The Moderating Role Of Firm Size On Relationship Between Majority Ownership And Debt Policy Of Property Sector

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Abstract: This study aims to understand well the effect of majority ownership and firm size on financial fundamentals as controlling the debt policy of the property sector in Indonesia. The data panel model was built using data from firms listed in the property sector of the Indonesia Stock Exchange. Data is extracted from audited quarterly financial reports from 2014-2019. The results show that majority ownership negatively influences debt policy. In general, majority ownership negatively affects the capital structure in the short and long term because management is more prudent. However, sales growth and firm size insignificantly affect debt policy. Moreover, the moderate effect of firm size on the relationship between majority ownership and debt policy was strengthened. The controlling fundamentals, namely liquidity and profitability, negatively affect leverage. However, price to book value positively affects leverage. Our main implication is that majority ownership and firm size with firm-specific rather than country facts explain the differences in debt policy in the property sector.

Keywords: majority ownership, corporate fundamentals, debt policy, property.

Abstrak: Studi ini bertujuan untuk memehami lebih dalam efek kepemilikan majoritas dan ukuran perusahaan dengan fundamental keuangan sebagai variabel kontrol pada kebijakan utang perusahaan sektor properti. Analisis menggunakan data panel dengan data finansial dari laporan keuangan 2014-2019. Temuan-temuan yang diperoleh adalah kepemilikan majoritas berdampak negatif pada kebijakan utang, namun ukuran perusahaan tidak berdampak signifikan. Konklusi menujukkan kepemilikan majoritas lebih konservatif dalam mengendalikan manajemen dalam kebijakan utang, namun di sisi lain peningkatan ukuran perusahaan memberikan akses lebih baik untuk pendanaan utang. Selanjutnya interaksi antara ukuran perusahaan dan kepemilikan majoritas memperkuat pengaruh pada peningkatan leverage namun lebih terkendali. Variabel kontrol menunjukkan likuiditas dan profitabilitas memengaruhi leverage secara negatif karena mendorong modal kerja dan peningkatan laba ditahan untuk pengembangan bisnis perusahaan di sektor properti.

Kata kunci: kepemilikan mayoritas, fundamental keuangan, kebijakan utang, properti.

INTRODUCTION

To cover all of the company's investment fund and operating expenditures, management must get funding from both debt and equity from the capital market. Property is known as one of the sectors that are sensitive to the dynamics of the cost of debt in the market due to mortgage loans and construction debt. In running and developing a property business, financing by debt and equity is common to meet operational and investment needs while increasing income (Albart et al., 2020a); Santosa, 2019). However, many firms experience financial distress and even bankruptcy because they are wrong in taking their capital structure policies, especially debt decisions (Jaros & Bartosova, 2015). Even though the firm's business is experiencing good development, if the debt policy is carried out excessively, it will disrupt liquidity and solvency *in* the long term (Rashid, 2016). The increase in excess debt impacts liquidity because the interest-bearing is higher, thus disrupting the firm's working capital (Santosa, 2020a).

Determination of the proportion of debt ratios is related to the concentration of ownership that makes up the majority. The ownership structure and tenure of the Board of Directors are intended to boost the firm's worth. These factors are believed to reduce the conflict of interest between shareholders and management since they are inextricably linked to how the business is operated. (Arifin, 2016) contends that institutional ownership might catalyze good corporate governance. This circumstance is founded on the idea that an institution exercises prudence and sound judgment. When an institution has a stake in a firm, it is assumed that the firm's management would be sound due to the institution's oversight. These criteria also exist in the case of Majority ownership (Rich & Lumpkin-Sowers, 2017).

Majority ownership suggests a degree of concentration in the firm's ownership structure, with specific parties owning more than 5 percents of the shares. This situation will affect the firm's management. Since most shareholders already have complete access to corporate information (Dewayanto et al., 2020). Another factor that impacts corporate governance transparency is the Board of Directors' tenure of office. The duration of an office is directly proportional to the rising amount of expertise and knowledge. The Board's increased expertise and skills will likely bolster its capacity to manage the firm. Transparency, which in this context refers to the disclosure of corporate governance, is one sign of solid business management, including the debt policy (Dewayanto et al., 2020) (Kuhlmann & Rojahn, 2017).

A good debt policy is related to funding so that liquidity can support operations and has solvency that can support long-term sustainability profitable for firm shareholders (Salehi & Manesh, 2012; Buvanendra, Sridharan, & Thiyagarajan, 2017). Abdeljawad & Mat Nor (2017) state that debt policy must be carried out by managers, both current liabilities and long-term debt, to increase firm funding. The manager decides to meet operational and investment needs to continue expanding and maintaining sustainability with good performance (Santosa, 2020b). This debt decision becomes *leverage* for the firm to develop and run well. However, debt policy must be appropriately considered so as not to cause liquidity and solvency problems (Albart et al., 2020a).

With increased funding from debt, the involvement of debtholders (both banks and bond investors) is more profound, so managers are required to carry out better corporate governance (Horvathova et al., 2018). This situation also creates a more complex agency

problem because of interactions between interested parties (interplay), majority ownership, debtholders, and management in sharing information, control, and risk of financial distress (Kuhlmann & Rojahn, 2017; Subramanyam, 2014).

Debt policy is also influenced by other fundamental factors such as liquidity, sales growth, profitability, market ratios, and firm size. The level of liquidity and profitability affects the debt ratio because an increase in liquidity and profitability will reduce the need for funding through debt. However, this is still a debate among financial researchers due to several factors, namely the period, type of business/sector, interest rate, business cycle, and the country's economy (Nguyen, 2020; Huong, 2017; Arsov & Naumoski, 2016; Albart et al., 2020b). Revenue growth requires adequate funding support for investment and firm working capital. Investments are generally made for production capacity expansion, product innovation, and business development (Albart et al., 2020a).

By realizing the strategic position of debt policy among this majority ownership, a new study is needed to explore the factors influencing capital structure dynamics in the property sector. So that problems in debt policymaking can be done more comprehensively based on all the firm's internal factors, such as majority ownership and some fundamental corporate variables.

THEORETICAL REVIEW

Albart et al. (2020b) explained that the capital structure is the amount of short-term debt, both permanent and non-permanent, long-term debt, preferred stock, and common stock used to finance the firm. The firm's capital structure reflects how much the firm's assets are financed by debt. The relationship between capital structure and other financial decision variables makes it difficult to control (Sugiarto & Santosa, 2018). Factors that affect the firm's capital structure, both external and internal factors, including asset growth, profitability, and asset structure, affect property firms' capital structure. In contrast, firm size, dividends, and business risk affect the capital structure insignificantly (Santosa, 2020). Five variables that significantly affect are firm size, firm growth, profitability, and ownership, while asset structure has no significant effect on capital structure in manufacturing firms (Balios et al., 2016) ; (Bandyopadhyay & Barua, 2016). The study (Albart et al., 2020a) states that sales growth, managerial share ownership, institutional share ownership, and firm size have a positive and significant effect on capital structure.

Management is an agent of shareholders who delegate authority to agents to act in their interests. However, there is no guarantee that management will always act in the principal's interests. Management can make decisions to maximize profits for themselves. One way to minimize this is by incentivizing management and supervision to carry out their duties properly (Santosa et al., 2020). These supervisory activities generate agency costs related to management supervision to ensure that management acts consistently under the firm's contractual agreements with creditors and shareholders (Alanazi, 2019; Brigham & Houston, 2016).

Majority ownership and debt policy. Albart et al. (2020a) and (Tran & Le, 2020) state that concentrated ownership or majority ownership negatively affects the firm's debt policy. Similar results were concluded by Albart et al. (2020b) that majority ownership has a

negative effect on capital structure, which means that the larger the concentrated ownership or majority, the smaller the debt portion. This condition shows that the greater the Majority shareholding, the smaller the DER ratio. The majority supervision of management is considered adequate and contributes to the firm's debt policymaking. The more significant the shareholding by the majority, the less opportunity for management to increase its debt ratio. Furthermore, the factors that motivate Majority ownership are shared control and private benefit (Vijayakumaran & Vijayakumaran, 2019). The majority can use their voting power to enjoy firm profits or profits that are not distributed to minority shareholders. (Du & Xiu, 2009) . In addition, Majority ownership affects the firm's debt policy which is a trade-off of the firm's investment risk and return (Santosa, 2020b).

H1: Majority ownership effect on debt policy negatively

Firm size and debt policy. According to trade-off theory, large firms must lend more because their managed businesses are more diverse and lower bankruptcy probability. In contrast, smaller firms must operate with low leverage because they can easily deal with financial difficulties and liquidation (Yang et al. al., 2015; Rani et al., 2019). Additionally, big corporations adopt innovation and competitive market changes more quickly than small to medium-sized enterprises do, owing to the vast quantity of resources available for substantial expenditures (Jermias & Yigit, 2019; Muzir, 2011; Lim, 2012; Lee et al., 2013).

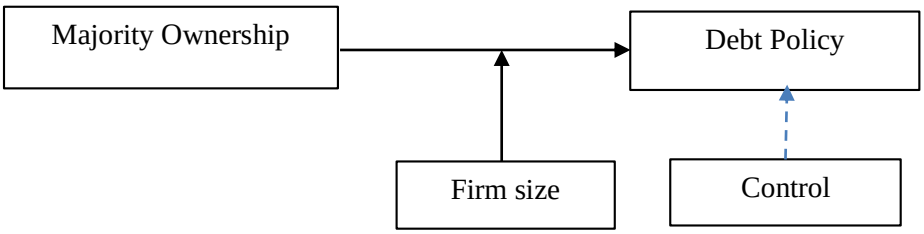
H2: Firm size effect positively on capital structure

Moderate effect of firm size on the relationship between majority ownership and debt policy. Alanazi & Alhoqail (2019) and (Albart et al., 2020a) argue that large investors or majority ownership have a stronger preference for bigger enterprises since they are more knowledgeable about them. The concern for large firms may be related to better market liquidity and investor interest, which may minimize the challenges caused by information asymmetries. We determine the firm size based on the natural logarithm of its total assets, which interacts with majority ownership or major investors on relationship debt policy. While a big firm and majority ownership might be advantageous for resource mobilization and governance, they may not be suitable for rapidly adapting to internal and external business environments.

H3: Firm size moderate the effects of majority ownership on debt policy

Research Framework

Based on hypotheses development, a research framework can be presented as seen in Figure 1.



Control variables: liquidity (quick ratio), sales growth, profitability (return on equity), market value (price-to-book value).

Figure 1. Research Framework

METHODS

The population in this study are all publicly listed firms in the property, real estate, and building construction sectors on the Indonesia Stock Exchange. The sampling technique is non-probability sampling through the purposive sampling method, namely, taking samples with specific criteria tailored to this study's needs. In this sampling, the selection of the sampling unit is carried out based on expert considerations. Based on the research criteria, through 3 stages of sample selection, 35 firms (issuers) are listed on the Indonesia Stock Exchange (IDX) with quarterly financial reports published during 2014–2019, so the total sample is 840 observations.

Operationalization of Research Variables. The dependent variable used in this study is debt policy as a proxy for leverage, which is a variable that is the main concern of the researcher or the main variable that becomes the prevailing factor in the investigation. The main variables are majority ownership and firm size—the firm size is used as moderating variable that interacts with the majority shareholder. We also used fundamental ratios to control the model, such as liquidity, sales growth, profitability, and market ratio. The variables used in this study are in Table 2):

Table 2. Description of Research Variables

No.	Variable	Measurement	Notation
1	Debt Policy	$\text{DER} = \frac{\text{Total Liabilities}}{\text{Ekuitas}}$	DER
2	Majority Ownership	$\text{MOS} = \frac{\text{Majority ownership}}{\text{Outstanding share}} \times 100\%$	MOS
3	Liquidity	$\text{QR} = \frac{\text{CA} - \text{Inventories}}{\text{Current Liabilities}}$	LIQ
4	Sales Growth	$\text{SGR} = \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_{t-1}} \times 100\%$	SGR
5	Profitability	$\text{ROE} = \frac{\text{EAT}}{\text{Equity}} \times 100\%$	ROE
6	Market Value	PBV=Price/Book Value	PBV
7	Size	Ln Total Assets	Size

Empirical Model. According to (Baltagi, 2013), panel data regression is a regression approach that uses both time series data and cross data to make predictions. The financial data is processed in a panel model using Eviews 10 software used in this research. A total of three models were utilized in the panel analysis, including the common effect model (CEM), the fixed-effect model (FEM), and the random-effect model (REM), which were then used to identify which model was the most appropriate for this study. The likelihood test, the Chow test, and the Hausman test determine which model is the best (Santosa, 2020a).

The model analysis in estimating is based on some recent studies on the relationship and correlation of majority shareholders, corporate fundamentals, and debt policy. (Albart et al., 2020b; Manzaneque et al., 2016; Kuč & Kaličanin, 2021; Jermias & Yigit, 2019):

$$DER_{it} = \alpha_0 + \alpha_1 MOS_{it} + \alpha_2 LIQ_{it} + \alpha_3 SGR_{it} + \alpha_4 ROE_{it} + \alpha_5 PBV + \alpha_6 Size_{it} + e_{it} \quad \ldots.. (1)$$

$$DER_{it} = \delta_0 + \delta_1 MOS_{it} + \delta_2 LIQ_{it} + \delta_3 SGR_{it} + \delta_4 ROE_{it} + \delta_5 PBV + \delta_6 Size_{it} + \delta_7 (MOS \cdot Size)_{it} + e_{it} \ldots. (2)$$

Where DER (debt policy/leverage), α1….α6: δ1…δ7= coefficients of the interaction variables; MOS= majority shareholder; LIQ=liquidity; SGR=sales growth; ROE=profitability; PBV=market value and Size: firm size (log natural) and controlling variable; i=firm-i; t= period-t and e= *error term*.

RESULTS

Descriptive statistics. Table 3 shows the results of a descriptive analysis of the variables of the firm's financial characteristics, such as debt policy or *leverage* (DER), majority ownership (MOS), liquidity (LIQ), sales growth (SGR), profitability (ROE), price to book value (PBV), and firm size (Size). DER shows symptoms of moderate variability where the coefficient of variation is 1.4935, which indicates a lower mean than the standard deviation. This result is also evident in the majority ownership variable, where the coefficient of variation is lower than DER, which is 0.9150. This result shows that the distribution of MOS data is relatively low. However, the CV of liquidity of 1.4607 is almost the same as DER. Variability of the sales growth variable (SGR) has a coefficient of more than one, 1.2334.

Table 3. Statistics description of research variables

	DER	MOS	LIQ	SGR	ROE	PBV	Size
Mean	1.0910	0.4570	1.1697	0.6789	0.1090	2.5456	8.8044
Median	0.1250	0.4220	1.3502	0.5452	0.0655	1.6900	7.1655
Max.	6.3209	0.8830	3.4720	0.2603	0.2085	4.5600	19.7700
Min.	0.3570	0.3577	0.2694	-0.7772	-0.3075	0.0280	0.18256
Std. Dev.	1.6295	0.4182	1.7086	0.8374	0.1762	3.2044	15.5497
CV	1.4935	0.9150	1.4607	1.2334	1.6165	1.258	1.7661

The description presents that profitability in terms of the coefficient of variation, and it also shows that ROE variability is1.6165. The high distribution of data on the profitability variable shows variations in different firms' efficiency with different core business and market target characteristics. The price to book value (PBV) shows symptoms of moderate

variability where the coefficient of variation reaches 1.258, which indicates the mean value is lower than the standard deviation value. The size variable relatively all variability higher than other variables.

The results of the data normality test present the Jarque-Bera value of 0.361 with a significance value of 0.372 or more than a significance level of 0.05. These results indicate that the data in this study are normal. Then the heteroscedasticity test is conducted to find some disturbances in the panel model. The Harvey test shows that F of 1.593 with a probability of 0.2442. The chi-Square count of 0.3827 from all tests is more than the 5 percent significance level. These results indicate that there is no heteroscedasticity in the panel model.

Panel Model 1. CEM analysis shows that the effect of MOS, SGR, and Size on DER is not significant. The independent variables that affect DER are LIQ, ROE, and PBV, with a coefficient of determination, R sq. of 0.3292. Panel analysis of FEM shows better results than CEM, where MOS, LIQ, SGR, and PBV significantly affect DER, with a coefficient of determination R^2 of 0.4256. Meanwhile, the REM panel results are similar to FEM, but only the coefficient values differ. CEM, FEM, and REM analysis show that the number of significant independent variables is almost the same but with a different coefficient of determination. This study conducted a likelihood test between CEM and FEM; Lagrange multiplier (LM) testing between CEM and REM; and Hausman testing between FEM and REM models to get the optimal model.

The estimation results of the model are *the common effect model* (CEM), *fixed effect model* (FEM), and *random effect model* (REM) in the form of coefficients, probability, and coefficient of determination are presented in Table 4.

Table 4. Results of Panel Model 1

	CEM		FEM		REM	
Variable	**Coefficient**	**Prob**	**Coefficient**	**Prob**	**Coefficient**	**Prob**
MOS	-0.1821	0.2078	-0.8337	0.0868*	-0.7265	0.1103
LIQ	-0.0395	0.0032	-0.0198	0.0352	-0.0282	0.0262
SGR	0.0207	0.3688	0.0154	0.1579	0.0194	0.1507
ROE	-1.3057	0.0000	-1.8881	0.0072	-1.3673	0.0081
PBV	0.1084	0.0000	1.3711	0.0548*	0.1316	0.0884*
Size	0.0043	0.4766	0.0156	0.2160	0.0117	0.4858
C	1.1569	0.0000	1.6922	0.0069	1.3312	0.0075
R-sq	0.3292		0.4256		0.3752	
R-sq adj.	0.3180		0.4080		0.3604	

*significant at α=10%

This study conducted a likelihood test between CEM and FEM; Lagrange multiplier (LM) testing between CEM and REM; and Hausman testing between FEM and REM models to get the optimal model.

Likelihood Test. A likelihood test was conducted to select the estimated model between CEM and FEM. The hypotheses used are:

Ho: common effect model (CEM)

Ha: fixed effect model (FEM)

Decision-making :

Test results likelihood in Table 5 shows the probability of chi-square of 0.0000 then Ho is rejected, so it can be concluded that the best estimation model is FEM.

Table 5. Likelihood Test Results: Model 1

Effects Test	Statistics	df	Prob.
Cross-section F	73.2219	(34,660)	0.0000
Cross-section Chi-square	1093.9429	34	0.0000

Langrange Multiplier Test. The estimation model chosen is the fixed effect model (FEM). However, because there is a significant difference in the fixed effect model (FEM) compared to 2 (two) other models, then a comparison is made between the common effect model (CEM) and random effect model (REM) using the multiplier Lagrange test. This test was carried out using the Breusch-pagan method. The hypotheses used in this test are:

Ho: common effect model (CEM)

Ha: random effect model (REM)

Lagrange multiplier test results Table 6 shows that REM is better than CEM (*breusch pagan*).

Table 6. Lagrange Multiplier Test Results: Model 1

	Hypothesis Test		
	Cross-section	time	Both
Breusch-Pagan	13889.35	3.3595	13642.68
	(0.0000)	(0.0667)	(0.0000)

Hausman test. If the best model is FEM, then a comparison is made between FEM and REM using *the* Hausman *test.* The hypotheses used in this test are:

Ho: random effect model (REM)

Ha: fixed effect model (FEM)

Decision-making basis:

The results of the Hausman test in Table 7 show that the random cross-section is 0.0000, which means that the FEM model is better than REM. Thus the best model among the three models is FEM.

Table 7. Hausman Test results: Model 1

Test cross-section random effects			
Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	27.442362	5	0.0000

Panel Model 2. Table 8 presents that the effect of MOS, SGR, and Size on leverage is insignificant; however, LIQ, ROE, and PBVsignificantley affect leverage, with a coefficient of determination, R sq. of 0.3802. FEM panel analysis shows better results than CEM, where MOS, LIQ, ROE, and PBV significantly affect leverage, with a coefficient of determination R^2 of 0.4752. In addition, the REM panel findings are comparable to those of CEM, except for the coefficient values. Analyses using CEM, FEM, and REM reveal that the number of significant independent variables is nearly the same but with a varying coefficient of determination. The best model was determined by likelihood testing between CEM and FEM, Lagrange multiplier (LM) testing between CEM and REM, and Hausman testing between FEM and REM models. The estimation findings of the model are shown in Table 8 below in the form of coefficients, probability, and coefficient of determination for the common effect model (CEM), fixed effect model (FEM), and random effect model (REM).

Table 8. Results of Panel Model 2

	CEM		FEM		REM	
Variable	Coefficient	Prob	Coefficient	Prob	Coefficient	Prob
MOS	-0.2331	0.1630	-0.6265	0.0677*	-0.8025	0.1203
LIQ	-0.1725	0.0771*	-0.0282	0.0262	-0.1042	0.0612*
SGR	0.1707	0.2039	0.0194	0.1507	0.0302	0.1383
ROE	-0.8528	0.0381	-1.3673	0.0353	-08376	0.0281
PBV	0.1904	0.0072	0.1316	0.0646*	0.1316	0.0884*
Size	0.0043	0.2086	0.0117	0.2858	0.0221	0.4858
MOS· Size	-0.165	0.0942*	-0.4385	0.0788*	-0.6237	0.1482
C	1.1569	0.0000	1.3312	0.0491	1.3312	0.0075
R-sq	0.3802		0.4752		0.4712	
R-sq adj.	0.3691		0.4624		0.4638	

*significant at α=10%

The best model was determined by likelihood testing between CEM and FEM, Lagrange multiplier (LM) testing between CEM and REM, and Hausman testing between FEM and REM models.

Likelihood Test. A likelihood test was conducted to select the estimated model between CEM and FEM. The hypotheses used are:

Ho: common effect model (CEM)

Ha: fixed effect model (FEM)

Decision-making:

Test results likelihood in Table 5 shows the probability of chi-square of 0.0000 then Ho is rejected, so it can be concluded that the best estimation model is FEM.

Table 9. Results of Likelihood Test: Model 2

Effects Test	Statistics	df	Prob.
Cross-section F	76.2219	(38,520)	0.0000
Cross-section Chi-square	1288.9732	34	0.0000

Langrange Multiplier Test. The estimating model used is the fixed effect model (FEM). However, because there is a substantial difference between the FEM and two other models, the multiplier Lagrange test assesses the common effect model (CEM) and random effect model (REM). This test was conducted utilizing the Breusch-pagan procedure. These are the theories tested in this study:

Ho: common effect model (CEM)

Ha: random effect model (REM)

Decision: Lagrange multiplier test results Table 10 shows that REM is better than CEM (breusch pagan 0.0000).

Table 10. Lagrange Multiplier Test Results: Model 2

	Hypothesis Test		
	Cross-section	time	Both
Breusch-Pagan	1889.65	3.3595	13642.68
	(0.0000)	(0.0733)	(0.0000)

Hausman test. Then a comparison is made between FEM and REM using the Hausman *test.* The hypotheses used in this test are:

Ho: random effect model (REM)

Ha: fixed effect model (FEM)

Decision-making: The results of the Hausman test in Table 7 show that the random cross-section is 0.0000, which means that the FEM model is better than REM. Thus the best model among the three models is FEM.

Table 11. Hausman Test Results: Model 2

Test cross-section random effects			
Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	33.4423	5	0.0000

DISCUSSION

Majority ownership. Majority shareholders, as concentrated or institutional ownership, can reduce agency conflict because they can control and direct managers to make debt and dividend policies that favor the interests of institutional shareholders, especially in state-owned enterprises (Phung & Mishra, 2016; Albart et al., 2020a). In other words, the greater the percentage of shares owned by institutional investors causes monitoring efforts to be more effective because they can control opportunistic behavior carried out by managers (Solikhah & Jariyah, 2020); Xuan Anh *et al.*, 2018). This finding can be seen in the analysis results above, showing that majority ownership has a significant effect on property sector firms at IDX and as a speed adjustment to balance the debt ratio in running the firms (Öztekin & Flannery, 2012).

Firm size. The finding of this study indicates that the relationship between firm size and leverage is positive and insignificant. Although, large firms can easily access the capital

market because they have prospects for asset growth and a better reputation for obtaining capital than small firms (Forte, Barros, & Nakamura, 2013). In addition, large firms have lower agency costs due to more intensive GCG implementation, more stable cash flows, and easy access to the capital market, thus creating a positive relationship between size and leverage. (Albart et al., 2020a) . However, this does not apply in the short term because it relies more on current liabilities supported by firm liquidity. As for long-term debt, the debt ratio of larger firms is easier to access the capital market and has more flexibility in issuing securities (stocks and bonds) than small firms (Muzir, 2011; Sanil, Noraidi, & Ramakrishnan, 2018).

Moderate effect of firm size on the relationship between majority ownership and debt policy. Albart et al. (2020b) and Kuč & Kaličanin (2021) find that stock markets are unduly enthusiastic about large corporations due to their erroneous extrapolation of the lower operational risk and profits growth firms. In addition, the fast expansion of small businesses renders their existing and fixed tangible assets less significant than their hidden or growth fundamentals. Large companies get more investor concern and analyst support. The prior study acknowledges that analysts' followership can enhance the information environment of businesses.

Consequently, large investors would be less concerned with the corporate governance of large enterprises compared to smaller firms. Due to the larger size of their activities, large companies would also have easier access to suitable financing resources (Nair et al., 2020). These reasons imply that majority ownership in large corporations would place a greater emphasis on boards' strategic and controlling role relative to the monitoring and resource mobilization roles, particularly in debt policy (Santosa, 2020b).

Liquidity. Liquidity negatively affects firm leverage because the higher the liquidity, the smaller the need for external funds to support additional operations. Several previous findings stated the same thing, even though the studies were conducted in different sectors and countries such as (Solikhah & Jariyah, 2020) (Kuč & Kaličanin, 2021) (Bandyopadhyay & Barua, 2016). However, it is also stated that liquidity does not affect the firm's debt policy because leverage is used more for long-term investment funding (Santosa, 2020a)

Sales Growth. The results of this study are not supported by Pandey (2001) and (Santosa, 2020a). They conclude that prospect growth has a positive relationship with the debt ratio because sales growth has the potential to increase current liabilities. Vo (2017) and Prieto and Lee (2019) argue that sales growth has a positive relationship with growth opportunities and short-term and long-term debt of the firm because the larger the firm's business requires greater capital but is more financed by equity and retained earnings than debt.

Profitability. Based on the analysis above, profitability negatively affects the capital structure, a proxy for debt policy. This finding is in-line with Pecking Order Theory, and the financing hierarchy starts from retained earnings, debt, and equity. The negative relationship between leverage and profitability supports the previous opinion that the debt portion is increased when retained earnings are insufficient to finance operations and capital expenditure (Santosa, 2020a) (Albart et al., 2020b). Furthermore, Santosa (2020a) and

Frank & Goyal (2009) state that a negative relationship between profitability and leverage is generally formed between large and mature *firms* because their internal and external capital structures are more systematic than small growing firms.

Price to Book Value. Capital structure is a signal conveyed by managers to the market, and if investors respond positively, the stock price will increase. In other words, managers who believe that the firm's capital structure supports the firm's prospects will increase stock prices, thus forming a positive relationship between PBV and debt ratios (Albart et al., 2020b; Yoo & Wu, 2019). Managers can use more debt to signal that the market is trustworthy as long as economic growth and sales growth are good. Firms that increase debt can be seen as firms with good business prospects so that the relationship between the PBV ratio and leverage is positive (Santosa, 2020b).

CONCLUSIONS

Compared to the global economy, the relatively high and stable national economic growth puts pressure on the firm's capital structure during the 2014-2019 period. The increase in the firm's debt ratio, both short-term and long-term, is due to the increasing business prospects that support economic growth. This condition affects the capital structure through majority ownership and firm characteristics such as liquidity, sales growth, profitability, price to book value, and firm size. In addition, the aspects of corporate governance through concentrated ownership form the ownership structure, both managerial and institutional. The firm has the opportunity to increase equity through the capital market due to a stable increase in the market index, thereby opening up space for management to increase the portion of the debt through loans and bond issuance.

Analysis of the effect of capital structure provides various conclusions depending on the different independent variables. Majority ownership, profitability, and liquidity show a negative effect on leverage. This finding is due to the influence of concentrated ownership, which increases the effectiveness of corporate governance so that management becomes selective with the addition of debt. This study implies that Majority ownership or institutional ownership has a negative effect on debt policy due to increased institutional control over management. In general, concentrated ownership, both managerial and institutional ownership, negatively affects the capital structure in the short and long term because management is controlled to be more prudent so that the firm does not experience financial distress. In general, the more the firm size, the ratio of the firm's debt to finance firm growth, and the stronger the guarantee for debt. However, in this study, the effect of firm size on debt ratio is insignificant.

The interaction between firm size and majority ownership on debt policy. When firm size interacts with ownership, this study finds that the coefficient on the interaction term is negatively moderated. The role of firm size as a moderating variable strengthens the effect of majority ownership on firm leverage. With increasing company assets, the opportunity for access to debt financing is larger than smaller ones, and efficiency will be higher to create optimal firm value. So increasing interaction between majority ownership and firm size simultaneously made a bigger impact on leverage because this interaction indicated that firm size is managed to create growth business effectively.

Liquidity also shows the same result, where higher liquidity will reduce external debt. Furthermore, sales growth positively insignificantly affects the firm's debt policy, especially in the long term; innovation and investment from long-term debt are needed to support sales growth and firm expansion. Profitability also negatively affects leverage, indicating that increased profits can increase retained earnings that meet short-term and long-term capital requirements. This study shows a positive relationship between PBV and leverage.

Limitations and avenues for future research. This study has two limitations. Firstly, the future analysis could use a re-specification model that captures all data "in-out" to/from the Kompas 100 index and period study. Secondly, this paper could be adding moderating variables (such as corporate governance, firm size, or macroeconomics indicators) and, third, investment. In addition, it should also consider the use of more extended periods and the comparative study between conventional and Islamic firms to obtain more representative findings.

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