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**Article history:**

Received: 2018-09-29

Revised: 2018-12-28

Accepted: 2019-01-19

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## **Internal Factors and Firm Value: a Case Study of Banking Listed Companies**

### **Abstract**

The weakening of the value of the rupiah against the US dollar has made Indonesia again experiencing economic crisis conditions. However, this condition did not make the performance of the banking sector share decline and vice versa, defeating nine other industrial sectors, this indicates that the firm value in the banking sector is still considered good by investors, which are the factors that influence the firm value? This study aims to analyze the factors that influence firm value in the banking sector and can be used by investors in making investment decisions. This research uses secondary data with 12 sample companies in the banking sector listed on the Indonesia Stock Exchange in the 2011-2016 period using the purposive sampling method and panel data regression analysis. The results of this study indicate that the variable interest income, a debt-equity ratio (DER) and firm age (AGE) influence the firm value (FV), while the managerial ownership variables and earnings per share (EPS) do not affect the firm value (FV). The results of these studies are expected to help companies and investors in decision making.

**Keywords:** Company Age; Company Value; Debt to Equity Ratio; Earning Per Share; Interest Income; Managerial Ownership

**JEL Classification:** G32, L25

**Citation:** Subing, H. J. T., & Susiani, R. (2019). Internal factors and firm value: A case study of banking listed companies. *Jurnal Keuangan dan Perbankan*, 23(1), 73-83. <https://doi.org/10.26905/jkdp.v23i1.2405>

### **Abstrak**

*Melemahnya nilai Rupiah terhadap US Dollar membuat Indonesia kembali mengalami kondisi krisis ekonomi. Namun kondisi tersebut justru tidak membuat kinerja saham sektor perbankan menurun bahkan sebaliknya, mengalahkan sembilan sektor industri lainnya hal ini menunjukkan bahwa nilai perusahaan pada sektor perbankan masih dinilai baik oleh investor yang menjadi pertanyaan, apa saja faktor-faktor yang mempengaruhi nilai perusahaan? Penelitian ini bertujuan untuk menganalisis faktor-faktor yang mempengaruhi nilai perusahaan pada sektor perbankan dan dapat digunakan oleh investor dalam mengambil keputusan investasi. Riset ini memakai data sekunder dengan 12 sampel perusahaan pada sektor perbankan yang terdaftar di Bursa Efek Indonesia periode 2011-2016 dengan menggunakan metode purposive sampling dan analisis regresi data panel. Hasil penelitian ini menunjukkan bahwa variabel pendapatan bunga, debt-equity ratio (DER) dan umur perusahaan memberikan pengaruh terhadap nilai perusahaan, sedangkan variabel kepemilikan manajerial dan earning per share (EPS) tidak berpengaruh terhadap nilai perusahaan. Hasil penelitian tersebut diharapkan dapat membantu perusahaan dan investor dalam pengambilan keputusan.*

**Kata Kunci:** Umur Perusahaan; Nilai Perusahaan; Debt to Equity Ratio; Earning Per Share; Pendapatan Bunga; Kepemilikan Manajerial

## 1. Introduction

The financial industry is a group of service companies listed on the Indonesia Stock Exchange and divided into several sub-sectors, one of which is the banking sub-sector. The financial industry, especially banking, has a vital role in maintaining economic stability in a country. In a report entitled “Global Financing Development Report 2013: Rethinking the Role of the State in Finance”, the World Bank concluded that no financial sector should go in the opposite direction to national economic goal. The statement stressed that companies in the banking sector everywhere now can describe the economic conditions of a country, even becoming a benchmark for progress in the country.

According to the data from the Financial Services Authority Performance Report 2012-2017, during the 2011-2016 period, the Financial Services Sector has contributed significantly to the growth of the Indonesian economy that there was an increase from 0.25 percent (2011) to 0.36 percent (2016). Capital Adequacy Rate of the banking industry during the period 2012-quarter I-2017 increased from 17.43 percent to 22.88 percent. According to Sukirno (2015), in the range of 2014-2016, the value of the rupiah weakened against the US dollar, some parties considered the economic conditions at that time had entered a period of crisis as happened in 1997-1998 due to the continued weakening of the rupiah exchange rate. The condition of the weakening of the rupiah exchange rate against the US Dollar did not make the performance of the banking sector shares listed on the Indonesia Stock Exchange decline, even the banking sector stocks grew the highest sectorally, beating the other nine sectors. In addition, the performance of banking stocks outperformed the performance of the composite stock price index (IHSG) and the index of the 45 most liquid stocks (LQ-45). The increase in banking stocks is a sign that investors on the trading floor still have high trust in banking issuers (beritasatu.com).

One of the factors that can encourage an increase in a company's stock price is through increas-

ing the firm value (FV) because the firm value is a reflection of the market price of a company's stock (Gusni & Vinelda, 2016). According to Salvatore (2005), firm value is an investor's perception of the company, which is often associated with stock prices. High stock prices make the firm value increase. The company's main goal according to the theory of the firm is to maximize the wealth or firm value

Firm value does not always increase from time to time, sometimes decreases. The decline in firm value can occur because of one of the factors of company performance that has not been maximal in managing company-owned resources as well as slow economic growth and a decline in credit conditions in the banking sector (www.bisnis.com, 2012). The decrease in the average firm value can be caused by various factors including managerial ownership, DER, and EPS (Oxelheim & Randoy, 2001 in Cho, Sul, & Min, 2012).

One of the factors that increase and decrease FV is managerial ownership (MO). Managerial ownership in a company can lead to interesting suspicion that the firm value increases as a result of ownership of management which increases. The theory put forward by Ross (1977) in Warapsari & Suaryana, (2016), proposes that the greater management ownership in the company, the better management performance and the firm value that will tend to increase seen by shareholders because the company's activities are directly monitored through managerial ownership. The theory is in line with the results of research conducted by Rachman (2012), Abbas, Naqvi, & Mirza (2013), Abdolmanafi et al. (2013), and Ningsih (2013) which states that managerial ownership has a positive effect on firm value, but different from the results of a study conducted by Welim (2013) indicates that the independent variable of managerial ownership has a negative effect on firm value.

Another factor that is also thought to affect firm value is income; in this case in the banking sector industry is interest income (II). Interest income is very fundamental in determining the profitability of the bank because most of the sources of banking income

are still derived from interest. Bank interest income that continues to increase illustrates that the company continues to grow and has a positive impact on firm value (Kusumajaya, 2011). This theory is in line with the research carried out by Baele, Jonghe, & Vennet (2007), Chiorazzo, Milani, & Salvini (2008), Sanaya & Wolve (2011) in Brighi & Venturelli (2014).

The company's capital structure can come from within the company, namely in the form of the owner's capital and retained earnings and outside the company, in the form of loans or debt. The main task of company management determines the target of optimal capital structure in which there is a proportion between foreign capital or debt with its own capital (Husnan, 2004). According to Jensen (2001) explained that to maximize the firm value not only with equity values that must be considered, but also all financial resources such as debt, ordinary shares, and preferred shares. One of the debt ratios predicted to influence firm value is the debt to equity ratio (DER). High DER can reduce firm value, while low DER can increase firm value (Kasmir, 2012). According to Modigliani & Miller (1958) in the theory of trade-offs, companies will try to balance the benefits of funding using debt with high-interest rates and bankruptcy costs. If there is a shift in the level of financial leverage until it passes the optimal capital structure point, then the cost of bankruptcy will exceed the tax benefits, so that the company's value will decrease. A number of studies show that DER is one of the factors that have a negative influence on firm value as stated by Hidayati (2010), Kusumajaya (2011), Dewi & Wirajaya (2013), Asmirantho (2014), Sukaenah (2015), and Hasibuan, Dzulkirom, & Endang (2016) that DER has a negative effect on firm value. But it is different from the research conducted by Suteja & Manihuruk (2009), Cheng & Tzeng (2011), Hermuningsih (2013), and Pirashanthini & Balasundaram (2013), states that DER has a positive effect on firm value.

Another ratio used in this study is earnings per share (EPS). EPS is a ratio to measure management's success in gaining profit for shareholders (Kasmir, 2012). According to Brigham & Houston (2011),

companies must be able to influence stock prices in the capital market so the companies can increase the firm value through increasing the value of shares traded in the capital market. This statement is in line with research according to Putra et al. (2007), Brigham & Houston (2011), and Priatinah & Kusuma (2012) states that EPS has a significant positive effect on firm value, in contrast to research conducted by Sukaenah (2015) states that EPS has a significant negative effect on firm value.

The Firm age (AGE) is also predicted as one of the factors that influence the firm value in various countries. A number of studies show that AGE has a positive effect on firm value, which means that the older the firm age, the higher the firm value as research conducted by Dahya, Dimitrov, & McConnell (2007), Driffield, Mahambare, & Pal (2007), and Sulong & Nor (2008). Different opinions as stated by Loderer & Waelchli (2011) and Choi, Sul, & Min (2012), they states that AGE has a negative effect on firm value. Based on the phenomena and results of previous studies, the authors are interested in researching the factors that affect the firm value.

## **2. Hypotheses Development**

In agency theory, it is explained that the interests of management and the interests of shareholders may be in contradiction. The contradiction between management and shareholders will decrease if there is management ownership (MO) (Christiawan & Tarigan, 2007). Increasing managerial ownership helps to connect the interests of internal parties and shareholders, and leads to better decision making which is expected to increase firm value. Thus, company activities can be directly monitored through large managerial ownership (Endraswati, 2012). Some studies suggest that there is a relationship between managerial ownership and firm value, including Rachman (2012) that is in his research stated that the increase of managerial ownership would have a positive impact on firm value because with increased share ownership by the management company, control of management activities

will increase the company will be maximal. These findings are reinforced by research Ningsih (2013) which found that managerial ownership variables also have a positive effect on firm value. This condition shows that the higher the proportion of managerial ownership, the higher the firm value. The results of this study are consistent with the results of Abbas, Naqvi, & Mirza's research (2013) and Abdolmanafi et al. (2013) who state that increasing managerial ownership has a positive impact on firm value but different from the results of study conducted by Welim (2013) indicates that the independent variable of managerial ownership has a negative effect on firm value. Based on the description above, the hypothesis to be investigated is as follows:

H<sub>1</sub>: managerial ownership has effects on the firm value

Interest income (II) is income earned from the planting of bank funds on productive assets. An appropriate fund management capability is needed in carrying out a fine management strategy for the bank because the bank's obligations to its customers must be fulfilled. The better the management of funds made by the bank, the greater the interest income. It also can affect firm value.

Increasing bank interest income illustrates that the company continues to grow and has a positive impact on firm value (Kusumajaya, 2011). This opinion is in line with a number of studies in the banking industry that has been carried out in several countries such as America and Europe by Baele, Jonghe, & Vennet (2007), Chiorazzo, Milani, & Salvini (2008), and Sanaya & Wolve (2011) in Brighi & Venturelli (2014). They provided results that bank income has an effect on firm value because the higher the income, the higher the firm value. Based on the description above, the hypothesis to be investigated is as follows:

H<sub>2</sub>: interest income has effects on the firm value

Debt to Equity Ratio (DER) is one of the ratios which is thought to influence firm value. The high

DER results in smaller profits distributed to shareholders, conversely the lower the DER, the greater the profit received by shareholders (Harahap, 2010). The results of research conducted by Hidayati (2010), Kusumajaya (2011), Dewi & Wirajaya (2013), Asmirantho (2014), Sukaenah (2015), and Hasibuan, Dzulkirom, & Endang (2016) who say that DER has a negative effect on firm value. While other studies found the opposite results that DER has a positive effect on firm value, that is the research conducted by Suteja & Manihuruk (2009), Cheng & Tzeng (2011), Hermuningsih (2013), Marlina (2013), and Pirashanthini & Balasundaram (2013), occurred because companies with high debt do not mean that the company fail, the higher the debt, the more capital the company has. There are some investors who evaluate this condition as the opportunity or good news because, with more capital, the company is freer to manage the company and the possibility of getting a large dividend. Based on the description above, the hypothesis to be investigated is as follows:

H<sub>3</sub>: debt to equity ratio has effects on the firm value

Brigham & Houston (2001) state that one of the factors which also affects firm value is earnings per share (EPS). It is in line with research conducted by Brigham & Houston (2011) that shows EPS as the ability of a company to distribute income obtained to shareholders, the higher the value of EPS will cause greater profits and the possibility of an increase in the number of dividends received by shareholders and also affect the increase in firm value. The research put forward by Putra et al. (2007), Brigham & Houston (2011), Priatinah & Kusuma (2012), and Marlina (2013) state that EPS influences the firm value. The higher the EPS of a company means, the higher the investor interest in the company's shares. Based on the description above, the hypothesis to be investigated is as follows:

H<sub>4</sub>: earnings per share have effects on the firm value

Firm age (AGE) is one of the factors that influence the firm value in various countries. According to

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Lee & Choi (2015), the longer the firm age, the more closely related to the firm value and the higher the possibility that the company has better long-term investment decisions that impact on the firm value. Some studies show that AGE has a positive effect on firm value as research conducted by Dahya, Dimitrov, & McConnell (2007), Driffield, Mahambare, & Pal (2007), Sulong & Nor (2008), and Abdolkhani & Jalali (2013). While the results of different studies were put forward by Loderer & Waelchli (2011) and Choi, Sul, & Min (2012) who state that older companies have lower margins, higher costs, slower growth, older assets, so investors are not interested in investing and occurring a decrease in firm value. Based on the description above, the hypothesis to be investigated is as follows:

H<sub>3</sub>: the firm age has effects on the firm value

### 3. Method, Data, and Analysis

A correlation prediction design is used in this quantitative study to determine whether MO, II, DER, EPS, and AGE have an effect on FV calculated using Tobin's Q. This study uses quantitative data that are obtained by using formulas in the financial literature and partly the original data. Sources of data used in this study are secondary data obtained from financial reports, annual reports, and other pertinent information on the banking sector financial industry listed on the Indonesia Stock Exchange period 2011-2016. In addition to the information, authors also use the data

already available through articles, journals, books, and others. The population in this study are companies in the banking sector financial industry listed on the Indonesia Stock Exchange during the period 2011-2016, consisting of 31 companies. The number of samples taken to meet the objectives of this study is as many as 12 companies selected based on purposive sampling method. The data used is a combination of time series and cross-section data also called the data panel of 72 data. The data panels provide more informative, more varied data, less co-linearity among variables, higher degrees of freedom and more efficient (Zhao, 2013).

Hypotheses are interim to answer a formulated problems of the research and an answer based on relevant theory; it is not basically empirical facts from data gathering. Based on a review of several prior studies has resulted in several testable hypotheses. Table 1 showed the definition of the variables and research hypotheses used.

The first step for model regression are classical assumption tests consist of normality, multicollinearity, autocorrelation, and heteroscedasticity test. The second step, the test of the hypothesis in this research is using a panel data regression model as used by Carter et. al. (2003) and Gusni & Vinelda (2016). The regression equation model is presented below:

$$FV = a + b_1MO + b_2II + b_3DER + b_4EPS + b_5AGE + e \quad (1)$$

**Table 1.** Research Variables Measurements

Variables	Measurement	Symbol	Scale
<b>Independent variables</b>			
Managerial Ownership	Number of Managerial Shares / Number of shares outstanding	MO	Ratio
Interest Income	Income - Interest expense	II	Ratio
Debt to Equity Ratio	Total Amount of Debt / Equity	DER	Ratio
Earnings Per Share	Net profit / Number of shares outstanding	EPS	Ratio
Firm Age	Age = year <sub>t</sub> - year <sub>n</sub> year <sub>t</sub> = year annual report under study year <sub>n</sub> = year company standing	AGE	Ratio
<b>Dependent variables</b>			
Firm Value	Market Value of Equity + Total Debt / Total Asset	FV	Ratio

Where  $a$  was constant,  $b_1$ ,  $b_2$ ,  $b_3$ ,  $b_4$ ,  $b_5$  were regression coefficients, and the variables already being defined in Table 1. Furthermore, to test the model proposed in this research, the F test and the coefficient of determination test (Lind, Marchal, & Wathen, 2005) were used. F-test or also known as the ANOVA test used to know whether the proposed model is correct or not. If the constructed model is correct, then it can be continued to the next test, but if not correct, it is necessary to change the independent variable based on previous theory and research which is estimated to have relation with the dependent variable.

Test coefficient of determination ( $R^2$ ) is used to find out how big the capacity of the model or independent variable to explain changes in the dependent variable. The coefficient of determination has a value between 0 and 1. The smaller the value, then indicates the limited ability of the model formed to explain changes in the independent variable, on the other hand, if the value of  $R^2$  is close to 1, then the model is able to explain the variation in the dependent variable perfectly.

The hypothesis proposed in the research needs to be tested by using a t-test, in order to know the result of each hypothesis proposed for each independent variable (X) and its effect on the dependent variable (Y) at 5 percent confidence level.

## 4. Results

### Descriptive statistics

The descriptive statistical analysis describes the character of the sample used in this study. Descriptive analysis of the data used for this study was 72 obser-

vational data during the 2011-2016 period. Descriptive statistics as can be seen in Table 2 below illustrate the mean, minimum, maximum, and standard deviations for each independent variable and the dependent variable.

The results in Table 2 shows that the banking sector financial industry companies listed on the Indonesia Stock Exchange in the period 2011-2016 have a minimum value of the firm value of -0.05977 and a maximum value of 4.283065. The average firm value is 0.398148, which indicates that the average firm value is unstable. The standard deviation of firm value is 1.041975 (above average), meaning that the firm value has a high level of data variation.

Managerial ownership variables proxies by MO have a minimum MO value of 0.000100 and a maximum MO value of 0.687600. The mean of MO is 0.079571, which indicates that the MO average is not stable. The standard deviation of MO is 0.174990 (above average), meaning that MO has a high level of data variation.

The interest income variable which is proxies with II has a minimum value interest income of 0.751847, and the maximum value interest income is 27.53147. The mean II is 1.369762, which shows that the average II is not stable. The standard deviation II value is 3.127472 (above average), meaning that II has a high level of data variation.

The debt to equity ratio variable proxies by DER has a minimum DER value of -4774359 and a maximum DER value of 2.583593. The mean DER value is 1.334851, which indicates that the DER average is unstable. The standard deviation of DER is 1.853053 (above average), meaning that DER has a high level of data variation.

**Table 2.** Descriptive Statistics

Variabel	Mean	Maksimum	Minimum	Std. Dev.
Firm Value (FV)	0.398148	4.283065	-0.05977	1.041975
Managerial Ownership (MO)	0.079571	0.687600	0.000100	0.174990
Interest Income (II)	1.369762	27.53147	0.751847	3.127472
Debt to Equity Ratio (DER)	1.334851	2.583593	-4774359	1.853053
Earnings per Share (EPS)	4.365721	6.729632	0.287805	1.531056
Firm Age (AGE)	43.41667	75.00000	19.00000	16.96039

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Earnings per share variable which is proxies by EPS has a minimum EPS value of 0.287805 and the maximum EPS value is 6.729632. The mean of EPS is 4.365721, which indicates that the average EPS is stable. The standard deviation of EPS is equal to 1.531056 (below the average), meaning that EPS has a low level of data variation.

Firm age variables that are proxies by AGE have a minimum value of 19.0 and a maximum value of 75.0. The mean AGE is 43.41667, which indicates that the average firm age is stable. The standard deviation of AGE is 16.96039 (below average), meaning that AGE has a low level of data variation.

In this study normality test uses the probability value of Jarque-Bera. The Jarque-Bera test results show a probability value of 0.8726 greater than 0.05, which means that the data has been normally distributed.

Multicollinearity test indicates that there is no multicollinearity between independent variables because the correlation coefficient shows VIF value smaller than the critical value ( $VIF < 10$ ) which means there is no multicollinearity problem between independent variable or in other words, the independent variable used in research regression model these have been mutually independent.

The autocorrelation test in this study used the Durbin-Watson test with the provisions  $dU < dW < 4-dU$  which means there was no autocorrelation. In this study the number of samples ( $n$ ) = 72, the number of independent variables ( $k$ ) = 5, and  $\alpha$  = 0.05. Then we get the critical value  $dL$  = 1.4732 and  $dU$  =

1.7688. Autocorrelation test shows the Durbin-Watson 1.9776 numbers which will be compared with the Durbin-Watson table ( $dL$  = 1.4732 and  $dU$  = 1.7688). Thus,  $dU$  (1.7688) <  $dW$  (1.9776) <  $4-dU$  ( $4-1.7688$  = 2.2312), which means there are no symptoms of autocorrelation.

Heteroscedasticity test using white test shows that the probability value of Obs \*R-squared is 0.09 or  $0.09 > 0.05$  meaning there is no symptoms of heteroscedasticity (the data satisfies the assumption of homoscedasticity).

Regression analysis showed that the variation of MO and EPS coefficient was positive indicating that MO and EPS increased by one unit, then the FV will rise equal to the value of the regression coefficient. Meanwhile, the coefficient of II, DER, and AGE have a negative value which means if II, DER, and AGE increase by one unit, then the FV will decrease equal to the value of the regression coefficient. For the f-test results from the table 6 below show probability value (F-statistics)  $0.000000 < 0.05$  which means that variable MO, II, DER, EPS, and AGE have a linear relationship with FV variable or the regression model used is appropriate and can be used for further analysis. The results of the regression are shown in Table 3.

The coefficient of determination in this study using adjusted r-squared. Adjusted r-squared value as seen in table II of 0.724895, which means that the influence of variable MO, II, DER, EPS, and AGE of 72.49 percent while the rest of 27.51 percent is influenced by other variables outside regression model.

**Table 3.** Panel Data Regression Results

Variables	Coefficient	Std. Error	Prob.
MO	0.046058	0.201312	0.8197
II	-0.009840	0.004719	0.0409
DER	-0.441925	0.024584	0.0000
EPS	0.000509	0.000261	0.0558
AGE	-0.009937	0.002835	0.0008
C	1.430886	0.131741	0.0004
R-squared	0.744268		
Adjusted R-squared	0.724895		
F-statistic	38.41662		
Prob (F-statistic)	0.000000		

The t-test results show that the variables II, DER, and AGE have lower probability ( $\alpha$ -calculated) values than  $\alpha = 0.05$  which means that the variables II, DER, and AGE have a negative and significant effect on FV. Meanwhile, MO and EPS variables have a higher probability ( $\alpha$ -calculated) value of  $\alpha = 0.05$  which means that MO and EPS variables do not affect FV. t-Test (Hypotheses Test) results can be shown in Table 4.

## 5. Discussion

The first hypothesis in this study is MO has an effect on FV, rejected. The test results show that MO does not affect the FV. This situation indicates that higher or lower managerial ownership in the company does not affect the decrease or increase in FV. This condition is theoretically opposite the higher ownership of managers in a company, it will improve the performance of companies that can increase investor confidence so that the firm value will increase, But this is not the case with what happens in the banking sector, managerial ownership decreases or increases it does not have an effect on firm value, because with or without owning company shares, investors assume that managers must act professionally and prioritize the interests of shareholders. The results of this study contradict the study conducted by Rachman (2012), Abbas, Naqvi, & Mirza (2013), Abdolmanafi et al. (2013), and Ningsih (2013), it shows that managerial ownership positive effect on the firm value and study conducted by Welim (2013) indicates that the independent variable of managerial ownership has a negative effect on firm value.

The second hypothesis in this study is II affects FV. The test results indicate that variable II affects FV variable in a negative direction, so a hypothesis is ac-

cepted. These conditions indicate that if interest income increases then the firm value will decrease. Increased interest income is considered not necessarily indicate an increase in bank performance, so it does not attract investors to invest that affects the decline in firm value. This result is different to theory and study conducted by Baele, Jonghe, & Vennet (2007), Chiorazzo, Milani, & Salvini (2008), Kusumajaya (2011), and Sanaya & Wolve in Brighi & Venturelli (2014), who say that income has a positive impact on the firm value.

The third hypothesis in this study is DER affects FV. The test results show that the DER variable affects FV in a negative direction, so the third hypothesis is accepted. This condition indicates that the higher the company's debt, the more the firm value will go down. Increased debt in the banking sector is not appreciated by investors, so an increase in debt causes a decline in firm value. The results of this study are in line with research conducted by Kusumajaya (2011), Dewi & Wirajaya (2013), Asmirantho (2014), Sukaenah (2015), and Hasibuan, Dzulkirom, & Endang (2016), found that DER had a negative impact on the firm value, but contrary to Suteja & Manihuruk (2009), Cheng & Tzeng (2011), Hermuningsih (2013), Marlina (2013), and Pirashanthini & Balasundaram (2013), which stated that DER had a positive impact on the firm value.

The fourth hypothesis in this study is EPS affects FV. Test results show that EPS did not affect FV, so the fourth hypothesis is rejected. This condition shows that the higher or lower the EPS in the company do not give effect to the decrease or increase in the firm value. In theory, the company's EPS increase shows that the company's performance continues to increase, so investors judge that the company has better prospects for

**Table 4.** T-test Result (Hypotheses Test)

Variables	t-Calculated	$\alpha$ -calculated	t-table	$\alpha$ -table
MO	0.2288	0.8197	1.6663	0.05
II	-2.0850	0.0409	1.6663	0.05
DER	-17.9762	0.0000	1.6663	0.05
EPS	1.9469	0.0558	1.6663	0.05
AGE	-3.5058	0.0008	1.6663	0.05

the long term. Increased investor confidence can drive the increasing of FV, but this is not the case with what happens in the banking sector. The rise and fall of EPS do not affect FV, because investors income comes from capital gains and dividends. Perhaps investors in the banking sector assume that companies with high EPS will have no meaning if the company does not distribute capital gains or dividends. There are other factors which, according to investors, the banking sector can be used as a benchmark to see the firm value such as the company's prospects, investment activities, dividends distributed, stock price movements, and others. This result contrary to Putra et al. (2007), Brigham & Houston (2011), Priatinah & Kusuma (2012), and Marlina (2013) stating that EPS has a positive effect on FV, and Sukaenah (2015) which stated that EPS had a significant negative effect on FV.

The fifth hypothesis in this study is AGE affects FV. The results of statistical tests that have been done show that AGE has affected FV in a negative direction, so the hypothesis accepted. These conditions indicate that if the firm age increases then FV will decrease. The longer the life of the company will not always earn greater profits than the newly established company because at a given moment the old company's earnings often decrease as newcomers grow which results in the company's long-lasting lower FV. The results of this study are in line with the opinion that is given by Loderer & Waelchli (2011) and Choi, Sul, & Min (2012) which states that in older companies having lower margins, higher costs, slower growth, older, stiffer assets and loss of competitiveness so investors are not interested in investing and a decrease in FV, but this study is different from the research conducted by Dahya, Dimitrov, & McConnell (2007), Driffield, Mahambare, & Pal (2007), Sulong & Nor (2008), and Abdolkhani & Jalali (2013) that AGE has a positive impact on FV.

## **6. Conclusion, Limitations, and Suggestions**

### **Conclusion**

This study was conducted to analyze the effect of MO, II, DER, EPS, and AGE at FV and determine

the variable that most effect on FV. This research data use secondary data. The study used banking companies listed on the Indonesia Stock Exchange during the period 2011-2016 with the number of samples of 12 companies taken using a purposive sampling method. The result of the research shows that the regression model used has passed from the classical assumption test and the regression model used is correct based on the result of the F test. The hypothesis test results in this research found negative and significant effect between variable II, DER, and AGE with the variable of FV, while the MO and EPS variables do not affect the FV variable. The test results Adjusted R square coefficient of determination ( $R^2$ ) shows that models built tend to be strong as the independent variable that is used to give effect to the dependent variable.

### **Limitation and suggestions**

This research has a limited scope because it is only done in the banking sector which is listed on the Indonesia Stock Exchange and this research is only limited to the use of independent variables namely, MO, II, DER, EPS, and AGE and the dependent variable is FV.

Companies, especially in the banking sector, are advised to pay more attention to various factors that can affect firm values such as II, DER, and AGE so that companies can make appropriate strategies to increase FV and long-term investors must also consider these factors before making an investment decision. As well as for the next researcher, this study only uses samples in the banking sector so that the results of this study can certainly be generalized to other sectors. It is suggested to further researchers to expand the scope of research to other sectors, and this study only uses MO, II, DER, EPS, and AGE variables to find out the effect on FV, it is suggested to the next researcher to use other variables that have a greater influence on FV.

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