DO FOREIGN OWNERSHIP, FINANCIAL LEVERAGE, INFLATION AND FIRM SIZE INFLUENCE TO FIRM VALUE? EVIDENCE IN INDONESIA STOCK EXCHANGE

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INFORMASI NASKAH

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<th>Alur Naskah</th>
<th>ABSTRAK</th>
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<td>Diterima: 27 Februari</td>
<td>The aim of this study is to get empirical proof the influence of foreign ownership, financial leverage, Inflation, firm size and firm value of firms listed in Indonesia Stock Exchange (IDX). This study provides results on consumer, trade, service and investment, and miscellaneous industry in IDX.</td>
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<td>Revisi: 10 Maret</td>
<td>This study uses fixed effect methode. This study uses E-Views to analysis the data. F test shows that high financial leverage, foreign ownership, inflation, firm size and sales growth is positively related to firm value.</td>
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<td>Diterima untuk terbit: 12 Maret</td>
<td>T test shows that high financial leverage is positively related to firm value. Moreover, High Foreign ownership is positively related to firm value. High inflation is positively related to firm value. High firm size is positively related to firm value. This study uses sales growth as control variable. The result shows that high sales growth is negatively related to firm value. This study expected that it can deliver information as references for stockholder, firm management, and goverment in making decision in foreign investment, Inflation and financial leverage.</td>
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<td>Tersedia online: 22 April</td>
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INTRODUCTION

Indonesia becomes the member of ASEAN Economic Community (AEC). Asean Economic community (AEC) create foreign investor. Foreign Investor is both Foreign Direct Investment (FDI) and Multinational Companies (MNC). Foreign investor that buying stock of firms listed in Indonesia Stock Exchange (IDX) called foreign ownership.

Foreign ownership have access in supplying capital. Berger (2009) found that foreign ownership has efficiency impact to firms. Foreign investors can support many advantages in firms such as supplying capital, technology transfer, good service and...
networking. It used to develop the firms and create firm value. Foreign investor will conduct tight control to firm managements. It can increase firm performance and firm value. It can increase price stock. Thus, foreign ownership influence to firm value of listed firms. It is similar results with previous studies such as Li et al (2009), Sung and Tong (2003), and Bai et al (2004).

Firms also can get supplying capital by taking credit bank and issuing bond. Financing that is from bond and credit bank called financial leverage of firm. The financial leverage have positive effect on firm value. Increasing debt is a positive signal for developing business thereby improving firm value. By increasing debt manager communicate to the market that firms have positive prospect in future. Thus, Market gives positive respond for debt through increasing price stock.

Debt have both a positive and negative effect on firm value (however there is no corporate taxes and bankruptcy cost). Debt can increase positive market valuation but the higher debt have the bankruptcy risk. Ross (1977) stated that managers will take debt/equity ratio as a signal. The fact that high leverage implies higher bankruptcy risk (and cost) for low level of firm quality. Ross’s model (1977) suggested that firm value will rise with leverage, since increasing leverage can increase the market’s perception of value. The manager will maximize firm value by choosing the optimal capital structure, highest possible debt ratio. Then, The debt level be positively related to firm value.

Firms have several business risk such as inflation, recession, and crisis. Business risk influence on firm performance and firm value. Inflation can decrease firm value. Cooley dan Hansen (1991) found that inflation decrease supplying employee and economic production. Barro (1995) found that inflation is negatively related to economic performance. It is inline with (Chordia and Shivakumar, 2005; Basu et al, 2010; and Konchitchki, 2011).

Based on mentioned above shows that foreign ownership and financial leverage have important role on firm value in globalization era. Therefore, this study addresses the relation of foreign ownership, financial leverage, inflation, firm size and firm value of non financial firms in Indonesia Stock Exchange during 2009-2015. This study expected that it can deliver information as references for stockholder on controlling financial leverage, for firm management in controlling firm value and corporate governance, and for government in making decision on foreign investment in domestic firms.

The rest of the study is organized as follows. Section 2 shows the results of previous studies, being emphasized the theories regarding the relationship between foreign ownership on the link between financial leverage and firm value, while Section 3 describes the sample and the employed methodology. The empirical results and discussion are presented in Section 4. A summary of the paper and concluding remarks are provided in Section 5.

THEORITICAL REVIES AND HYPOTHESIS
Financial Leverage And Firm Value

Financial leverage is debt and equity in the capital structure of a firm. It includes debt, common equity and preferred equity that are used to finance the firm’s total assets, operations and financial growth (Goel et al, 2015). Modigliani and Miller (1958)
stated that debt create market value. The firm value is market value of debt and market value of equity. Capital Structure showed that the ability of firm equity to fulfill all of liabilities. The manager can select the mix between debt and equity (Ukaegbu & Oino, 2012). Firm managers are often faced with difficulties in determining the optimal capital structure.

The pecking order theory (Myers and Majluf, 1984) predicted that firm will follow the pecking order as an optimal financing strategy. It was an assumption of Information asymmetry. If the manager action similar with interest of the owners, they issue securities at a higher price than they are truly worth. The more sensitive of the security, the higher the cost of equity capital, since the action of the manager is giving a signal to the market that the securities is overpriced.

This study uses debt to equity ratio (DER) to measure capital structure. Brigham and Daves (2008) stated that financial leverage is proportion of debt to funding investments. Thus, Firm value calculated by adding market value of equity and book value of debt and dividing by book value of assets. Tobin-q ratio is used to measure firm value. Based on the theories and previous studies, the hypothesis is:

**Hypothesis 1 :** High Financial Leverage is Positively related to Firm Value

**Foreign Ownership And Firm Value**

Foreign Ownership (Wiwattanakantang, 1999) is proportion of outstanding share of companies owned by investor both personally and institutions. Foreign Ownership has positive impact in firm value (Farooque et al, 2007). Bai et al. (2004) found that foreign investor influence to the higher market valuation. Li et al (2009) Chinese Firms with high foreign ownership have not high leverage that is consistent with the trade off theory. Li, Yue and Zhao (2009) foreign ownership can drive positive impact in firm value of financial leverage. Based on the theories and previous studies, the hypothesis is:

**H2 :** High Foreign Ownership is positively related to firm value.

**Inflation And Firm Value**

Cooley dan Hansen (1991) found that inflation decrease supplying employee and economic production. Barro (1995) found that inflation is negatively related to economic performance. It is inline with (Chordia andShivakumar, 2005; Basu et al, 2010; and Konchitchki, 2011). Based on the theories and previous studies, the hypothesis is:

**H3 :** High inflation is negatively related to firm value.

**Firm Size And Firm Value**

Li et al (2009) said that the Larger listed companies were easier to access financial markets both domestic and international. Moreover, capital decision will be subjective to home countries. Wiwattanakantang (1999) said that the larger firms can reduce asymetry information between insider and outsider investor. The decreasing asymmetry supports the firms to use stock, so it can forecast about the negative relation between size and debt. Based on the theories and previous studies, the hypothesis is:

**H4:** High Firm Size is positively related to firm value.
RESEARCH METHODOLOGY

Data analysis is shaping data making easy to read and interpret. This study uses quantitative method. This study investigate whether foreign ownership drive positive impact in firm value of financial leverage.

Data

Data of this study is consist of non financial firms especially consumer, trade, service, and investment, and miscellaneous industry listed in Indonesia Stock Exchange (IDX) in period 2009-2015. This study uses yearly non financial firms level data for 2009-2015. The data resource is annual financial report of firms from website of Indonesia Stock Exchange (IDX). Collecting data of Foreign Ownership is from website of Central Bank of Indonesia, website of The financial service authority (OJK), and firm's website.

Measuring and Operational Definition

Dependent Variable

Firm Value

Firm value is market value and book value of debt. This study uses Tobin-q to measure firm value. Lindenberg and Ross (1981), Jim Tobin (1969) and Chen (2003) uses formulation tobin-q that is:

\[
\text{Tobin's Q Ratio} = \frac{\text{MVS} + \text{Debt}}{\text{TA}}
\]

MVS: Market value of all outstanding shares
Debt: total debt
TA: total asset

Independent Variable

Financial Leverage

Capital Structure called financial leverage uses DER as its proxy. Financial Leverage is measured by examining debt to equity. Shyu (2011) and Sheikh and Wang (2011) measured capital structure by using DER. DER uses ratio scale.

\[
\text{DER} = \frac{\text{Debt}}{\text{Equity}}
\]

Foreign Ownership

Foreign Ownership is measured by a number of proportion of foreign ownership in the company. It consists of foreign institution ownership and personal foreign ownership. Foreign ownership uses ratio scale.

Inflation

Inflation is the increasing price of consumer stuffs. Inflation is understood as a persistent, ongoing rise across a broad spectrum of prices (www.bi.go.id). This study uses data of inflation from Bank Indonesia.

Size

Size (Li et al, 2009) is proxy of firm size. Formula to examine Size is log natural of total asset.

\[
\text{Size} = \text{Ln(Total Aset)}
\]
Control Variable
Sales Growth
Sales Growth is increasing on sales every year. Sales growth can influence on firm value. Sales growth uses percentage on changing sales. Sales growth can influence to firm value. Sales growth is the percentage change in sales over the year following Chen et al. (1999) and Cakraborty (2010).

Sales Growth is increasing on sales every year. Sales growth can influence on firm value. Sales growth uses percentage on changing sales. Sales growth is the percentage change in sales over the year following Chen et al. (1999) and Cakraborty (2010). The formulation of sales growth is:

\[ \text{Sales Growth} = \frac{\text{Total Sales}_t - \text{Total Sales}_{t-1}}{\text{Total Sales}_{t-1}} \]

Multiple Regression Analysis
This study uses multiple regression analysis. Multiple regression analysis is techique to examine the influence of independent variable on dependent variable. Formulation of moderated regression analysis is:

\[ Y_{\text{Tobin-q}} = \alpha + \beta_1 \text{FO} + \beta_2 \text{DER} + \beta_3 \text{inflation} + \beta_4 \text{firm size} + \beta_5 \text{sales growth} + e \]

Where,

\( Y_{\text{Tobin-q}} \) is dependent variable of Firm value. FO is Foreign Ownership. DER is Debt to Equity Ratio. FO, DER, inflation and Firm size are independent variable. Sales growth is as control variable. e is Error.

RESULT AND DISCUSSION
Data analysis is important in the research. It interprets the results of the research. After examining data by using statistic data analysis, the next step is interpretation of the results. This research uses E-Views 9th edition to examine the data. The data of this research is panel data. The data analysis will answer the problem of this research. The problem in this research is whether financial leverage (debt to equity ratio), foreign ownership, firm size have positive effect on firm value and whether inflation have negative effect on firm value.

Financial Leverage, Foreign Ownership, Firm Size And Firm Value

<table>
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<th>Table 1</th>
<th>Regression Result of Financial Leverage, Foreign Ownership And Firm Value</th>
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<tr>
<td>Independent/Dependent</td>
<td>Model TobinQ</td>
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<tr>
<td>Constanta</td>
<td>-1,755</td>
</tr>
<tr>
<td>DER</td>
<td>0,515</td>
</tr>
<tr>
<td>Foreign</td>
<td>1,475</td>
</tr>
<tr>
<td>Inflation</td>
<td>0,0448</td>
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</table>

\( * \) indicates statistical significance at the 0.05 level.
Based on Table 1, the equation of regression is as follows:

\[ Y_Q = -1.755 + 0.515 \times DER + 1.475 \times FOREIGN + 0.0448 \times \text{Inflation} + 0.203 \times \text{Firm Size} - 8.707 \times \text{Sales Growth} + e \]

Table 1 shows values of Akaike, Schwarz, and Hannan Quinn criteria. Akaike, Schwarz, and Hannan Quinn criteria are the truth of the model we made. The lower level of Akaike, Schwarz, and Hannan Quinn criteria is the truth of the model we made. Akaike info criterion is 0.4758, Schwarz criterion of this model is 1.0757, and Hannan Quinn criterion is 0.7151. Based on Akaike, Schwarz, and Hannan Quinn criteria, it shows that The low level of Akaike, Schwarz, and Hannan Quinn criterion. It means that this model is a fit model.

Moreover, based on Table 1, the probability of F statistic is 0.00 and F statistic is 81.8195. It means that DER, foreign ownership, inflation, firm size, and sales growth are significant on 5% influencing firm value. DER, foreign ownership, firm size, sales growth, and firm age can increase 81.8195 firm value of consumer, trade, service, investment, and miscellaneous industry listed in IDX during 2009-2015. Adjusted R-Square value shows 0.9262. It means that independent variables which are DER, Foreign ownership, inflation, firm size, and sales growth can influence dependent variable which is firm value (tobin-Q) at 92.62% while 7.38% firm value is influenced by other variables outside this research. T statistic test shows the influence of independent variable on dependent variable partially. These are the results of t statistic test:

1. T test shows that probability of DER is 0.000 and its coefficient is 0.515. It means that partially DER has a positive significant effect on firm value with 5% alpha. T statistic of DER implies that the higher DER the higher firm value. DER can increase 0.515 of firm value. Debt gives positive signal to the market. It makes positive respond from market. So, debt can increase firm value of consumer, trade, service, investment, and miscellaneous industry in 2009-2015.
2. T test shows that probability of foreign ownership is 0,000 and its coefficient is 1,475. It means that foreign ownership has positive significant effect on firm value with 5% alpha. Coefficient of foreign ownership implies that the higher foreign ownership the higher firm value. Foreign ownership can increase 1,475 of firm value. Foreign ownership give positive impact to market. Foreign ownership brings foreign capital flow that gets positive respond from market. So, foreign ownership will increase firm value of consumer, trade, service, investment and miscellaneous industry in 2009-2015.

3. T test shows that probability of inflation is 0,000 and its coefficient is 0,0448. It means that inflation has positive significant effect on firm value with 5% alpha. Coefficient of inflation implies that the higher inflation the higher firm value. Inflation can increase 0,0448 of firm value. Inflation strengthen the increasing of price products generally. It can increase total asset. So that, it will increase market value of firms. Thus, inflation will increase firm value of consumer, trade, service, investment and miscellaneous industry in 2009-2015.

4. T test shows that probability of firm size is 0,000 and its coefficient is 0,203. It means that firm size has positive significant effect on firm value with 5% alpha. Coefficient of firm size implies that the higher firm size the higher firm value. Firm size can increase 0,203 of firm value. Firm size give positive impact to market. Firm size can create the larger market share. So, firm size will increase firm value of consumer, trade, service, investment and miscellaneous industry in 2009-2015.

5. T test shows that probability of sales growth is 0,000 and its coefficient is -8,707. It means that sales growth has negative significant effect on firm value with 5% alpha. Coefficient of sales growth implies that sales growth can not create firm value. When firms create positive of sales growth, firms gets negative respond from market. It is because sales growth can not cover expenses. So it makes decreasing firm value. Based on t test, sales growth of firm decrease 8,707 of firm value of consumer, trade, service, investment and miscellaneous industry in 2009-2015.

Discussion

Financial Leverage And Firm Value
Based on data analysis, higher financial leverage (DER) is positively related to firm value (tobin-q). Firms that using financial leverage (DER) gives positive signal to market. Firms that using financial leverage reflects that business of firms can gain more profit and asset to cover their debt. Determining debt and equity in consumer, trade, service and investment and miscellaneous industry create high firm value. By using financial leverage, Creditor will control those firms strictly. This condition encourage firm management to create high level of firm value. Thus, Stock price of firms will increase. Thus, this hypothesis of this research (H1) states that financial Leverage Create Positive effect on Firm Value. So, The decision of hypothesis (H1) is Accepted. This result is inline with Ross (1977), Myers and majluf (1977), Stulz (1990), Jensen (1986) and Modigliani and Miller theory (1958).

Foreign Ownership And Firm Value
Foreign ownership has positive significant effect on firm value. Foreign
ownership create transfer technology so it makes more efficient. This result is inline with Bekaert and Harvey (2000), Bekaert et al (2001) and Bai (2004). Bekaert and Harvey (2000) and Bekaert et al (2001) found that foreign investors give many advantages such as role in emerging markets, supplying capital, and technology. So, The decision of hypothesis (H2) is Accepted.

**Inflation And Firm Value**

It means that inflation has positive significant effect on firm value. This result is different with previous studies. Cooley dan Hansen (1991), Barro (1995), Chordia and Shivakumar (2005), Basu et al (2010) and Konchitchki (2011) found that inflation is negatively related to economic performance. So that, H3 is rejected.

**Firm Size And Firm Value**

Firm size has positive significant effect on firm value. Firm size give positive impact to market. Firm size can create the larger market share. This result is inline with Wiwattanakantang (1999) and Li et al (2009). So that H4 is accepted.

**Control variables And Firm Value**

Based on data analysis, control variables which is sales growth has significant effect on dependent variable which is firm value (tobin-q). Sales growth has negative significant on firm value of consumer, trade, service and investment, and miscellaneous industry listed in IDX in 2009-2015. Firms that creating sales growth have decreasing firm value. It implies that market do not respond on firm performance when firms issuing new stock. Market will respond issuing stock in the low level of value even though firms create good sales growth.

**CONCLUSION**

This study is to get empirical proof of financial leverage (DER), foreign ownership, inflation, firm size and sales growth influence to firm value of consumer, trade, service, and investment and miscellaneous industry listed in Indonesia Stock Exchange (IDX) during 2009-2015. Examining with panel least square, this study provides some findings. With E-Views 9th edition, this study uses fixed effect method to examine the data.

F test shows that simultaneously financial leverage (DER), foreign ownership, inflation, firm size and sales growth create positive significant effect on firm value. T test shows that partially financial leverage (DER) create positive significant on firm value. Foreign ownership partially create positive significant on firm value. Inflation create positive significant effect on firm value. Firm size partially create positive significant effect on firm value. Sales growth partially create negative significant on firm value.

This study uses samples in limit scope. This study only focus in consumer, trade, service, and investment and miscellaneous industry listed in Indonesia Stock Exchange (IDX) in 2009-2015.

This study can not provide the small and large firms effects on debt and firm value. The next study can develop the robustness check to ensure the consistency of the model. By using another proxy of financial leverage and firm value.

Implication for Firm Management is To increase firm value firm managements should concern using debt than equity. Debt is positive signal for market. it is about the planning of business in future. In managing debt firm managements should concern
the development of firm business. Market tend to provide high price in good corporate governance of debt. Developing equity stockholders should concern good corporate governance of firm. Bad corporate governance can decrease firm value. Foreign ownership have worse potential on firm value. Foreign ownership tend to difficult to control activities of managers. Government consider good corporate governance in supplying capital. Academics that develop this study should consider good corporate governance effect on debt and firm value. Beside that, adding scope of samples can provide more findings.

REFERENCES


