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THE MARKET VALUE OF NON-FAMILY FIRMS: A STUDY ON OWNERSHIP CONCENTRATION, FINANCIAL POLICY, AND PROFITABILITY

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ABSTRACT

This study investigates the market valuation effect of ownership concentration, financial policy, and profitability in a sample of 109 non-family from 2012 to 2019. We used balance panel data to investigate the market values and possible effects of the variables identified using the General Method of Moment (GMM) estimator. The market value is dynamic, which means that last year's market value significantly affects the current market value. Even though the majority shareholder is not a family member, the ownership concentration still has a significant negative effect on the market value. The financial decision shows that leverage has a positive and significant effect. At the same time, investment and dividend policy seems to have a negative effect on market value, although the investment is insignificant. Lastly, profitability has positive and significant effects on market value. This study contributes to non-family firm literature and provides new empirical findings and policy implications for regulators to enhance the market value.

JEL: G11, G30, G32.

Keywords: ownership concentration, investment, leverage, dividend, profitability, market value.

1. INTRODUCTION

Most empirical studies on corporate finance have been discussed and developed in a literature review to support the effect of various factors determining firm value. The market value represents the company's value generated by the stock market, so managers should consider maximizing future shareholder returns to increase the company's market capitalization and market value. Hence, the market value is significant for investors to analyze investment opportunities, and it reflects the firm performance, which can affect investor perceptions (Sudiani & Wiksuana, 2018). Several indicators can measure market value, namely Tobin's Q and market-to-book value (Ayuba, Bambale, Ibrahim, & Sulaiman, 2019; Muchtar, Ramadhani, Rasyimah, & Syamni, 2021).

Previous studies on the value of family firms and non-family firms have been discussed in depth in various studies (Abdallah & Ismail, 2017; Haider, Qayyum, & Zainudin, 2021; Koji, Adhikary, & Tram, 2020; Saidat, Silva, & Seaman, 2019). These studies provided various findings about the relationship between ownership concentration and financial decisions, which report that family-controlled firms are better than non-family firms in aligning the objectives of owners and managers. Other findings revealed that non-family firms are more likely to have zero debt when they face financial constraints (Fardnia, Kooli, & Kumar, 2023). In other cases in Italy, the non-family firm used higher debt financing and low ownership concentration than the family firm

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(Mbanyele, 2020). In particular, the studies on the market value of non-family firms are still debated and limited. The interesting is the majority of Indonesian firm is owned by families.

Both family and non-family companies have different characteristics. Usually, family firms rely less on formal knowledge and lower labor productivity (Andersson, Johansson, Karlsson, Lodefalk, & Poldahl, 2018). Most of the previous studies focused on family and non-family firms. Meanwhile, this research focuses on understanding ownership concentration and financial policies such as investment decisions, capital structure, dividend policy, and profitability in non-family companies. This research is motivated by empirical findings inconclusive in previous research on the relationship between ownership concentration, financial policy, profitability, and market value. More specifically, we examine the implications of ownership concentrations, investment decisions, financing decisions, dividend policy, and profitability in non-family-owned firms.

In emerging markets, the ownership structure is more concentrated, and large firms have large shareholders (Hamadi & Heinen, 2015). When the ownership structure is concentrated, large shareholders tend to have more control over management (Mbanyele, 2020), and they have an essential role in a company takeover if management does not act in their interests. With good supervision, companies can avoid inefficiencies in management, which will increase market value (Shleifer & Vishny, 1986). Empirically, ownership concentration has a positive effect on the firm performance of non-family firms (Koji *et al*., 2020; Mandacı & Gumus, 2010). In the case of Indonesia, most companies have higher ownership concentration (Krismiaji, Wiratno, & Ashari, 2019). Indonesia is known to have a lower level of protection for investors than Malaysia and others (Claessens & Yurtoglu, 2013). The relationship between concentrated ownership and market value is still unsolved. Such a study was proposed by (Wang & Shailer, 2015), who found that ownership concentration has a negative effect on firm performance, similar to the current study, which found a negative effect on family and non-family firms (Halili, Saleh, & Zeitun, 2015; Saidat *et al*., 2019). The uniqueness of the current issue is that ownership concentration has a U shape or nonlinear effect on firm value (Azoury, Azouri, Bouri, & Khalife, 2018; Villegas, Giráldez, Sánchez, & González, 2018).

On the other hand, financial policy plays an important role in increasing the market value. Managers must make decisions regarding investments, suitable financing, and whether decisions should pay dividends. Muchtar, Nor, Albra, Arifai, & Ahmar (2018) reported that the average Tobin's Q value of Indonesian non-financial firms is around 1.0147, indicating that firms have higher market value during this period. Their results showed that leverage and dividend policies have a positive effect on market performance. Singapurwoko (2013) examined the performance of family and non-family firms in Indonesia and found that non-family firms outperformed family firms in terms of their effectiveness in leveraging firm profitability and that family firms' profitability value was lower than that of non-family firms. Another study reported that the firm value of non-family firms has an average of 3.125, which are higher than family firms was 2.317 (Sumarsono, 2014).

Managers have the authority to obtain several financial sources to finance their investments. There are three primary sources of financing: internal funds, external financing, and issuing new equity (Myers & Majluf, 1984; Parker, 2010). Debt financing has the consequence that if managers finance investments with external funds, they have to pay interest costs. However, if they choose internal funds by holding dividend payments, the managers tend to waste those

funds for their personal interest. Another issue for the firm is the over-investment problem with the firm higher free cash flow. While the firm has excess free cash flow, the managers tend to waste internal funds to finance unprofitable projects (Jensen, 1986; Stulz, 1990). Indonesian non-financial companies have a problem of overinvestment in which investment has a negative and significant effect on market performance, so overinvested companies can lead to decrease market performance (Agha, 2016; Muchtar *et al*., 2018).

Leverage plays an important role in financial decisions, whether debt or equity, both will affect the company's value. Agency theory posits that the interests of managers and shareholders are not always perfectly aligned. Agency cost of equity occurs when there is a separation of ownership and control of a company. Consequently, managers tend to prioritize their gains over increasing firm value (Jensen & Meckling, 1976). Most family and non-family firms have higher debt levels, with a maximum value of 2.13% (Sumarsono, 2014). This implies that non-family firms in Indonesia have a higher debt ratio than family firms (Mulyani, Singh, & Mishra, 2016; Ntoung, Oliveira, Sousa, Pimentel, & Bastos, 2019). According to trade-off theory, companies with higher debt ratios tend to increase firm value because of tax advantages. Debt is a substitute for monitoring and forcing managers to work in shareholder interests (Mbanyele, 2020).

Additionally, regarding dividend policy, managers must decide when the company should pay dividends or withhold them to finance new investments with internal funds. Despite the theory and empirical evidence presented by many researchers, dividend policy is still the most debated and unresolved issue in the financial literature. Baker & Powell (2012) concluded that the important factors influencing managers paying dividends are the stability of earnings and the current and expected future earnings. Family-owned firms tend to pay lower dividends (Rajverma, Misra, Mohapatra, & Chandra, 2019). However, companies controlled by professional families pay higher dividends to shareholders. The dividend is used as a control mechanism for an effective governance system, such as non-family involvement in the governance system (Michiels, Uhlaner, & Dekker, 2017). Current evidence posits that family firms distribute higher dividends than non-family firms in Bangladesh (Miah, 2022). Thus, dividend payout has a negative effect (Setiawan, Bandi, Phua, & Trinugroho, 2016).

Finally, firms with higher profitability may increase their market value. A profitable firm can generate profits from assets or equity. Profitability is commonly measured using return on assets (ROA) and return on equity (ROE). Moreover, Halili *et al.* (2015) reported that non-family firms have lower profitability than family firms, and the mean differences were significant. Thamrin, Syamsurijal, Sulastri, & Isnurhadi (2018) found a positive and significant effect between profitability and firm value.

This study investigates the impacts of ownership concentration, financial decisions, and profitability on the market value of non-family firms. Based on panel data analysis, this study used a dynamic panel model with a GMM first-difference estimator to estimate the model analysis. The dynamic model estimator is a more proper model to overcome the potential sources of the endogeneity problem (unobservable heterogeneity). The GMM estimator is used to control the dynamic nature of the market value-ownership structure and financial decision relationship (Wintoki, Linck, & Netter, 2012). This paper is organized as follows. Section 2 discusses the literature review. We discuss the research methodology in Section 3. Section 4 presents our findings and discussion. Finally, Section 5 presents the conclusions and implications of the study.

2. THEORETICAL FRAMEWORK AND EMPIRICAL STUDIES

2.1. Ownership Concentration and Market Value

The theoretical view of ownership structure is developed based on agency theory, which explains the behavior of related parties in the relationship between shareholders and managers (Blanco-Mazagatos, de Quevedo-Puente, & Delgado-García, 2016). An agency problem arises when firms have shareholder groups. These groups have incentives and the ability to control and monitor managerial activities. Typically, agency problems increase when firms have higher free cash flows but lower firm growth (Jensen, 1986). A firm with high ownership concentration will cause conflicts between majority and minority shareholders and thus would be reducing the market value (Yasser & Mamun, 2015). The majority shareholders act for their personal interests, taking over minority shareholders to maximize their benefit (Saidat *et al.*, 2019). Thus, higher ownership equity of a firm could increase the costs that would reduce the firm value. They also found that the average concentration ownership of non-family firms is higher than family firms.

Previous studies have documented that ownership concentration negatively affects market value (Hu, Tam, & Tan, 2010). Moreover, Peng & Jiang (2010) also suggested that ownership concentration could cause the non-family firm's market value to decline. Halili *et al*. (2015) found that high ownership concentration firms had low firm value in market capital. Taufil-Mohd, Md-Rus, & Musallam (2013) found a negative relationship between ownership concentrations. The empirical result of Saidat *et al*. (2019) stated that concentrated ownership has a negative effect on market performance but is insignificant. Thus, the first alternative hypothesis is as follows:

H1: Ownership concentration has a negative and significant impact on the market value of non-family firms.

2.2. Investment and Market Value

Investment is a principal prominence in business cycle changeability and economic growth. The investment decision is the main factor in determining the market value, even though it is independent of the financial structure in a perfect capital market (Saidat *et al.*, 2019). Fama & French (2006) developed a new approach to investigate the effect of investment and financing decisions on firm value. They state that investments provide positive information about prospects. Previous studies on investment decisions concerning free cash flow and investment levels have been extensively discussed. This is related to over- and under-investment problems (Moez & Amina, 2018; Zhang, Cao, Dickinson, & Kutan, 2016). Overinvestment occurs when firms have an excess of internal funds, such as free cash flow, in which case, a positive relationship is formed between free cash flow and investment level. Managers with higher free cash flow may have incentives to overinvest to maximize their self-interest. As a result, the company's value has decreased (Jensen, 1986; Stulz, 1990). Based on the explanation of agency costs, managers tend to waste internal funds when the company's free cash flow is high. Thus, debt is essential for reducing excess investments in companies with serious agency problems. However, debt cannot eliminate excess capital (D'Mello & Miranda, 2010). Empirical studies have found that optimal investment increases the value of Indonesian public firms (Fajaria, 2017; Muchtar *et al*., 2018; Thamrin *et al.*, 2018). It indicated that investment decision is important in increasing firm value in Indonesia. Other studies revealed that investment has a positive impact on firm value (Chen & Lin, 2013; Hashmi, Mirza, & Sehar, 2016). Therefore, this study posits the following hypothesis:

H2: Investment has a positive and significant impact on the market value of non-family firms.

2.3. Financing Decision and Market Value

Capital structure theories are described clearly by the specific mix of debt and equity firms use to finance their investment. This theory was first developed under an irrelevant proposition (Modigliani & Miller, 1958), suggesting that firms' financial decisions cannot affect on market value under certain conditions. The more specific issue is that under some conditions, the optimal capital structure can be completely debt-financed because of the preferential right of debt relative to equity in terms of tax (Hackbarth & Mauer, 2012; Haron, 2018). Regarding the unique optimal capital structure, the level of debt increases with liquid assets, the tax rate, and firm size. According to the trade-off theory, the optimal debt ratio is caused by a trade-off between bankruptcy costs and the benefits of debt tax shielding (Schnabel, 1984; Scott, 1977). Companies must maintain a net operating income above interest payments. Thus, leverage is positively related to firm value. Thus, companies use debt to finance their investments by increasing their leverage. Debt and a higher level of profitability are expected to reduce the possibility of bankruptcy, thus causing an increase in company value.

Several prior studies on capital structure in family and non-family firms have been discussed intensely, such as the study by Haider *et al*. (2021), an analysis of the leverage of family and non-family firms in East Asian economies. The average leverage of non-family firms is lower than that of family firms. However, the speed of leverage adjustment of short-term and long-term debt are insignificant differences between family and non-family firms. Fardnia *et al*. (2023) suggested that family firms are more likely to choose zero leverage than non-family firms to maintain financial flexibility for future investments. Several past empirical studies by Shahzad, Ali, Ahmad, & Ali (2015) found that leverage has a positive effect on firm value. Similarly, Tarek (2019) and Alabri, Almanthri, & Ahmed (2021) found that leverage positively relates to firm value. Thus, the hypothesis in this study is below.

H3: Leverage has a positive and significant effect on the market value of non-family firms.

2.4. Dividend Policy and Market Value

The debate on theoretical principles underlying dividend policy in the literature has focused on the irrelevance or relevance of dividend policy to a firm's value. In irrelevance, the theory proposes that the future market value remains unaffected by the current dividend in the perfect capital market. Bird-in-hand theory suggests that outside shareholders prefer a high-dividend policy. The bird-in-hand assumption is based on the uncertainty of future dividends, in which shareholders expect firms to pay cash dividends because it is more certain than capital gains that might or might not appear if investors let firms hold their earnings.

The signaling hypothesis explains the preference for dividends over stock repurchases in terms of tax advantages. This means that changes in dividends have borderline information content only when the firm simultaneously exposes good news about earnings on dividends, in which regular dividends signal an ongoing commitment to pay out cash (Michiels *et al.*, 2017; Wijk, 2013). Referring to the signaling hypothesis, managers are typically concerned with dividend stability, which leads the market to respond well to a stable dividend policy. Additionally, the value of the signal depends on the level of information asymmetry in the market. This implies that the information is important in determining whether the dividend signal should be sent and its effect on prices and firm value. Mulyani *et al.* (2016) suggested that non-family firms have higher dividend payouts than family firms with low dividend payouts. This indicated that they used cash

for firm operations. According to the free cash flow hypothesis (Jensen, 1986), dividends mitigate agency problems by reducing the amount of cash available for use by managers. Deslandes, Fortin, & Landry (2016) also mentioned that family firm payout policy differs from non-family firms.

Previous studies have examined the relationship between dividend policy and market value. When a firm pays dividends to stockholders, it makes the market believe more in its performance, increasing market value (Rajverma *et al*., 2019). The positive relationship between the dividend payout ratio and firm performance has been proven (Muchtar *et al*., 2018; Rajverma *et al*., 2019). Another study found that an increase in dividend payout leads to increased share price, so dividends have a positive effect on a firm's share value (Mokaya, Nyangara, & James, 2013). Hence, paying dividends also affects the firm's value in the long term (Abreu, 2016). Therefore, we hypothesize the relationship between dividend policy and market value as follows:

H4: Dividend policy has a positive and significant impact on the market value of non-family firms.

2.5. Profitability and Market Value

Profitability is the company's ability to effectively generate future profits from its investments (Putu, Moeljadi, & Djazuli, 2014). A firm with higher profitability indicates good performance and prospects going forward. Profitability encourages the market or investors to invest, increasing market value (Sabrin, Sarita, Takdir, & Sujono, 2016). Profits can change the perception of investors who were initially not interested in being interested in company shares. In general, profitability is a proxy of firm performance that represents accounting-based performance, commonly measured by Return on Assets (ROA) and Return on Equity (ROE) or return on investment. These returns are the preferred ratios used by many scholars in previous research, where each ratio provides insight into how a financial institution allows its management to execute strategic decisions that can affect its structure and profitability. This study uses ROA to measure accounting performance and has been the predominant analytical tool to measure profitability. Most past studies analyzing profitability commonly used return on assets (Akbar, ur Rehman, & Ormrod, 2013; Saeedi & Mahmoodi, 2011; Zabri, Ahmad, & Wah, 2016). Thus, ROA reflects managers' ability to use a firm's assets efficiently and effectively to generate profit, in which a lower rate of return on assets would reveal the inefficiency of firm management. Return on assets also indicates a company's capital intensity, subject to the industry to which the company belongs. For example, the manufacturing sector produces a relatively lower return on assets than the service sector. However, a higher return on assets indicates that a company can use its assets effectively to fulfill shareholders' interests.

Previous studies have examined the impact of profitability on firm value. Sabrin *et al*. (2016) found that profitability positively affects firm value. Thamrin *et al.* (2018) examined the relationship between profitability and market value of a Manufacture Firm in Indonesia and found that profitability has a positive effect on market value. Another study found that profitability is a factor that determines the firm value (Chen & Chen, 2011; Jihadi, Vilantika, Hashemi, Arifin, Bachtiar, & Sholichah, 2021) and directly influences market value (Zuhroh, 2019). A study in Kenya Public Firm showed that profitability is a driving factor of firm value for small and large firms (Kodongo, Mokoaleli-Mokoteli, & Maina, 2015). Based on these theories and previous studies, the hypothesis on this point is as follows:

H5: Profitability has a positive and significant impact on the market value of non-family firms

3. RESEARCH METHODS

This research method was developed to examine the impact of ownership concentration, financial decisions, and profitability on the market value of Indonesian non-family firms. This study used yearly financial data retrieved from the Data Stream database. The data included 109 non-family companies on the Indonesia Stock Exchange (IDX). The panel data, organized based on cross-sectional and time series data, have annual observations over eight years for each company and produce balanced panel data of 872 annual observations for data analysis. This study used the period from 2012-2019 because the global financial crisis period (2008-2009) and the Covid-19 period (2020-2021) affected most of the Indonesian stock market, so that period was excluded from this study.

The market value was the dependent variable. The independent variables were ownership concentration, financial decisions, and profitability. Financial decisions consisted of investment, capital structure, and dividend policy. The control variables used were company size and age. Additionally, several approaches can be used to measure a company's market value. One of them was Tobin's Q. It is the ratio of the market value of equity plus the book value of the total debt divided by the book value of a total asset (Alias, Rahim, Nor, & Yaacob, 2014; Zeitun & Saleh, 2015). The ownership concentration was measured by the percentage of company shares owned by majority shareholders (Halili *et al*., 2015; Muttakin, Khan, & Subramaniam, 2014). The investment variable was used capital expenditure (CAPEX), calculated as the current year's fixed asset mines last year's fixed assets divided by the book value of the total assets (Jiang, Chen, & Huang, 2006) . The leverage (LEV) was measured by the ratio of total debt to total equity (TDTE). The dividend policy variable was a proxy with the dividend payout ratio (DPR) measured by dividend per share divided by earnings per share. The profitability (PROF) used return on assets (ROA). ROA was measured by the percentage of net income to total assets. This study utilized firm size (SIZE) and firm age (AGE) as control variables. SIZE represents the firm's total assets and was measured as the natural logarithm of total assets. Finally, firm age (AGE) was calculated as the number of years since its incorporation.

This study employed the dynamic GMM first-difference estimator to investigate the impact of ownership concentration, financial decisions (INV, LEV, and DPR), and PROF. The dynamic panel models describe the time path of the dependent variable with its past values. The dynamic panel is a more appropriate estimator to overcome the endogeneity problem than the static model estimation (i.e., OLS, FEM, and REM), which provides biased estimates due to the presence of the lagged dependent variable among the explanatory variables (Wintoki *et al*., 2012; Zeitun & Saleh, 2015). The basic dynamic applied in this study is an autoregressive panel data model (Baltagi, 2008) with the following general equation:

$$Y_{it} = \delta_1 Y_{i,t-1} + \sum_{k=1}^{K} \beta_k \times X_{k,it} + u_{it} \quad \text{..... (1)}$$

TOBINS'Q is the dependent variable, and the independent variables are all defined. This model represents a set of six additive multiple regressions of Y on Y(-1), C_OWNR, INV, LEV, DPR, and PROF, with control variables SIZE and AGE. Thus, the empirical model of a dynamic panel using the General Method of Moment (GMM), the first difference estimation method, is as follows:

$$TOBINS'Q_{it} = \beta_0 + \beta_1 TOBINS'Q_{it}(-1) + \delta_1 C\_OWNR_{it} + \delta_2 INV_{it} + \delta_3 LEV_{it} + \delta_4 DPR_{it} + \delta_5 PROF_{it} + \delta_6 SIZE_{it} + \delta_7 AGE_{it} + \varepsilon_{it} \quad (2)$$

where the β_1 is an autoregressive coefficient, δ_1 to δ_7 are the coefficient parameters of each independent variable of *i-th* firm and at time *t-th*, and $\mathcal{E}_i$ which are the cross-section error.

4. DATA ANALYSIS AND DISCUSSIONS

The statistical results of the descriptive analysis of all research variables are presented in Table 1. The market value of non-family firms is in the range of 0.12 – 23.28, or the average market value is 1.96. The firm's market value is greater than 1, indicating that the market value is higher than the book value, in which investors are very optimistic about firm performance. The average ownership concentration is approximately 57.29 percent, indicating that the firms have high ownership levels. Investment measures by capital expenditure seem to have low values, with an average of approximately 1.48 percent and a standard deviation of 134 percent. Nevertheless, the leverage value appears high, with an average of 142.79 percent and a maximum leverage of approximately 823 percent. This indicates that most firms use more debt to finance their investments, while the ratio of capital expenditure scaled to total assets is lower. The dividend payout ratio of non-family firms is about 16.97 percent, indicating that the total amount of dividends paid to shareholders is lower, which means that most Indonesian firms do not pay dividends regularly. Profitability proxy by ROA has an average value of 4.91 percent. The size and age of the firms are 28.4134 and 35 years, respectively.

Table 1. Descriptive Statistics

Variable	Mean	Std Dev	Maximum	Minimum	Obs
TOBINS'Q	1.9685	2.5688	23.2857	0.1228	872
C_OWNR	0.5729	0.2052	0.9909	0.2005	872
INV	0.0148	0.1525	1.3469	-2.4644	872
LEV	1.4279	5.2024	82.3754	-44.763	872
DPR	0.1697	0.6369	5.1452	-8.0342	872
PROF	0.0491	0.2138	3.5461	-1.2162	872
SIZE	28.4134	1.9792	33.3772	21.9268	872
AGE	35.5468	23.4326	161.0000	0.00000	872

Source: Processed data using Eviews, 2022

Notes: TOBINS'Q is the market value measured by market value of equity plus book value of total debt divided by book value of total asset, INV is investment, measured by capital expenditure, LEV is leverage measured by total debt to total equity, DPR is dividend payout ratio, PROF is profitability measured by return on asset, SIZE is firm size measured by logarithm of total asset and AGE is the number of year firm incorporate.

Table 2. Correlation Matric

Variables	TOBINS_Q	C_OWNR	INV	LEV	DPR	PROF	SIZE
C_OWNR	0.138	1					
	(4.116)***	-----					
INV	-0.120	0.059	1				
	(-3.565)***	(1.753)*	-----				
LEV	-0.056	-0.057	0.029	1			
	(-1.678)*	(-1.686)*	-0.870	-----			
DPR	0.131	0.088	0.021	-0.031	1		
	(3.925)***	(2.630)***	-0.631	(-0.918)	-----		
PROF	0.432	0.086	-0.184	-0.065	0.126	1	
	(14.15)***	(2.546)**	(-5.512)***	(-1.927)*	(3.761)***	-----	
SIZE	-0.057	0.122	0.136	0.078	0.187	-0.041	1
	(-1.691)*	(3.627)***	(4.062)***	(2.306)*	(5.613)***	-1.220	-----
AGE	0.110	0.069	0.001	-0.051	0.106	0.119	0.24
	(3.293)***	(2.044)**	-0.031	(-1.500)	(3.132)***	(3.526)***	(7.42)***

Source: Processed data using Eviews, 2022
Notes: Robust standard error in parentheses *,**,*** significant at 10%, 5% and 1% level.

The analysis correlation between independent and dependent variables is presented in Table 2. The results show that ownership concentration (C_OWNR), DPR, PROF, and AGE have a positive relationship with the market value at the 1 percent significance level. In contrast, INV, LEV, and SIZE have negative and significantly correlated to the market value (TOBINS'Q) at 1 percent and 10 percent, respectively.

The results of a dynamic model of GMM-difference estimation are reported in Table 3. Two diagnostics tests should be conducted to know the most appropriate estimation in a dynamic model, i.e., the specification test of the valid instrument and serial correlation to test the first and second-order serial correlation (AR(1) and AR(2). The results of Hansen's J-statistic of over-identifying restriction have p-values of 0.0835, indicating that the lagged model has valid instruments or that over-identifying restrictions are valid. The instrument's estimations do not correlate with the residuals. This means the residual was unaffected by AR(2) (Arellano & Bond, 1991), in which the second-order autocorrelation was insignificant, with a p-value of 0.3672. The Arellano-Bond test for residual correlation found no serial correlation in the first-difference disturbances. The impact of each explanatory variable on the market value in Table 3 shows that the 1st lagged market value (TOBINS'S Q(-1)) has a positive and significant effect on TOBINS'Q at the 1 percent level of significance. This indicates that the market value is dynamic, in which last year's market value significantly influences this year's market value. Thus, the data support the lagged effect of market value. This finding aligns with previous studies' findings (Muchtar *et al.*, 2018; Zeitun & Saleh, 2015).

Table 3. Estimation Results of GMM Difference on Market Value

Variable	Coefficient	T-statistic
TOBINS_Q(-1)	0.1823	11.8725***
C_OWNR	-2.8586	-6.9254***
INV	-0.2670	-1.0187
LEV	0.0086	2.1771**
DPR	-0.1072	-2.2567*
PROF	1.2585	5.9943***
SIZE	-0.7314	-8.0398***
AGE	0.0523	2.1404**
Arellano-Bond Test:		
AR(1) (*p-value*)		0.1483
AR(2) (*p-value*)		0.3672
Hansen J-test (*p-value*)		0.0835
Number of instruments		28
Observations		654

Source: Processed data using Eviews, 2022

Notes: Robust standard error in parentheses *,**,*** significant at 10%, 5% and 1% level.

$$TOBINS'Q_{it} = \beta_0 + \beta_1 TOBINS'Q_{it}(-1) + \delta_1 C\_OWNR_{it} + \delta_2 INV_{it} + \delta_3 LEV_{it} + \delta_4 DPR_{it} + \delta_5 PROF_{it} + \delta_6 SIZE_{it} + \delta_7 AGE_{it} + \varepsilon_{it}$$

Table 3 shows that ownership concentration (C_OWNER) has a negative and significant impact on the market value at 1%, with a coefficient of -2.8586. This result implies that an increase in ownership concentration leads to a decrease in the market value of non-family firms in Indonesia. Thus, the data support hypothesis H1. The negative coefficient suggests that controlling shareholders expropriate minority shareholders right under the concentrated ownership structure, which means that the higher concentrated ownership of non-family firms reduces the firm's value. This finding is consistent with the agency theory. Therefore, the conflict between the majority and minority shareholders exists in this study (Fama & Jensen, 1983). This finding aligns with those of Hu *et al*. (2010) and Saidat *et al*. (2019) who revealed that ownership concentration negatively affects firm value. However, this result is contradicted by the study proposed by Rajverma *et al.* (2019), who found the positive effect of ownership concentrated on market value. Hegde, Seth, & Vishwanatha (2020) also found an insignificant relationship between stock market performance and share ownership.

Moreover, investment shows a negative impact on market value but is insignificant. The negative coefficient of investment, measured by capital expenditure, suggests that a firm with higher free cash flow and lower debt creates an overinvestment problem that might cause the market value to decline. This means that an increase in investment in fixed assets reduces the market value caused by over-investment in non-family-owned companies. This finding contradicts the expected hypothesis and investment theory, which suggest a positive relationship between investment and firm value. Thus, the data do not support H2. This finding is consistent with the results of Agha (2016), who found that investment measures by capex negatively affect market performance. Rajverma *et al*. (2019) also found a negative and significant effect of investment on market-to-book value.

Leverage has a positive coefficient and a significant impact on market value at the 5 percent significance level. This implies that an increase in debt levels increases the market value of non-family firms. This finding is consistent with theoretical expectations and is supported by the trade-off theory, which reveals that the optimal debt ratio is determined by the trade-off

between the cost of capital and bankruptcy costs (Scott, 1977). Therefore, management should maintain operating profit to remain above the amount required to pay interest. In addition, the positive leverage also accepted the signaling effect (Ross, 1977). This means that market participants perceive high firm leverage as a positive signal to the market. Indonesian firms are generally considered proficient in bearing a high level of debt in their capital structures. Thus, alternative hypothesis H3 is supported. This result is consistent with previous research, which states that leverage has a positive and significant effect on firm value (Alabri *et al.*, 2021; Ibhagui & Olokoyo, 2018; Olokoyo, 2013; Park & Jang, 2013). However, this finding contradicts the study by Thamrin et al. (2018), who found that leverage has a negative effect on TOBIN'Q. Saidat *et al.* (2019) also found leverage's negative effect on the full sample's market value (family and non-family firms).

Further, results show that the dividend payout ratio (DPR) has a negative impact on market value at the 10 percent level. This finding is contrary to expectation theory. Thus, H4 is not supported. Moreover, the negative coefficient of dividend per share suggests that an increase in dividend per share negatively leads to a decrease in market performance. This implies that when a firm pays out more dividends, it will consequently reduce the amount of available cash, even if the firms have or do not have available free cash flow. Therefore, market performance decreases because of an increase in dividend payouts. This finding supports agency theory, which suggests that dividends can play an important role in mitigating the effect of conflict due to the shareholder-manager relationship. Firms' high dividend payouts reduce cash flow for manager consumption (Jensen, 1986). Instead, firms must seek additional funding from the capital market (equity and debt) to provide additional investment opportunities. Additional funding policies may affect a company's value and cause conflicts between the management and shareholders. Therefore, shareholders need to monitor company activities to ensure that management follows the interests of shareholders, which can reduce agency costs (Agha, 2016). This study is in line with Khan, Naeem, Rizwan, & Salman (2016), who found that the dividend policy has a negative impact on market performance. However, this result was not statistically significant. However, this finding contradicts those of Mokaya *et al.* (2013) and Muchtar *et al.* (2018) revealed that the dividend payout ratio positively affects the market performance.

The profitability results show a positive impact and significance on the market value at the 1 percent significance level. This implies that the firm can generate profit from its capital assets, leading to an increase in market value. This finding is consistent with the expected hypothesis and is supported by signaling theory, which reveals that increasing a firm's profitability should send a good signal to the market. Thus, investors are willing to invest in the firms. So that the data support the alternative hypothesis H5, this finding aligns with past studies (Thamrin *et al.*, 2018; Zuhroh, 2019), which found that profitability positively affects market value. Lastly, the results of the control variables show that firm SIZE has a negative impact on market value and is statistically significant at the 1% level. This result indicates that large firms decrease their market value. This finding contradicts the theory and expected hypothesis. However, firm AGE has a positive and significant effect on market value at the 5% level. This implies that older companies can manage their operations well and that the firm will be more sustainable in the future.

5. CONCLUSION, SUGGESTION, AND LIMITATION

Bivariate analysis results show that ownership concentration, dividend policy, and profitability have a positive and significant relationship with market value. However, investment and leverage have opposite directions, showing a negative relationship with market value. By applying the GMM first-difference estimation, the results show that ownership concentration has a negative and significant effect on market value. This means that an increase in the concentration of ownership leads to a decrease in the market value of non-family firms. The financial decision results show that the investment and dividend policies seem to have a negative impact on market value, but the investment is insignificant. The findings are inconsistent with the expected hypothesis but support agency theory, which states that when a firm is over-invested and pays more dividends to shareholders, it will affect a decrease in market value. This implies that firms send bad news to the market, which affects investors' decisions. Lastly, leverage and profitability have a positive and significant effect on market value, meaning that firms with higher debt and return on assets will increase market value significantly. This finding is consistent with the expected hypotheses. The implication of the results suggests that agency conflicts exist between majority and minority shareholders in the study. Under a concentrated ownership structure, controlling shareholders expropriate minority shareholders' rights.

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