

The Effect of Foreign Ownership on Firm Performance: Evidences from Indonesia

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ABSTRACT

This study examines the effect of foreign ownership on firm performance using a panel data consisting of 66 non-financial firms listed in the Indonesia Stock Exchange. Five-year period data from 2014 to 2018 is considered. The result of the random effects model indicates that foreign ownership has a positive and significant effect on firm performance; foreign firm ownership is found to have more roles in encouraging performance than what foreign institutional investors can do. This result is consistent with the facts about foreign ownership in Indonesia, where high and stable foreign ownership, in the long run, is beneficial for domestic companies, due to effective monitoring, facilitation of technology usage, international market development, and professional management. The problems in this study is limited due to the fact that the firms being studied, either companies or institutions, are mostly owned by single foreign investors

Keywords: *firm, foreign, monitoring, performance, ownership*

1. INTRODUCTION

Globalization of capital markets makes developing countries more open to foreign investment, which in turn increases the share of domestic companies owned by foreign investors. In these countries, foreign investors play a role not only in economic development but also in corporate governance systems [1, 2].

The effect of foreign ownership on company performance may differ between countries, so it is interesting to study. As found in Jensen & Meckling [3] and Shleifer & Vishny [4], large shareholders always have strong incentives to monitor management that can alleviate agency problems and increase firm performance. Foreign ownership enables technological innovation [5, 6], efficiency or reduction in business risk [7], access to resources, capital markets, and management expertise [8]. The studies examining the separate effects of foreign corporate ownership and institutional investors on firm performance focus on the degree of the fragmentation of each type of ownership, where less fragmented foreign corporate ownership creates stronger incentives for these investors to monitor the firms where they invest, so firms are more efficient, superior in technology, and better in managerial expertise [5]. However, foreign institutional investors who invest in firms that offer superior market returns [9] have better instruments to monitor managers [10], so they can improve the performance of the firms where they invest despite their ownership is more fragmented.

Foreign ownership of domestic firms in Indonesia differs from the one in other countries, as considered in previous studies, so the impact it has on performance may also be different. Based on our sample data extracted from the IDX, the average foreign ownership in non-financial firms

listed in the IDX is around 44% in 2018, showing that Indonesia is one of the emerging economies with the highest level of foreign ownership. The next difference is about the degree of fragmentation, where the share owned by foreign firms and foreign institutions in Indonesian non-financial firms are both less fragmented, so the impact on performance is interesting to study.

This study examines the effect of foreign ownership on firm performance in Indonesia. Foreign ownership is measured by the ratio of shares owned by foreigners to total shares. Furthermore, foreign ownership is broken down into two ownerships, i.e., foreign firm and foreign institution ownership, to test their respective effects on firm performance. We use Tobin's Q as a measure of market performance and ROA as an accounting measure. A panel data of 66 non-financial firms listed in the IDX for the five-year period from 2014-2018, selected purposively, were analyzed using multiple regression. The data sources are the company's financial and annual reports obtained from the IDX database.

The paper is organized as follows. The next section is a literature review that discusses the relationship between foreign ownership and firm performance. After presenting data and methodology, we display empirical results and finally our conclusions.

2. LITERATURE REVIEW

2.1 Foreign Ownership and Firm Performance

Foreign investors in general are large shareholders in domestic firms. Strong incentives they have to monitor managers could theoretically reduce agency costs in order

to improve company performance [3, 4]. The positive relationship between foreign investors as large shareholders and performance, related to monitoring that can reduce agency costs, was empirically confirmed by Douma et al. [9] and Khanna & Palepu [10]. Domestic firms with foreign ownership show higher performance than other domestic companies without foreign ownership [11, 12, 13]. However, Le & Phung [14] found a negative and significant effect of foreign ownership on firm performance in Vietnam. Their conclusions are associated with inefficient corporate governance and information asymmetry, two factors that make it difficult for foreign owners to monitor management.

In addition to monitoring benefits, foreign ownership makes it easy to transfer technology to domestic firms [5], encouraging technological innovation and professional workforce [6], limiting companies from holding more cash and from risk [7]. Large and concentrated foreign ownership indicates low agency costs and high corporate value [15]. Shrivastav and Kalsie [8] analyzed a panel data of 145 Indian non-financial firms listed in the NSE for a five-year period (2008-2012). The positive influence on performance they found was due to the role of foreign investors in access to large resources, more intensive monitoring, management expertise, capital markets, and advanced technology. Ferris & Park [16] found a curvilinear relationship between foreign ownership and performance, where performance is positive until foreign ownership reaches 40%, and, after this point, it starts to decline.

2.2 Foreign Board

Foreign investors who invest in emerging markets as large shareholders sometimes place their representatives in the firm board, whether as commissioners or directors. Oxelheim & Randoy [17], in a random sample analysis of 253 Swedish and Norwegian companies with a study period of 3 years, showed that performance was better in companies that involved Anglo-American directors than companies that did not involve them. The inclusion of Anglo-American directors in company management is a signal to change towards internationalization with the Anglo-American corporate system. A similar study was carried out by Bremholm [13] about Japanese non-financial firms, with the conclusion of the positive influence of foreign directors on performance. The presence of foreign directors is a signal that companies are moving to a new, more Anglo-American corporate governance model, such as tighter monitoring, more transparency, improved risk taking, greater dividends, and more assets sold because the company does not need them.

However, Masulis et al. [18], in a study of 9,970 American companies during 1998-2006, found that American companies with foreign directors achieved worse results than firms without foreign directors because the long travel time for foreign directors limits them to attend board meetings and carry out monitoring.

2.3 Firm vs Institutional Investor

Foreign firm ownership is less fragmented or more concentrated, implying strong incentives to carry out effective monitoring and makes firms more efficient, superior technology, and better managerial expertise. Supervision of domestic firms by foreigners is associated with technology transfer [5]. Foreign firm ownership has an influence on Tobin's Q and ROA [9, 8]

Foreign institutions are strategic investors with their ownership that can increase firm productivity [19]. They invest only in superior firms that offer high market returns [9]. Although they have better instruments to monitor managers [10], their ownership is fragmented which reflects a weak position to monitor management in improving performance.

3. DATA AND METHODOLOGY

3.1 Sample and Data

The sample of this study is non-financial firms listed in the Indonesia Stock Exchange (IDX). Financial firms such as banks, insurance, pension funds, security and investment firms were excluded from the sample with the reason that their accounting methods differed from those of non-financial firms. Considering them in the sample will cause bias in measuring firm performance. A five-year data period from 2014 to 2018 was chosen to obtain a good sample range for panel data and to describe the latest conditions. Firms with complete data during the study period were selected as the samples, resulting in 66 non-financial companies.

All data used in this study are secondary, obtained from financial reports, annual reports, corporate governance reports, and year-end securities reports. They were extracted from the IDX's web page.

3.2 Empirical Model

The panel data of this study consists of cross section and time series dimensions. We separately specified three regression models that explain the relationship between each category of foreign ownership on performance. In model 1, the independent variable is foreign ownership (FO), foreign corporate (FC) in model 2, and foreign institution (FI) in model 3. All control variables are integrated in each model.

$$(Q \text{ or } ROA)_{it} = \beta_0 + \beta_1 FO_{it} + \beta_2 Ln_Sales_{it} + \beta_3 Ln_Age_{it} + \beta_4 (D_{DB})_{it} + u_{it} \quad (1)$$

$$(Q \text{ or } ROA)_{it} = \beta_0 + \beta_1 FC_{it} + \beta_2 Ln_Sales_{it} + \beta_3 Ln_Age_{it} + \beta_4 (D_{DB})_{it} + u_{it} \quad (2)$$

$$(Q \text{ or } ROA)_{it} = \beta_0 + \beta_1 FI_{it} + \beta_2 Ln_Sales_{it} + \beta_3 Ln_Age_{it} + \beta_4 (D_{DB})_{it} + u_{it} \quad (3)$$

Where *i* and *t* are, respectively, firm number and time period, β_0 is the constant or intercept. $\beta_1 \beta_2 \dots \beta_k$ are regression slopes that explain the partial effect an independent variable has on the dependent variable. μ represents the unobservable factors that affect *y*, where their existence changes over time. For each regression, the Chow test was used to choose whether the common effect or fixed effect is the right estimation model. The Hausmann test was used to determine between the fixed effect or random effect model.

3.3 Variables

Performance Variables. In line with Masulis et al. [18], Nakano & Nguyen [7], and Bremholm [13], two performance measures were used in this study, i.e., Tobin's Q as a market-based measure and ROA as an accounting-based measure. Tobin's Q is the ratio of the market value of equity and the book value of debt to total assets, explaining whether the company's stocks are overvalued or undervalued by the market. ROA is the ratio of earnings after tax to total assets, explaining how effectively management uses its assets to generate earnings.

Independent Variables. The independent variable of this study is Foreign Ownership (FO), measured by the percentage of shares controlled by foreign owners who are not individual investors at the end of the tax year. Previous studies broke down the impact of each ownership on performance, for example Shrivastav and Kalsie (8), so that in this study foreign ownership was further divided into two different variables, i.e., ownership by foreign companies (FC) and by foreign institutions (FI). Both variables were measured by the percentage of shares held by each owner.

Control Variables. In line with previous research on the relationship between foreign ownership and performance, this study uses three control variables: firm size measured by Ln_Sales, firm age measured by Ln_Age, and Dummy board. Firm size is represented by total sales, while company age is represented by the number of years between firm establishment and the year of observation. A board member, whether a commissioner or director, is considered as a foreigner based on citizenship, and it is placed by a foreign investor. If the observation meets these

requirements, the variable is 1, otherwise it will be 0. As explained by Oxelheim & Randoy [17], the signal effect of Anglo-American directors occurs regardless of how many foreign directors are included. The data for this variable was extracted from the latest corporate governance reports from each company and every year.

Table 1. Variables Description

Performance	
Tobin's Q	Market value of equity (market capitalization) + Book value of debt divided by total assets
ROA	Earning after tax divided by total assets
Independent Variables	
FO	Percentage of shares owned by foreign corporate and institutional investors
FC	Percentage of shares owned by foreign firms
FI	Percentage of shares owned by foreign institutions
Control Variable	
Ln_Sales	Natural logarithm of sales
Ln_Age	Natural logarithm of age
D	Dummy, carrying value 1 for foreign board observation and 0 otherwise.

4. EMPIRICAL RESULTS

4.1 Descriptive Statistics

With a sample of 66 non-financial firms and five years data from 2014 to 2018, the number of observations was 330. As shown in Table 2 panel A, descriptive statistics of variables is based on the total observation, where the average foreign ownership (FO) is 45.3%. Data variation is quite high, from a minimum of 1.7% to a maximum of 97%. The dummy variable has an average of 0.60, which means that around 60% of the firms have one or more foreign board members. The average ownership level for foreign institutions (FI) is 31.8% (Panel B), lower than the foreign firm ownership of 46.1% (Panel C). All variables were calculated based on the number of observations of each ownership category, i.e., FO, FI, and FC.

4.2 Correlation Analysis

Table 2. Descriptive Statistics

Variables	Mean	Min	Max	Std. Dev	Obs.
Panel A: Foreign Ownership (FO) – obs = 330					
Q	1.275	0.084	7.958	1.035	330
ROA	0.030	-1.279	0.527	0.133	330
FO	0.453	0.016	0.970	0.302	330
Ln_sales	27.859	21.379	33.108	2.019	330
Ln_age	3.469	1.099	4.727	0.482	330
D _{DB}	0.600	0.000	1.000	0.491	330
Panel B: Foreign Institution Ownership (FI) – obs = 130					
Q	1.164	0.084	7.958	0.958	130
ROA	0.007	-1.216	0.335	0.135	130
FI	0.318	0.000	0.876	0.282	130
Ln_sales	27.417	22.913	30.973	2.101	130
Ln_age	3.417	1.099	4.727	0.556	130
D _{DB}	0.423	0.000	1.000	0.496	130
Panel C: Foreign Corporate Ownership (FC) – obs = 235					
Q	1.340	0.089	5.955	1.042	235
ROA	0.030	-1.279	0.527	0.149	235
FC	0.461	0.039	0.970	0.312	235
Ln_sales	27.953	21.379	33.108	1.892	235
Ln_age	3.510	2.197	4.615	0.398	235
D _{DB}	0.672	0.000	1.000	0.470	235

Table 3 shows the correlations between variables for the three categories of observation, namely total (obs = 330), FI (obs = 130), and FC (obs = 235). In all three categories, the highest correlation was less than 40%. Based on these results it can be said that there is no multicollinearity problem.

Table 3. Pearson Correlation Matrix

FO – obs = 330						
Q	1					
ROA	0.003568	1				
FO	0.092760	0.143774	1			
Ln_sales	-0.082368	0.220856	0.306608	1		
Ln_age	-0.041613	0.122879	0.322906	0.369697	1	
Dummy	0.057419	0.140189	0.317149	0.272139	0.092644	1
FI – obs = 130						
Q	1					
ROA	-0.079287	1				
FI	-0.144874	0.139483	1			
Ln_sales	-0.010930	0.220820	0.340653	1		
Ln_age	-0.043229	0.113184	0.367363	0.389068	1	
Dummy	-0.145049	0.145169	0.352551	0.258968	0.017579	1
FC – obs = 235						
Q	1					
ROA	0.019721	1				
FC	0.160389	0.195664	1			
Ln_sales	-0.115889	0.226196	0.314804	1		
Ln_age	-0.037099	0.060640	0.200251	0.315419	1	
Dummy	0.047249	0.168930	0.250866	0.220181	0.075111	1

4.3 Regression Results

First, we estimated the regression coefficients using the common effects, fixed effects, and random effects models for each of the three models and each dependent variable (Tobin's Q and ROA). Then, the most appropriate model was chosen for the purpose of this study. For all tests, the probability of cross-section F in the chow-test is smaller than 0.05, so the right model is fixed effect. However, the random cross-section probability in the Hausman test, for all tests, is greater than 0.05, so the correct estimation model chosen for this study is random effect model. In model 1, Tobin'Q is regressed to FO together with the control variables, in model 2 to the FI together with the control variables, and in model 3 to FC together with the control variables.

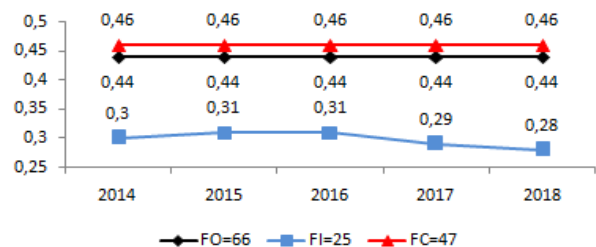
Table 4. Regression Results

VARIABLES	Model 1		Model 2		Model 3	
	Tobin's Q	ROA	Tobin's Q	ROA	Tobin's Q	ROA
FO	0.5379** (0.029)	0.0158 (0.038)				
FI			0.5563 (0.559)	0.0060 (0.068)		
FC					0.3056 (0.420)	0.0492* (0.048)
Ln_sales	-0.0754* (0.049)	0.0147*** (0.006)	-0.1069 (0.069)	0.0149* (0.009)	-0.0309 (0.056)	0.0179** (0.008)
Ln_age	-0.1705 (0.225)	0.0045 (0.024)	-0.1551 (0.280)	0.0034 (0.034)	-0.1416 (0.317)	-0.0185 (0.037)
D _{DB}	0.1401 (0.209)	0.0208 (0.022)	-0.2713 (0.327)	0.0220 (0.037)	0.1468 (0.242)	0.0342 (0.029)
C	3.6379*** (1.322)	-0.4152*** (0.146)	4.5628** (1.812)	-0.4244* (0.224)	2.4615 (1.667)	-0.4515** (0.211)
R_squared	0.27	0.18	0.19	0.23	0.26	0.19
N	330	330	130	130	235	235

Notes: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4 shows the estimation results using the random effect model. Foreign ownership (FO) has a positive effect on Tobin's Q at 5% significance level, but the coefficient is only positive for ROA. The coefficients of foreign institutional ownership (FI) and foreign corporate ownership (FC) are positive for all performance measures. However, the coefficient is found significant at 10% in foreign company ownership only when accounting-based measure ROA is used. Firm size, represented by Ln_sales, is positively and significantly related to ROA for all three models. The control variable Ln_age is not significant for all measures and all three models. Except for Tobin's Q in model 2, the dummy foreign board (D_{DB}) has only a positive sign but is not significant.

Figure 1
Foreign ownership Level of non-financial firm listed in the IDX



A positive and significant relationship between foreign ownership and firm performance can be explained by the fact that foreign ownership is very significant in Indonesia. As shown in Figure 1, foreign ownership in non-financial firms in Indonesia is at the average of 44%, with a stable trend for five years from 2014 to 2018. Sole investors dominate foreign ownership, both institutions and companies. Long-term and large-scale investments made by foreign investors do not seem to cause entrenchment, but conversely this condition supports the study of Khanna and Palepu [10] and Douma et al. [9] that this form of ownership results in monitoring benefits that can reduce agency costs. More specifically, foreign firm ownership in Indonesian non-financial companies which reached 46% and stable in the long run reflects their control over management, whose power they can

exploit to make the company they invested always competitive and make profits. The presence of representatives of foreign owners in 60% of companies is to implement technological and managerial innovation as well as to develop international market. However, foreign institutional ownership which tends to decrease during the study period indicates their decisions to invest only in firms that offer superior returns [9], and they sell their shares if the firms they invest becomes less prospective.

5. CONCLUSION

This study examines the relationship between foreign ownership and firm performance by analyzing a panel data consisting of 66 non-financial firms listed in the IDX. A five data period from 2014 to 2018 was considered. Based on the random effect model, it was found that foreign ownership has a positive and significant impact on firm performance. Foreign corporate ownership has a more dominant role than foreign institutional investors in improving performance. The results can be explained by specific conditions in Indonesia, where the level of foreign ownership is very significant and held by the owner over a long period. Furthermore, Indonesian non-financial firms tend to be owned by one foreign investor, both foreign institution and foreign corporate.

This study is limited to only two types of foreign investors, i.e. corporate and institution. It will be interesting if future studies analyze performance as influenced by Asian, European, Japanese, and Anglo-American investors.

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