies have a good development for long-term investments. Therefore, if an investor wishes to know stock returns proxies with enterprise multiple values, then it is perfect for investors who want to earn long-term profits.

With the company able to manage the fundamental value of EV (Enterprise Value) and EBITDA, hence they will be viewed by investors as a good company and have a high rate of return, making the investors to be more interested in investing in them.

CONCLUSION

The conclusions to this study are :

Enterprise multiple has a significant influence and negatively related to stock return on non-financial companies listed in IDX (Indonesia Stock Exchange) during the period of 2006-2015. Thus, the negative relationship indicates that firms with low enterprise multiple value have higher returns than firms with a high enterprise multiple value.

The Low Minus High (value minus growth) portfolio formed from Enterprise Multiple (EM) deciles has a significant influence in the Carhart 4 Factor Model and affects stock returns in all established portfolios (MKT, SMB, HML, and WML) in non-financial companies which is listed on IDX (Indonesia Stock Exchange) between 2006-2015.

The results and implications of this study can be extended for academicians and investors. For aacademicians', further researchs are then expected to extend the study period to investigate the existence of valuation measures projected by EV / EBITDA in the Indonesian Stock Exchange.

For Investors: Investors may consider using enterprise multiple values as an alternative determinant in analysing stock returns of each firm. Note that this research is limited to non-financial companies listed on Indonesia Stock Exchange (IDX) in 2006-2015.

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