Intrinsic Value Equity Determinants through Banking Profitability in Indonesia Stock Exchange

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Keywords: Capital Adequacy Ratio, Non-perfoming Loans, Net Interest Margin, Return on Equity, Free Cash Flow to Equity.

Abstract: The purpose of this research was to find out and analyze the influence of Capital Adequacy Ratio, Non-perfoming Loans and Net Interest Margin on the intrinsic value of equity with profitability as an intervening variable in banking sector companies in Indonesia Stock Exchange. The intrinsic value of this equity was the net present value of the projected Free Cash Flow to Equity (FCFE). The population was selected by the target population with 30 samples of companies. Hypothesis testing technique using path analysis using SPSS at 5% alpha value. The results of this study indicate that 1) the CAR has a negative and significant effect on profitability, 2) NPL has a negative and significant effect on profitability, 3) NIM has positive and significant effect on profitability, 4) CAR has positive and insignificant effect on equity intrinsic value.

1 INTRODUCTION

The capital market is one of the few investment instruments that are much in demand by the public. Investment is the placement of the funds at this time hoping to generate profits in the future. Investors in making decisions need important information as the base for determining investment choices. Investment decision is very important because to obtain the optimum return and avoid losses (Fachrudin, K.R. & Amalia, 2016). Understanding the stock market according to the Capital Market Law No. 8 in 1995 the activity concerned with the public offering and trading of securities, public companies relating to securities issuance, as well as professional organizations related to securities. One of the much-loved instrument in the capital market is stock. Shares in Darmadji T. (2001) is a unit of value or book keeping in a variety of financial instruments referred to under the ownership of a company. Investors who invest in the stock, of course, have the expectation that if the investment would be surplus / profit.

There are two benefits received by investors when investing in stocks, namely in the form of dividends and capital gains (Anorage, 2006). Dividend is the company's operating profits are distributed to investors, while the capital gain is the positive difference between the purchase price by selling stock price. After that, to succeed for investing stocks, do not need a high IQ, because according to Buffet (2003) that the needed for investing stocks is a framework for making decisions and the ability to keep emotions from an analytical framework so that investors have a clear reason and rational to the shares to be purchased, always disciplined for what has been planned, as well as dampen the emotional factor in the making investment decisions.

For investing stocks investor can be expects to forecast stock prices that will be formed in the future. Therefore, we need a method of analysis that can support the investor's expectations. Moreover this method of analysis is also useful to anticipate the possibility that will happen, the intention is to use stock analysis, if the results of the stock assessment is positive, then the investor can be assured against expectations stocks going forward, and if the result of judgment is negative, investors can minimize the chances losses that would arise if you buy the stock.

Motivation to perform stock valuation according to Hoover (2006) is extremely diverse. In addition to the benefit of trade, as well as to establish an effective economic policy, or to understand better

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manage the company, and can be beneficial to convey accurate information to the public. Additionally assortment are also people who use stock valuation, ranging from people in the company that manages company up to economists to manage the economy.

Now there are several valuation methods useful to facilitate investors to analyze stocks, one of which is the Discounted Cash Flow Model approach is to approach the valuation of Free Cash Flow to Equity (FCFE) against the shares of banking companies (Ariyanto, 2012). Definition FCFE by Pinto (2010) is the cash flow available to shareholders after all operating expenses, interest and principal payments have been paid. In addition, the selection of valuation models such FCFE because every company must have cash flow is the result of the company's operations, be it negative or positive cash flow, so they better reflect the actual condition of the company.

The main purpose of the bank's operations is to achieve the maximum level of profitability. Profitability is the ability of banks to earn profits effectively and efficiently. Profitability used is Return on Equity (ROE) because it can take into account the ability of the bank's management in the net profit of the company. The level of profitability with ROE approach aims to measure the ability of bank management to manage the assets it controls to generate income (Rangga, 2013).

Several factors are thought to affect the profitability and stock prices are Capital Adequacy Ratio (CAR), which is a financial ratio that shows how much the entire assets of the bank that contain risks (credit, investments in securities, bills to other banks) is also funded by the bank's capital itself, in addition to obtaining funds from sources outside the bank, such as public funds, borrowing (debt), and others (Dendawijaya, 2005).

Second factor that is expected to affect the profitability and stock prices is Non Performing Loan (NPL), which is a ratio used to measure the ability of banks to cover the risk of failure of loan repayment by the debtor (Darmawan, 2004). Bank said to have a high NPL if the number of troubled loans is greater than the amount of credit granted to debtor. If a bank has a high NPL, it will increase costs, better asset allowance and other costs, in other words higher NPL bank, then it will affect the performance of the bank (Masyhud, 2006).

A third factor that is expected to affect the profitability and stock price is Net Interest Margin (NIM). In the banking world, the Net Interest Margin (NIM) is a measure to distinguish between the interest income earned your bank or financial institution, the amount of interest that is given to the lender. NIM itself aims to evaluate the bank for managing the various risks that may occur in interest rates. High profits gained from the ordinary banking market in Indonesia has become one of the many factors triggering the acquisition of local banks by foreign banks due to net interest margin of banks in Indonesia is the highest in Asia (A. Prasetyantoko, 2012). Thus the amount of NIM will affect the Bank's profit and loss that ultimately affect the performance of the bank.

Based on the phenomenon and background that have been revealed, so authors would like to re-examine the fundamental factors of companies and know how to influence the CAR, NPL, NIM, to profitability as measured by ROE, and the effect on the intrinsic value of the equity. The title of the research to be performed is "Determinants of Intrinsic Value Equity Banking Profitability Through Indonesian Stock Exchange".

Based on the background and the formulation of the problem that has been raised that the conceptual framework of this study is illustrated in Figure 1.

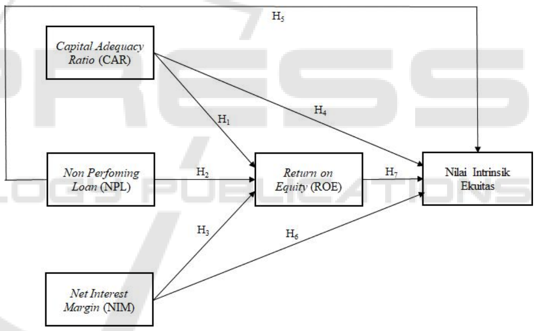

Figure 1: Conceptual Framework Research.

2 METHODOLOGY

Type of research is descriptive research which is a type of research that aims to describe the systematic, factual and accurate about the facts and the properties of an object or a particular population.

The population in this study using banking companies listed on the Stock Exchange during the period of the study period 2014 - 2016 a total of 39 companies, criteria of the sample by using specific criteria that banking companies listed in the period of 2014 or earlier, have a complete financial statement at the time of the study, banks had record profits in the study period 2014-2016, so we get the total sample of 30 companies in the study period.

Source of the data obtained from the Indonesia Stock Exchange's website (*www.idx.co.id)*, In the form of the company's annual financial statements published in the study period, namely 2016 The analysis technique used path analysis (path analysis), which is a method for analyzing the effects (direct effect) and indirect effects (indirect effects) of the variables measured (Ghozali, 2009).

Stages in conducting the research method of Free Cash Flow to Equity (FCFE) are as follows:

1. Calculating the Cost of Equity
2. Counting FCFE
3. Measuring growth FCFE
4. Calculate the intrinsic value

3 RESULTS AND DISCUSSION

3.1 Substructure Testing First

1. Residual Normality Test Kolmogorov-Smirnov test statistic of data Asymp. Sig. (2-tailed) of 0543 (> 0.05) and points (residual emission) spread around fine lines, which indicates that the normality assumption is met.
2. test Heteroscedasticity
   With Glejser test found that the significant value of t test is greater than 5% alpha which indicates that data is free from the problem of heteroscedasticity.
3. test multicollinearity

Coefficients[a]

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
CAR	.802	1.247
NPL	.881	1.135
NIM	.854	1.171

a. Dependent Variable: ROE

Tolerance value of each variable is greater than 0.1. VIF value smaller than 10. This shows that there is no multicollinearity.

4. The coefficient of determination (R2)
   The coefficient of determination is worth 0353 which means that ability of the model to explain variations in variable profitability amounted to 35.3%, while the remaining 64.67% explained by other variables not included in the model.
5. Simultaneous Significance test (test F)
   Significance test F is 0.009. Values smaller than 5% alpha indicates that the model used feasible and can be used for further analysis.
6. Individual Parameter Significance test (t-test)
   CAR variable negative and significant with p-value 0.011 (<0.05) on ROE. NPL variable negative and significant with p-value 0.029 (<0.05) on ROE. While the NIM variable positive and significant with p-value 0.004 (<0.05) on ROE.

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.139	.047		2.950	.007
CAR	-.532	.194	-.484	2.748	0.11
NPL	-1.204	.523	-.387	2.305	.029
NIM	2.023	.649	.532	3.118	.004

a. Dependent Variable: ROE

The mathematical equation model of lane 1:

$$\boldsymbol{Y1} = -\mathbf{0{,}484}\boldsymbol{X1} - \mathbf{0{,}387}\boldsymbol{X2} + \mathbf{0{,}532}\boldsymbol{X3} + \boldsymbol{\varepsilon} \quad (1)$$

3.2 Substructure Testing Second

1. Residual Normality Test
   Kolmogorov-Smirnov test statistic of data Asymp. Sig. (2-tailed) of 0201 (> 0.05) and points (residual emission) spread around fine lines, which indicates that the normality assumption met.
2. test Heteroscedasticity
   With Glejser test found that the significant value of t test is greater than 5% alpha which indicates that the data is free from the problem of heteroscedasticity.
3. Test multicollinearity

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
	(Constant)		
	CAR	.621	1.609
1	NPL	.731	1.367
	NIM	.621	1.609
	ROE	.647	1.547

a. Dependent Variable: Nilai Intrinsik Ekuitas

Tolerance value of each variable is greater than 0.1. VIF value smaller than 10. This shows that there is no multicollinearity.

4. The coefficient of determination (R2)
   The coefficient of determination is worth 0493 which means that ability of the model to explain variations in the variable profitability amounted to 49.3%, while the remaining 50.7% explained by other variables not included in the model.
5. Simultaneous Significance test (test F)
   Significance test F is 0.001. Values smaller than 5% alpha indicates that the model used feasible and can be used for further analysis.

6. Individual Parameter Significance test (t-test)
   CAR variable positive and not significant with p-value 0.577 (> 0.05) of the intrinsic value of equity. NPL variable positive and not significant with p-value 0.342 (> 0.05) of the intrinsic value of equity. NIM variable positive and not significant with p-value 0.004 (> 0.05) of the intrinsic value of equity. While ROE positive and significant with p-value 0.000 (<0.05) of the intrinsic value of equity.

Coefficients[a]

		Unstandardized Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-661939.850	470222.055		-1.408	.172
	CAR	1.074E6	1.899E6	.102	.566	.577
	NPL	4.793E6	4.949E6	.161	.968	.342
	NIM	406384.906	6.565E6	.011	.062	.951
	ROE	6.992E6	1.693E6	.732	4.131	.000

a. Dependent Variable: Nilai Intrinsik Ekuitas

The mathematical equation model of lane 1:

$$\boldsymbol{Y2} = \mathbf{0{,}102}\boldsymbol{X1} + \mathbf{0{,}161}\boldsymbol{X2} + \mathbf{0{,}011}\boldsymbol{X3} + \mathbf{0{,}732}\boldsymbol{Y1} + \boldsymbol{\varepsilon} \qquad (2)$$

3.3 Discussion

3.3.1 Effect of Capital Adequacy Ratio, Non-perfoming Loan and Net Interest Margin on Profitability

Their negative influence on profitability between CAR means that the higher the CAR can decrease the value of profitability (ROE). This is because the bank-owned capital is not managed effectively because the value of risky assets (RWA) in the company that became the sample is larger than the amount of capital used to fund such that the ratio of RWA CAR reduced profitability (ROE). The amount of RWA shows that the expansion of the company's valuable assets owned large so that the risk too great, it can reduce profitability.

From the statistical test result that non-performing loans have a negative impact on profitability. If the lower non-performing loans it gives an indication that the level of risk on bank lending in low enough that the bank will have the advantage (Rahim and IRPA, 2008). Non Performing Loan (NPL) will cause the loss of opportunity to earn (income) of loans, thereby reducing profits and reduced ability to lending activities. The number of non-performing loans also makes the bank did not dare to increase lending.

Among the positive influence on profitability NIM means that the higher the value of the NIM can increase the value of profitability. According Almilia and Herdiningtyas (2005), the greater the ratio of net interest margin earned by banks will increase interest income on earning assets managed by the bank so that the possibility of the bank in a smaller risk conditions. Net interest margin is strongly influenced by interest rates, therefore the net interest margin is used as an evaluation of the banking addressing risk management. When interest rates are rising the interest expense and interest income will go up so it can see the ability of banks to earn interest income from loans granted.

3.3.2 Effect of Capital Adequacy Ratio, Non-perfoming Loans, Net Interest Margin and Profitability against Intrinsic Value Equity

Statistical test results showed that the variable CAR positive effect on the intrinsic value of equity, this means that every variable CAR will increase the intrinsic value of the equity. Due to the higher value of CAR means the company has sufficient capital to maintain the likelihood of the risk of losses resulting from the movement of bank assets which basically originates mostly from third party funds.

In this study resulted that the NPL a positive impact on the company's intrinsic value. This condition implies despite the higher NPL value does not give effect to lower the intrinsic value of equity. This is because Allowance for Assets (PPAP) is still able to cover credit problems. Banking earnings may still increase with the NPL are high because banks are still able to obtain a source of income, not only of interest but also of other income sources such as fee-based income also gives effect is high relative to the increase in the intrinsic value (Nurus, 2017).

The results of this study showed that NIM have a positive effect and not significant to intrinsic value of the equity. This is because of high NIM caused by banks that had business focused on UMKM credit and micro with same ratio (Hassim, and Indiani, 2016). Known that in Indonesia the main banks revenue from credit interest income. Of course, the microfinance of the community as long as there is no need for the fewer unhealthy people, it is only that they may overstay. Higher NIM can not afford to have a lot of good because high NIM are prompted with a good operating system.

This study showed that ROE have a positive effect and significant through intrinsic value of equity. The results showed investors does overview of a company by looking at the financial ratios such as an evaluation tools investments, because of the high financial ratios reflect its lower firm value. If investors want to see how much the company earns a return on investment that they cultivate, which will see first is profitability ratios.

3.3.3 Indirect Effect of Capital Adequacy Ratio, Non-perfoming Loan, and the Net Interest Margin of the Intrinsic Value Equity through Profitability

The results showed indirect effect of the intrinsic value of equity CAR through profitability amounted to -0.3542 and significant (0.0223 < 0.005). This indicates that direct effect of intrinsic value of equity CAR smaller than indirect effect of intrinsic value of equity CAR through profitability. This means that with increasing profitability or company's ability to earn a return may affect CAR in increasing intrinsic value of equity.

The results showed indirect effect of intrinsic value of equity NPL through profitability amounted to -0.2833 and not significant (0.0768 > 0.005). This indicates that direct effect of NPLs of intrinsic value of equity is greater than indirect effect of intrinsic value of equity NPL through profitability. This means that with increase in profitability can affect NPL in increasing intrinsic value of equity. So that means bigger the problem loans that pose a bank do not want to do too much credit, thereby reducing the amount of credit granted by banks which will reduce the amount of a bank's profits and ultimately lowers value of the company.

The results showed indirect effect of intrinsic value of equity NIM through profitability amounted .3894 and significant (0.0128 < 0.005). This indicates that direct effect of intrinsic value of equity NIM smaller than indirect effect of intrinsic value of equity NIM through profitability. This means that with increasing profitability or company's ability to earn a return may affect NIM in increasing the intrinsic value of equity.

4 CONCLUSIONS

Based on the research conducted, it can be concluded as this:

1. *Capital Adequacy Ratio* a significant negative effect on profitability.
2. *Non-perfoming Loan* a significant negative effect on profitability.
3. *Net Interest Margin* positive and significant impact on profitability.
4. *Capital Adequacy Ratio* and no significant positive effect on the intrinsic value of the equity.
5. *Non-perfoming Loan* and no significant positive effect on the intrinsic value of the equity.
6. *Net Interest Margin* and no significant positive effect on the intrinsic value of the equity.
7. Profitability positive and significant effect of the intrinsic value of equity.
8. *Capital Adequacy Ratio* a significant negative effect on the intrinsic value of the equity through profitability.
9. *Non-perfoming Loan* and no significant negative effect on the intrinsic value of the equity through profitability.
10. *Net Interest Margin* positive and significant impact on the intrinsic value of the equity through profitability.

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