



Do Leverage Concentration Influence Firms Value

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ABSTRACT

The primary objective of financial managers is generally stated to be the maximization of shareholders' wealth by increasing the firm value. This research was undertaken to investigate the effect of corporate financing decisions on firm value.

A sample of 10 investment subsector companies listed on Indonesia stock exchange for a period of 9 years from 2009-2017 was used. Data were sourced from annual reports of selected firms. The study uses price to book value (PBV) representing firm value for the dependent variable and the corporate financing was measured by Debt equity ratio representing for the independent variable. Descriptive analysis, correlation coefficient analysis, coefficient of determination, significance test, linear regression analysis was used for statistical technique for data analysis and hypothesis testing.

The study revealed that there is a low significant relationship between financial leverage and firms' value. It was found that an increase in financial leverage is negatively correlated with firm value.

The conclusions of this study have practical implications for financial managers of Investment Subsector Companies to include a suitable amount of debt in their equity. The study therefore recommends that financial leverage be optimized by firms to aid maximization of firms' value.

Keywords: leverage ratio, equity, debt, the value of the company

INTRODUCTION

Company value is an investor's perception of the company's success rate which is often associated with stock prices (Sambora et.al, 2014). High stock prices make the value of the company also high and will increase the wealth of the shareholders.

One way to measure company value is the Price to Book Value (PBV) ratio. PBV is a comparison between the stock price and the book value of the company's shares. By using the PBV ratio, potential investors can find out companies whose shares are undervalued or overvalued. According to Permata, et al (2013), the value of shares is said to be undervalued when the PBV value is below 1, and overvalued when the PBV value is above 1.

The Trade, Service and Investment Sector is one of the sectors included in the IDX Sectoral Stock Index. Where in this sector is divided into 8 sub-sectors, one of which is the subject of

research is the investment sub-sector. The rise and fall of stock prices in the capital market is an interesting phenomenon to be discussed relating to the issue of the ups and downs of the value of the company itself, as in figure 1 below,

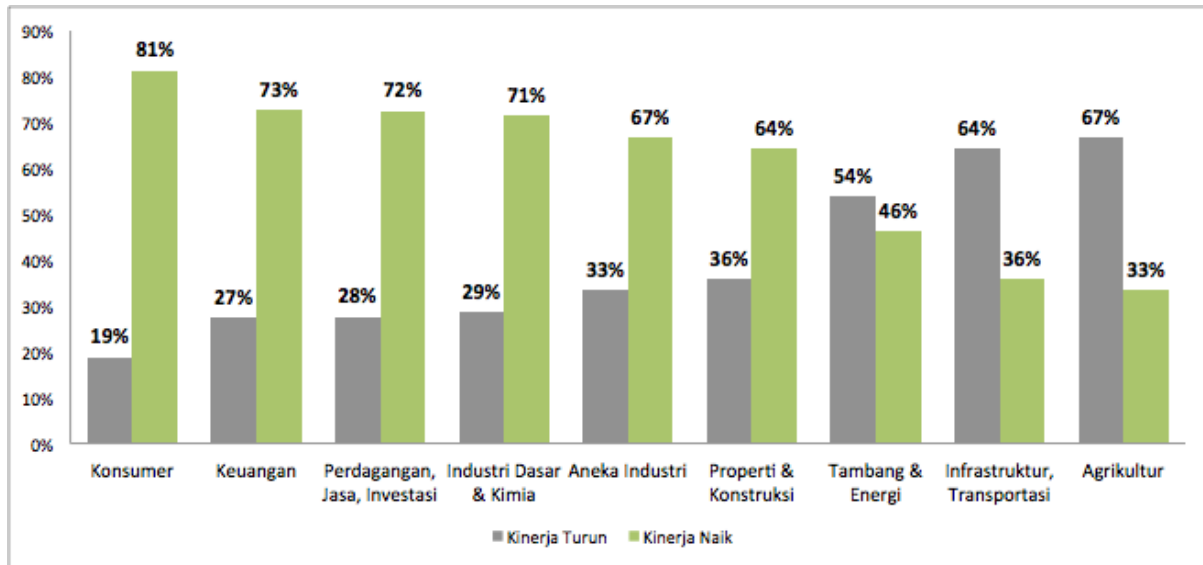


Figure 1. **IDX Sectoral Stock Indexes.**

LITERATURE REVIEW

Leverage. The leverage ratio is used to measure the company's ability to meet all its obligations, both short-term liabilities and long-term liabilities. One type of leverage ratio measurement that is commonly used in practice to measure a company's ability to fulfill all its obligations (Hery, 2016) is:

$$DER = \frac{\text{Total debt}}{\text{Total Equity}}$$

DER illustrates the ratio between the total debt held by the company against its own capital (equity). This ratio illustrates how the company manages the composition between debt and equity, this ratio that measures how much the company's ability to pay off its liabilities from the capital owned. The higher the DER, the smaller the profit distributed to shareholders, conversely the lower the DER, the greater the profit received by shareholders. A high DER can reduce the value of the company, while a low DER can increase the value of the company. If the company is optimal in managing a combination of debt and equity, the company can maximize the value of the company. Basically, leverage can describe a company's funding

sources that will result in the stock market reaction and the market price of its shares in the stock market.

The value of the company. The value of the company will be reflected in its share price. High stock prices make the value of the company also high, and increase market confidence not only in the company's current performance but also in the company's future prospects. The stock price used generally refers to the closing price (closing price), and is the price that occurs when shares are traded on the market (Fakhruddin and Hadiano, 2001).

Kusumadilaga (2010) explained that firm value is an important concept for investors, because it is an indicator for the market to assess the company as a whole.

Susanti (2010) stated that one of the indicators that influence the value of the company is PBV (Price Book Value). This ratio measures the value the financial markets give to management and corporate organizations as a company that continues to grow (Brigham, 2012), which is proxied by:

$$PBV = \frac{\text{Market price per share}}{\text{Book value per share}}$$

PBV is very closely related to stock prices. Changes in stock prices will change the PBV ratio. The higher PBV ratio indicates the higher share price. High stock prices reflect high company value. And vice versa, the smaller the PBV value of the company means the stock price is getting cheaper. This reflects the low value of the company.

The existence of PBV is very important for investors to determine investment strategies in the capital market. Based on PBV value, investors can also predict stocks that are undervalued or overvalued, so they can determine investment strategies that are in line with investors' expectations to obtain high dividends and capital gains (Yulianto, 1998 in Pandowo, 2002).

Some previous studies often associate corporate value with leverage. I Gusti Angga Pratama (2016), Pratama and Wiksuana (2016), Mabrurroh, V. et.al (2015), Rizqia, D. et. al (2013) Kouki and Said (2013) said that leverage has a significant positive effect on firm value. The positive direction means that the higher the leverage, the higher the value of the company obtained. However, these results contradict the research of Suffah and Riduwan (2016), Sari Putu Indah Purnama (2014), Ernawati, D (2015), Sujoko and Soebiantoro (2007) saying that leverage has a significant negative effect on firm value. While research conducted by Prasetyorini (2013) revealed that leverage has no effect on firm value.

Some of the results of these studies indicate a research gap. A company is not solvable if the total debt of the company is higher than the total assets owned by the company. The higher the leverage ratio indicates the greater amount of funds provided by creditors

METHODS

The population used in this study were all manufacturing companies listed on the Indonesia Stock Exchange in the 2009-2017 period, amounting to 7 companies.

The sampling in this study was conducted using a purposive sampling method on the suitability of the characteristics of the specified sample criteria in order to obtain a representative sample.

The sampling criteria in this study are:

1. Investment subsector companies that have complete annual financial statement data during the study period in 2009 -2017.
2. The company has not changed its industrial sector.
3. Companies that use rupiah units in their financial statements.

From the 10-population investment sub-sector companies listed on the Indonesia Stock Exchange (IDX). Found the name and company code of 7 samples of investment subsector companies, namely:

Table 1. **List of Research Samples.**

No	Code	Company Name
1	BHIT	MNC Investaman Tbk
2	BMTR	Global Mediacom Tbk
3	BNBR	Bakrie and Brothers Tbk
4	MLPL	Multipolar Tbk
5	MYRX	Hanson International Tbk
6	PLAS	Polaris Investama Tbk
7	POOL	Pool Advista Indonesia Tbk

Source: processed by the author

Data collection methods in this research were carried out in two ways, namely literature study and documentation study. literature study is conducted by conducting a study of literature, journals, online business media and other related sources related to research problems. the documentation study was conducted by collecting and analyzing published company financial data from annual financial reports, icmd, and other related sources. the data that has been obtained is then analyzed to form a systematic research result.

RESULTS

Leverage Ratio (DER). The leverage ratio used by the author in this study is Debt to Equity Ratio (DER), by comparing the total debt with total equity.

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

The debt to equity ratio performance in investment sub-sector companies in 2009-2017 can be seen in the table and figure below,

Tabel 2. Detail Of Total Debt

Year	Total Debt BHIT	Total Debt BMTR	Total Debt BNBR	Total Debt MLPL	Total Debt MYRX	Total Debt PLAS	Total Debt POOL
2009	6.730.947	4.245.225	18.211	8.425.786	147.078	47.888	17.471
2010	6.843.972	4.745.205	18.120	5.516.135	245.009	125.123	17.023
2011	6.648.342	4.295.815	13.045	6.165.968	895.063	77.340	18.947
2012	8.827.432	5.699.770	10.197	7.035.110	862.949	97.351	21.972
2013	14.928.302	7.716.434	7.688	11.278.142	454.785	118.392	22.118
2014	25.009.662	9.490.686	13.499	12.502.634	861.812	127.172	22.221
2015	30.464.913	11.197.567	13.130	13.821.169	1.977.051	115.752	23.837
2016	31.129.457	10.762.447	12.610	14.758.200	2.396.356	145.866	65.181
2017	32.437.621	13.568.375	12.600	15.328.905	3.046.007	167.101	33.461

Tabel 3. Detail of Total Equity

Year	Total Equity BHIT	Total Equity BMTR	Total Equity BNBR	Total Equity MLPL	Total Equity MYRX	Total Equity PLAS	Total Equity POOL
2009	4.832.431	7.050.623	4.014	3.442.591	146.177	159.616	122.114
2010	5.574.008	7.381.739	10.692	8.500.551	112.544	190.078	102.395
2011	12.209.162	10.815.788	12.166	8.148.739	33.089	214.779	89.435
2012	18.426.483	14.295.756	5.459	7.053.073	253.349	223.566	121.124
2013	16.820.317	13.353.037	2.024	8.977.127	4.881.076	229.906	123.213
2014	22.627.685	15.874.525	2.148	10.295.571	4.861.608	235.853	141.571
2015	22.834.355	15.294.612	3.907	8.651.183	6.321.844	226.420	147.310
2016	24.163.492	13.911.984	6.052	9.364.471	6.013.913	207.634	545.401
2017	24.086.190	14.126.359	5.995	7.535.890	6.962.162	192.758	878.696

Debt to equity ratio (DER) is a ratio used by companies to measure how much a loan is given. According to Kasmir (2010: 112) Debt to equity ratio is the ratio used to assess debt with equity. This ratio is sought by comparing all debt, including current debt and all equity.

Leverage as a variable (X) uses Debt to Equity Ratio as a measurement tool in calculating financial statements in investment subsector companies listed on the Indonesia Stock Exchange in the 2009-2017 period. Total debt divided by total equity is a formula of DER that can be seen in the company's financial statements. The table below is the result of data processing to find the debt to equity ratio in BHIT, BMTR, BNBR, MLPL, MYRX, PLAS and POOL companies as follows:

Tabel 4. **Detail of Total DER**

Tahun	Total DER BHIT	Total DER BMTR	Total DER BNBR	Total DER MLPL	Total DER MYRX	Total DER PLAS	Total DER POOL
2009	1.392869	0.602106	4.536870	2.447512	1.00616	0.300020	0.143071
2010	1.227836	0.642830	1.694725	0.648914	2.177006	0.658271	0.166248
2011	0.544537	0.39718	1.072250	0.756677	27.05016	0.360091	0.211852
2012	0.479062	0.398703	1.867924	0.997453	3.406166	0.435446	0.181400
2013	0.887516	0.577878	3.798418	1.256319	0.093173	0.514958	0.179510
2014	1.105268	0.597856	6.284450	1.21437	0.17726	0.539200	0.156960
2015	1.33417	0.732124	3.360634	1.597604	0.312733	0.511226	0.16181
2016	1.288284	0.773609	2.083608	1.57597	0.398468	0.702515	0.119510
2017	1.346731	0.960500	2.10175	2.034120	0.43750	0.866895	0.038210

Debt to equity ratio for each company is different, depending on the characteristics of the business and the diversity of cash flows. The higher DER shows a large proportion of debt to equity, thus reflecting the relatively high risk of the company and the risk that must be borne by investors will also be higher. In the end, investors will avoid shares of companies that have high DER. Companies with stable cash flows usually have a higher ratio than the less stable cash ratio.

Based on data that has been processed to show an increase and decrease in the debt to equity ratio, then it can be summarized in the form of a graphic image below:

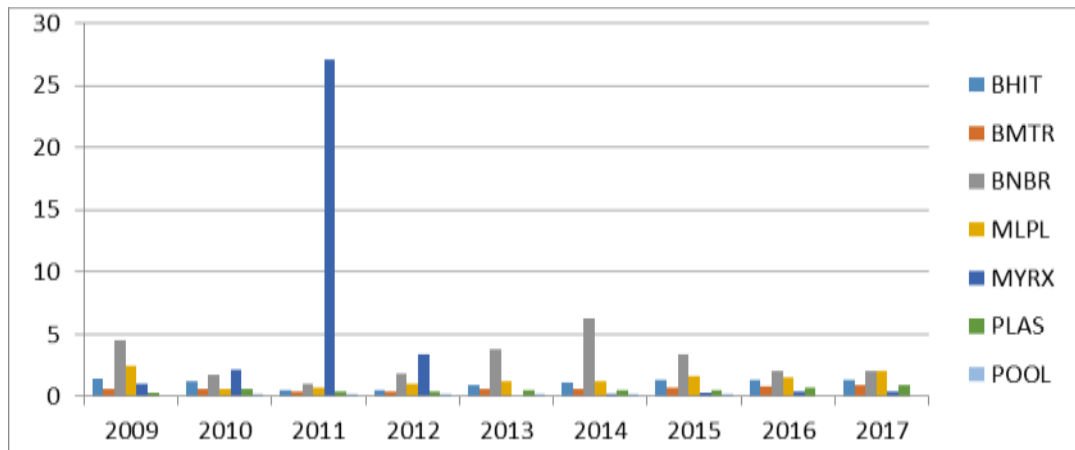


Figure 2. Chart DER of Investment Subsector Companies in 2009-2017

If seen from the graph above, those who use fund financing in the investment sector experience fluctuations each year.

The MYRX company which had the highest Debt to Equity Ratio in 2011 with a ratio of 27.05 and in 2017 decreased to 0.43. Thus 7 investment sector companies are less interested in using debt than company equity.

Company Value (Price Book Value). Price to book value plays an important role for a company to measure and know the results of the company's value so that it gets a more accurate calculation. For companies that operate well, this ratio generally reaches above one, which indicates that the market value of shares is greater than the book value.

According to Brigham and Houston (2010) describe how much the market appreciates the book value of a company's stock. The higher this ratio, the market believes in the company's activities. PBV also shows how far a company is able to create the value of a company that is able to the amount of capital invested. The following below shows PBV for all 7 subsector samples of Investment companies 2009-2017.

Table 5. Details of Price to Book Value of Investment Company Subsector

Tahun	PBV BHIT	PBV BMTR	PBV BNBR	PBV MLPL	PBV MYRX	PBV PLAS	PBV POOL
2009	0.297979216	0.268208061	1984.646238	0.098544962	1.783454305	6.379310345	0.237483008
2010	0.87284123	0.931362521	569.765245	0.27269997	9.265709411	6.291311988	0.977335032
2011	0.724092284	1.267363968	392.8836101	0.143184976	46.48463236	7.001410905	1.002313674
2012	1.045859918	2.295957625	858.4172925	0.224587921	6.577468236	4.872515164	2.829473684
2013	0.725670033	1.999455255	2315.266798	0.403585691	0.682798219	6.231389214	2.988207011

2014	0.494773151	1.198968866	2181.610801	0.81621893 5	2.03141635 4	7.83131866	4.73879015 6
2015	0.296223651	1.02113084	1199.411313	0.29897044 1	1.49201562 1	8.20983919 3	4.54657153 9
2016	0.217343172	0.627643764	801.569729	0.36754751	2.21212229	2.31515069 8	7.19069603 7
2017	0.179568873	0.59299215	946.9224354	0.19097306 4	1.93804166	0.30712084 6	10.4060084 8

Price to book value (PBV) is the ratio between stock price and book value. If the company has a PBV above 1 (> 1), then the company's stock price is valued higher than the book value which illustrates the company's performance is getting better for investors.

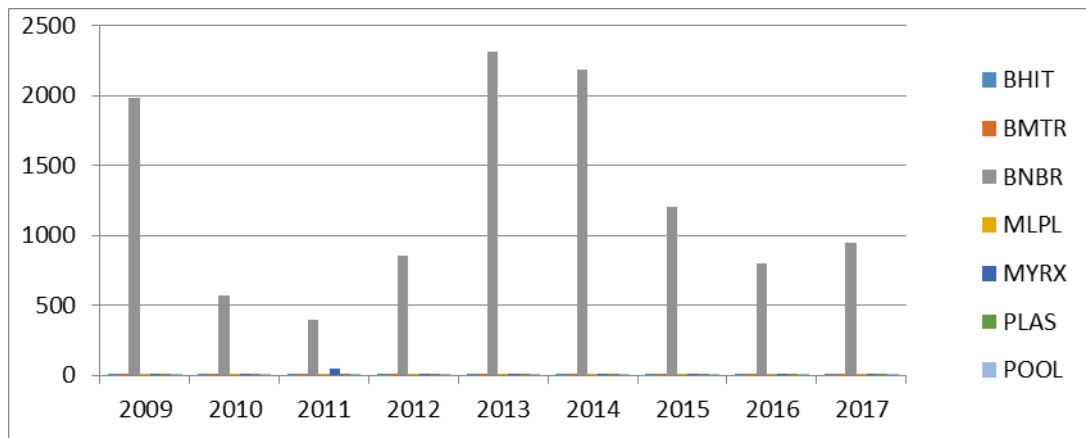


Figure 3. Graph PBV Investment Company Subsector in 2009-2017

The highest price book to value is found in BNBR companies from all investment sub sector companies in 2009-2017. Whereas in the previous year, in 2011 the price to book value (PBV) of the investment sub-sector company was low at 392.8. To get a good price to book value the company should have to increase the price of the company's shares in order to attract potential investors to invest in the company.

The author identifies leverage (debt to equity ratio) as an independent variable and company value (price to book value) as the dependent variable using SPSS, the results of the study of the effect of leverage ratios on firm value in investment subsector companies are divided into several forms, namely:

Table 6. Output Leverage Correlation Coefficient Test on Firm Value

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238 ^a	.057	.041	500.24148

a. Predictors: (Constant), DER

Based on statistical results in the calculation between the variable X (Leverage) with the Y variable (Company Value) which has been shown in the table above, $r = 0.238$, this shows that the correlation between leverage and firm value has a low relationship.

Table 7. Significant test output Leverage on Firm Value

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	127.853	68.934		1.855	.068
	DER	35.137	18.340	.238	1.916	.060

a. Dependent Variable: PBV

Based on the table above, it is known that there is no significant effect between the variable X (Leverage) on the variable Y (Company Value) seen from $p\text{-value} = 0.06 > 0.05$.

Table 8. Output Leverage Determination Coefficient on Firm Value

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.238 ^a	.057	.041	500.24148

a. Predictors: (Constant), DER

(Source: Company's Financial Statements and processed through SPSS)

Based on the table above, the calculation of the coefficient of determination is as follows:

$$Kd = r^2 \times 100\%$$

$$Kd = (0.238) \times 100\%$$

$$Kd = 0.057 \times 100\%$$

$$Kd = 5.7\%$$

Based on the table above, it is known that the contribution of leverage in influencing the company to the company's value is 5.7% and the remaining 94.3% is influenced by other factors.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	127.853	68.934		1.855	.068
DER	35.137	18.340	.238	1.916	.060

a. Dependent Variable: PBV

Based on the table above, the research regression model is known as follows:

$$Y = a + bX$$

$$PBV = 127.85 + 35,137 \text{ DER}$$

From the regression equation above it is known, if DER = 0 then the value of the company is 127.85 and if there is an additional one unit of DER it will increase PBV by 35,137

DISCUSSION

DER with a number below 1.00, follows that the company has a debt that is smaller than the equity it has. But if the total debt is greater than equity, then you have to look further at whether current debt or long-term debt is greater. If the amount of current debt is greater than long-term debt, this is still acceptable, because the amount of current debt is often caused by short-term operating debt. If the long-term debt is greater, it is feared that the company will experience liquidity disruptions in the future. In addition, the company's profits are also increasingly depressed due to having to finance the loan interest.

The smaller the DER value, the better it is because the small DER value indicates that the company is not too dependent on debt and gives more value to shareholders if the value of the liability does not exceed the value of equity. Companies that have a small DER value will be easier to repay their debts compared to those who have a large DER value because equity itself is the capital owned by the company.

Some companies that have more than one DER, this is very disruptive to the growth of the company's performance also disrupts the growth of its stock price. Therefore, most investors avoid companies that have a DER number of more than 2.

Investment companies tend to have high DER. Because most of the funds it manages are third party funds. In this case, third party funds are considered liabilities (debts). So for this type of company, the greater the capital of the third party they manage, the possibility to get operating profit is also higher.

Price to book value plays an important role for a company to measure and know the results of the company's value so that it gets a more accurate calculation. For companies that operate well, this ratio generally reaches above one, which indicates that the market value of shares is greater than the book value. With this PBV ratio, investors can find out immediately how many times the market value of a stock is valued from its book value. This ratio can provide a picture of the potential price movements of a stock so that from this picture, indirectly this PBV ratio also affects the stock price. For companies that operate well, this ratio generally reaches above one, which indicates that the market value of shares is greater than the book value.

Sawir (2000: 22) argues that the Price to Book Value Ratio describes the financial market value of the management and organization of the company that is running (going concern). A company that is doing well with strong management staff and an organization that functions lacks the same as the book value of its physical assets.

Conclusion

1. Based on the statistical results in the calculation between the variable X (Leverage) with the Y variable (Company Value) that has been shown in the table, $r = 0.238$ this shows that the correlation between leverage and firm value has a low relationship.
2. In this study, partially significant test or independent variable Leverage (DER) on Company Value (PBV), it is known that there is no significant effect between variable X (Leverage) on Y variable (Company Value) seen from $p\text{-value} = 0.06 > 0.05$.
3. The coefficient of determination is significant to determine the effect of variable x (leverage) on changes in the variable y (firm value). $Kd = 5.7\%$, it is known that the contribution of leverage in influencing the company to the value of the company is 5.7% and the remaining 94.3% is influenced by other factors.
4. Research regression model as follows: $Y = a + bX$

$$PBV = 127.85 + 35,137 DER$$

From the regression equation above it is known, if $DER = 0$ then the value of the company is 127.85 and if there is an additional one unit of DER it will increase PBV by 35,137

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