

## Linking ownership structure with capital structure of rural banks

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### Article info

*Keywords:*  
Capital structure, Ownership structure, Rural banks

ISSN (print): 2598-7763  
ISSN (online): 2598-7771

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### Abstract

*This study examines the relationship between ownership structure and capital structure at rural banks (BPR) in West Java, Indonesia. The ownership structure includes local government ownership, institutional ownership, management ownership, and female shareholding. Meanwhile, capital structure is measured using debt-to-assets ratio (DTAR) and debt-to-equity ratio (DTER). The data in this study was obtained from BPR's financial statements for the period 2016 to 2022. The results of data collection show that there are 218 rural banks in West Java, Indonesia with a total of 1526 BPR-years of observation. Next, the data was analyzed using the Robust standard errors of fixed effects model (Robust FEM). The findings show that local government ownership is positively related to the capital structure of rural banks as measured by DTER. Institutional ownership is positively related to the capital structure of rural banks as measured by DTAR. Meanwhile, women's share ownership is positively related to BPR's capital structure as measured by DTAR and DTER. Although, this study fails to prove the relationship between management ownership and capital structure, however, in general it can be said that ownership structure is related to the capital structure of rural banks in West Java, Indonesia*

*Citation:* Mai,U.M., Sudrajat, S., Sembiring. E.E., (2025). Linking ownership structure with capital structure of rural banks. *AFRE Accounting and Financial Review*, 8(1): 34-45

JEL Classification: G21, G34  
DOI: <https://doi.org/10.26905/afr.v8i1.13114>

### 1. Introduction

The purpose of studying the capital structure of a company is to reduce the cost of capital borne by the company which is ultimately expected to maximize shareholder value (Uwuigbe, 2014; Li, 2019; Titisari et al., 2019; Danso et al., 2019; Kruk, 2021). This is because the selection of the right capital structure can increase a company's competitive advantage and market share (Gill et al., 2010; Kumar et al., 2017), influencing and improving financial performance and company value (García & Herrero, 2021; Kalash, 2023; Al-Haddad et al., 2024). Conversely, improper selection of capital structure has the potential to lead to financial difficulties and bankruptcy of the company (Singh & Kumar, 2012; Tifow & Sayilir, 2015; Rehman, 2016; Ahmed & Afza, 2019; Fekadu Agmas, 2020; Mathur et al., 2021). Therefore, it is not surprising that capital structure has been one of the topics that has received a lot of attention

among practitioners and academic researchers for more than six decades.

The importance of capital structure for companies has prompted many studies examining the key factors that influence the choice of this combination of debt and equity. The discussion of capital structure separates non-financial companies and financial companies, including banks. Banks have different business properties that provide different financial reporting structures. This is because banks have a different regulatory framework than nonfinancial companies (Khan et al., 2020). In the context of banks, several studies prove that the choice of capital structure is influenced by bank-specific factors, such as profit volatility, growth, size, profitability, and profitability (Sheikh & Qureshi, 2017; Khan et al., 2020; Guizani & Ajmi, 2021). According to (Bukair, 2019; Saif-Alyousfi et al., 2020; Al-Hunnayan, 2020), the capital structure of banks is not only influenced by bank-specific factors, but also determined by the development of financial markets

and Gross Domestic Product (GDP). In the context of non-financial enterprises, Feng et al. (2020) found that the ownership structure has a significant influence on the capital structure of real estate companies in China. Farooq et al. (2024) found that corporate governance, as reflected in management ownership, block holder ownership, and institutional ownership, negatively impacted Pakistan's high leverage adjustment rate of non-financial companies.

Research on the relationship between ownership and capital structure in non-financial enterprises produces conflicting results. In this case, Shoaib & Yasushi (2015) reported that management ownership was associated with lower leverage of Pakistani non-financial firms; however, Le & Tannous (2016) and Tayachi et al. (2023) discovered that management ownership had a positive effect on the debt ratio because it was motivated to increase the value of the company by incorporating more debt financing into the company's capital structure. According to Khafid et al. (2020), institutional ownership reduces the capital structure of manufacturing companies in Indonesia; but, Tayachi et al. (2023) shows that institutional ownership increases the use of debt by manufacturing companies in some developed and developing countries. Zou & Xiao (2006) argued that companies with high levels of government ownership should use large debts to control and discipline management, but Feng et al. (2020) found that government ownership has a negative effect on the capital structure of Chinese real estate companies. Meanwhile, the relationship between bank ownership and capital structure does not seem to have received the attention of researchers. Therefore, studying the relationship between ownership structure and capital structure in banking institutions becomes important and beneficial.

This study examines the relationship between ownership structure and capital structure in People's Credit Banks (BPR) in Indonesia, which has never received attention from previous researchers. Examining the relationship between ownership structure and capital structure in BPR in Indonesia is important for three reasons. First, so far BPRs have been considered to have implemented poor corporate governance so that they often result in financial fraud, as a result of which as many as 71 BPRs were liquidated during the period 2013-2022 (Deposit Insurance Corporation (LPS), 2022). Second, the ownership structure is believed to be one of the most important com-

ponents of corporate governance that affects the company's performance capital structure (Bhagat & Bolton, 2019), especially companies or banks with small business scale such as BPR (Fithria et al., 2021). Third, according to Jensen's (1986) hypothesis of agency costs and free cash flow, the debt component in a company's capital structure is a governance instrument that can reduce conflicts of interest between agents and principals, allowing the company to achieve high performance (Degryse et al., 2012; Piaw & Jais, 2014; Arhinful & Radmehr, 2023). Indeed, agency theory assumes that high debt ratios can discipline managers' behavior because they are supervised by debtors, burdened with interest that must be paid each period, and required to pay the principal of the loan when it is due (Jensen, 1986; Jiraporn et al., 2012). However, high debt ratios pose significant risks, which appear to be particularly risky for the bank's business sustainability (Theis & Dutta, 2009; Ashraf & Zheng, 2015; Budagaga, 2020). Therefore, this study examines how BPR owners use debt to eliminate agency disputes and improve company performance while being aware of risks that endanger the bank's survival in the long term.

The governance implemented by BPR is very limited so that the ownership structure in this study is proxied with local government ownership, institutional ownership, management ownership, and women's ownership. This study may be the first to conduct an empirical assessment of the relationship between women's ownership and corporate capital structure, particularly in banks. As a result, the study helps fill in the gaps in the existing literature on the relationship between bank ownership structures and capital structures, particularly among rural banks. Furthermore, the study provides further information and insights for practitioners such as regulators, owners, and bank executives.

## 2. Hypothesis Development

Agency theory is one of the most commonly used theories to explain the relationship between corporate governance and capital structure (Jensen & Meckling, 1976). According to Agyei & Owusu (2014), conflicts of interest between principals and agents can incur agency costs and influence capital structure decisions. Jiraporn et al. (2012) argue that debt disciplines management and reduces conflicts of interest between controlling shareholders and minority shareholders. Se-

veral studies have found that debt policy is an important way to reduce agency conflicts between shareholders and managers because debt financing can reduce a company's existing cash flow while increasing the risk of bankruptcy for managers (Danso et al., 2019; Feng et al., 2020; Muttakin et al., 2020; Tayachi et al., 2023). This study adopts agency theory which assumes that the debt component in the capital structure of a company affects agency conflicts between principals and agents.

### **Local government ownership**

Research on the relationship between government ownership and the capital structure of companies, including banks, is rare. According to Saad (2010), companies with high government ownership face financial difficulties, have limited funding sources, which ultimately encourages companies to increase their debt ratios. Similarly, Zou & Xiao (2006) argued that government-owned companies should use large debts to monitor and discipline management, as government ownership is associated with poor corporate performance as a result of pursuing various social goals, which often leads to agency conflicts (Aguilera et al., 2021). In addition, Huang et al. (2018) revealed that Chinese companies with large state ownership adopt high levels of leverage. Indeed, the relationship between local government ownership and bank capital structure has never been studied before. However, agency theory and existing empirical literature show that government ownership tends to increase the use of debt in their capital structure to overcome conflicts that occur in companies.

H<sub>1</sub>: Local government ownership is negatively related to the capital structure of BPRs in West Java, Indonesia.

### **Institutional ownership**

According to George et al. (2005), institutional investors encourage managers to take on greater levels of risk, including debt risk, to achieve higher company performance. Similarly, Otero et al. (2020) showed that institutional ownership improves the risk-taking behavior of banking institutions in MENA countries with the aim of enjoying high rates of return. In the context of capital structure, Javaid et al. (2023) revealed that higher institutional ownership is directly related to a larger debt component in the capital structure of companies listed on the Pakistan Stock Exchange (PSX). In addition, Tayachi et al. (2023) proves

that institutional ownership increases the use of debt in the capital structure of manufacturing companies in developed and developing countries. Research on the relationship between institutional ownership and the capital structure of banks, including BPRs, appears to be rare. However, the existing empirical literature shows that institutional ownership tends to increase the use of debt in a company's capital structure.

H<sub>2</sub>: Institutional ownership is positively related to the capital structure of BPRs in West Java, Indonesia

### **Management ownership**

According to Sheikh & Wang (2012), management ownership lowers the capital structure of non-financial companies in Pakistan, as these holdings are often in line with the interests of other managers and outside shareholders thus reducing the role of debt as a tool to reduce agency problems. Similarly, Wellalage & Locke (2013) showed that management holdings had a negative impact on the debt ratio of non-financial companies in New Zealand, while Shoaib & Yasushi (2015) reported that management holdings were associated with lower leverage in Pakistani non-financial companies. Furthermore, using a sample of companies listed on the Indonesia Stock Exchange, Kumalasari et al. (2019) found that large managerial ownership is related to a high debt ratio. Lastly, Kolawole et al. (2023) proved that managerial ownership has a negative relationship with capital structure as measured by the debt-equity ratio in Nigerian non-financial companies. The relationship between managerial ownership and bank capital structure does not appear to have been studied, but the existing empirical literature suggests that managerial ownership tends to reduce the use of debt in a firm's capital structure.

H<sub>3</sub>: Management ownership is negatively related to the capital structure of BPRs in West Java, Indonesia.

### **Female ownership**

The relationship between women's ownership and the capital structure of firms, particularly banks, does not appear to have been studied. However, agency theory assumes that the presence of women on the board of directors minimizes information asymmetry (Connelly et al., 2011), lowers agency costs by reducing agency conflicts between principals and managers (Amin et al., 2022), which in turn improves company performance (Latukha et al., 2022). Some empirical

studies have also reported that the presence of women on boards of directors and executives is associated with a low capital structure. In this context, Abobakr & Elgiziry (2016) reported a negative relationship between female directors and short-term debt. Awwad et al. (2023) argue that the presence of women on the board of directors improves the quality of corporate governance norms that have the potential to replace debt as a tool to discipline managers. Finally, using a sample of non-financial companies listed on the IDX, (Siregar et al., 2024) shows that the presence of female executives on the board of directors is significantly negatively correlated with capital structure as measured by the debt-to-equity ratio and short-term debt-to-total assets. Referring to the existing empirical literature on the relationship between the presence of women in the board of directors and the executive with the decision on the capital structure.

H<sub>4</sub>: Women's ownership has a negative relationship with the capital structure of BPR in West Java, Indonesia.

### 3. Data and Methods

The population of this study is all rural banks in Indonesia registered with the Financial Services Authority (OJK). The study considered rural banks operating in West Java as a sample, for three reasons. First, West Java is the center of business in Indonesia. Second, West Java has the highest population density in Indonesia. Third, West Java is one of the provinces with the highest number of rural banks, namely 218 rural banks. Furthermore, this study data is taken from BPR's financial statements downloaded through the OJK website (<https://ojk.go.id/id/>) for the 2016-2022 period. The data collected formed a balanced panel with a total of 1526 BPR-year observations.

#### Deskripsi variabel

#### Dependent variables

The dependent variable is the capital structure measured by Debt to assets ratio (DTAR) and Debt to equity ratio (DTER). The DTAR value is determined by the ratio of the total debt to total assets of the BPR, as suggested by García & Herrero (2021); Wassie (2020). The value of DTER is determined by the ratio of BPR's total debt to total equity, as suggested by Wassie (2020); Moradi & Paulet (2019).

#### Variable independent

The independent variable is the ownership structure, which consists of local government ownership (LGOW), institutional ownership (INOWN), management ownership (MGOW), and female shareholding (WNSH). INOWN is determined by dividing the number of shares owned by institutions by the total shares of BPR (Queiri et al., 2021). LGOW is measured by dividing the number of shares owned by local governments by the total shares of BPR (Alshammari, 2022). MGOW is measured by dividing the number of shares owned by management (board of directors) by the total shares of BPR (Fithria et al., 2021). Meanwhile, WNSHG is the ratio of the number of shares owned by women that are not included in corporate governance to the total shares of BPR, as it measures the value of other ownership variables.

#### Control variables

Control variables consist of Loan to Deposit Ratio (LDR), Non-performing loans (NPL), Size (SIZE), Profitability or Return on assets (ROA), and Operating income growth (RGRW). Gross domestic product growth (GDPRG) and Western unemployment rate (UNEMR). Further-more, NPL is defined as the percentage of non-performing loans against the total loans provided by BPR to its customers (Syahfitri & Risfandy, 2023). LDR is the ratio of the amount of credit to total third-party funds owned by BPR (Zahro & Dewi, 2019). SIZE is the logarithm of BPR's total assets (Nadia & Hanafi, 2023). ROA is the ratio of net profit to total assets of BPR (Wassie, 2020). GDPRG is the annual real GDP growth. RGRW is the annual growth of BPR's operating income (Nguyen et al., 2023). UNEMR is the open unemployment rate, both of which apply in West Java, Indonesia (Priyadi et al., 2021).

#### Analysis model

The data in this study were analyzed using Robust standard errors on Fixed Effects Model (Robust FEM). This is in accordance with some previous studies such as (Hussain et al., 2021); (Mazzotta & Ferraro, 2020) and (Yusof & Ismail, 2016). This is because, FEM which was selected as the best model according to the results of the Hausman test showed symptoms of heteroscedasticity and autocorrelation. Meanwhile, the Generalized Method of Moments (GMM) model also does not meet all requirements. Therefore, we use Robust FEM. Furthermore, the Robust FEM equ-

ation model used in this study is shown as follows:

$$DTAR_{it} = \beta_0 + \beta_1 LGOW_{it} + \beta_2 INOW_{it} + \beta_3 MGOW_{it} + \beta_4 WNOW_{it} + \beta_5 NPL_{it} + \beta_6 LDR_{it} + \beta_7 SIZE_{it} + \beta_8 ROA_{it} + \beta_9 RGRW_{it} + \beta_{10} GDPRG_{it} + \beta_{11} UNEMR_{it} + \epsilon_{1it} \dots\dots\dots (Model 1)$$

$$DTER_{IT} = \beta_0 + \beta_1 LGOW_{it} + \beta_2 INOW_{it} + \beta_3 MGOW_{it} + \beta_4 WNOW_{it} + \beta_5 NPL_{it} + \beta_6 LDR_{it} + \beta_7 SIZE_{it} + \beta_8 ROA_{it} + \beta_9 RGRW_{it} + \beta_{10} GDPRG_{it} + \beta_{11} UNEMR_{it} + \epsilon_{2it} \dots\dots\dots (Model 2)$$

Where: DTAR= debt-to-assets ratio LGOW= local government ownership, WNOW= Women ownership; INOW= Institutional ownership, MGOW= management ownership; NPL= Non-performing loans, LDR= Loan to Deposit Ratio, SIZE= size of BPR, ROA= Profitability or Return on assets, RGRW= Operating income growth, GDPRG= Gross domestic product growth and UNEMR= Western un-employment rate; i indicate the BPR selected as a sample; t is the time of year;  $\beta_0$  is the value of the constant;  $\beta_1$ -  $\beta_{11}$  is the resulting regression coefficient;  $\epsilon_{1it}$  and  $\epsilon_{2it}$  are the error standards of equation models 1 and 2.

#### 4. Result

Based on Table 1, it can be seen that the mean DTAR is 0.750 which means that 75.00% of BPR's capital structure is debt, while 0.250 or 25% is equity. The minimum value of the DTAR is 4.50% which means that the amount of BPR debt is 4.50% of its total assets. The maximum value of DTAR is 2.1280 which means that the amount of BPR debt is greater than its total assets or is 212.80% of its total assets. The mean DTER is 493.03% which means that BPR's total debt is much larger (close to 5 times) compared to its total equity. The minimum value of DTER is 4.11%

which means that the amount of BPR debt is 4.11% of its total equity. The maximum value of DTER is 18,905 which means that the total debt of the BPR is 1890.50% of its total equity. The mean LGOW gives a value of 0.118 which means that on average 11.80% of BPR shares are owned by local governments. The minimum value of LGOW is 0,000 which indicates that the BPR shares are not owned by the local government, while the maximum value of LGOW is 1,000 or 100% which means that all BPR shares are owned by the local government.

Table 1. Descriptive statistics

Variables	Mean	Std. Dev.	Minimum	Maximum	Skewness	Kurtosis
DTAR	0.7500	0.2012	0.0450	2.1280	-0.2313	6.5196
DTER	4.9303	3.1471	0.0411	18.9048	0.7557	3.4445
LGOW	0.1178	0.3123	0.0000	1.0000	2.3280	6.5192
INOW	0.1395	0.3021	0.0000	1.0000	1.9383	5.1351
MGOW	0.0324	0.0998	0.0000	0.9688	5.1311	37.2395
WNOW	0.1429	0.2498	0.0000	1.0000	2.0058	6.1160
NPL	8.6615	8.6375	0.0600	57.9000	2.0241	8.1760
LDR	0.7482	0.2196	0.1068	4.3300	4.8265	74.0880
SIZE	7.5608	0.5309	5.8954	9.4990	0.2140	3.4418
ROA	1.1367	6.0560	-47.0215	39.0123	-3.4410	24.7591
RGRW	0.1876	0.6441	-2.9829	13.1360	8.4554	130.1113
GDPRG	4.4700	0.0242	4.4301	4.5076	-0.1335	2.0899
UNEMR	8.8329	0.8680	8.0400	10.4600	0.9139	2.1934

Source: Processed BPR financial report for the period 2016-2022

The mean INOW is 0.1395 which means that 13.95% of BPR shares are owned by institutions. The minimum value of INOW is 0.00 or 0.00% which means that no BPR shares are owned by the institution, while the maximum value of INOW is 100% which means that all BPR shares are owned by the institution. The mean MGOW is 0.0324 which indicates that on average 3.24% of BPR shares are owned by management. The mi-

nimum value of MGOW is 0.00% which indicates that there is no management ownership of the BPR shares, while the maximum value of MGOW is 0.9680 which means that 96.80% of the BPR shares are owned by the management. The mean (WNOW) is 0.143 or 14.30% of BPR shares are owned by women who are not included in the bank's corporate governance. The minimum value of WNOW is 0.00% which indicates that there is

no female ownership of the BPR shares, while the maximum value of WNOW is 100% which means that all BPR shares are owned by women. The mean NPL is 8.66%, meaning that on average BPRs have high NPLs that exceed the safe limit according to Bank Indonesia Regulation Number 15/2/PBI/2013, which is a maximum of 5.00%. The minimum NPL value is 0.060 which indi-

cates that the BPR has an NPL of 6.00%. Meanwhile, the maximum value of NPL is 57.900 which illustrates that the BPR has an NPL of 57.90% of the total credit it provides to its customers. Furthermore, a description of other control variables including LDR, SIZE, ROA, RGRW, GDPRG, UNEMR can be seen in Table 1.

Table 2. Correlation matrices between independent variables, including control variables

Variables	LGOW	INOW	MGOW	WNOW	NPL	LDR	SIZE	ROA	RGRW	GDP_RG	UNEMR
LGOW	1										
INOW	-0.114	1									
MGOW	-0.123	-0.130	1								
WNOW	-0.216	-0.213	-0.001	1							
NPL	-0.129	-0.107	0.049	0.060	1						
LDR	0.084	-0.018	0.025	-0.023	-0.041	1					
SIZE	0.365	0.242	-0.072	-0.176	-0.251	-0.003	1				
ROA	0.027	0.029	0.049	0.015	-0.320	0.036	0.219	1			
RGRW	0.019	0.038	-0.054	-0.018	-0.129	0.016	0.049	0.054	1		
GDPRG	0.006	0.007	-0.032	0.006	0.055	-0.066	0.142	-0.116	0.000	1	
UNEMR	0.003	0.001	-0.017	0.007	0.051	-0.098	0.040	-0.045	-0.190	0.081	1

Source: BPR financial statements for the 2016-2022 period

Table 2 shows that the correlation between the predictor variables (dependent and control variables) is at most 0.365, which is between LGOW and SIZE. Thus, the dataset analyzed in

this study did not show symptoms of multicollinearity. Furthermore, the results of the Robust FEM analysis of the dependent variables DTAR and DTER are shown in Table 3.

Table 3. Robust FEM results from DTAR and DTER dependent variables

Variables	DTAR				DTER				
	Coefficient	Robust std. error	t	P> t	Coefficient	Robust std. error	t	P> t	
LGOW	-0.0013	0.1182	-0.01	0.991	2.2562**	1.0123	2.23	0.027	
INOW	0.4312**	0.1882	2.29	0.023	1.8418	1.3516	1.36	0.174	
MGOW	0.0067	0.0234	0.29	0.775	-0.2897	0.6952	-0.42	0.677	
WNOW	-0.1653***	0.0576	-2.87	0.005	-2.4857***	0.8652	-2.87	0.004	
NPL	-0.0010	0.0008	-1.20	0.232	0.0052	0.0120	0.44	0.662	
LDR	0.0134	0.0198	0.67	0.501	0.6568*	0.3894	1.69	0.093	
SIZE	0.0515	0.0627	0.82	0.413	2.8753***	0.7303	3.94	0.000	
ROA	-0.0061***	0.0019	-3.15	0.002	-0.0722***	0.0268	-2.69	0.008	
RGRW	0.0196**	0.0091	2.15	0.032	0.0122	0.0919	0.13	0.895	
GDPRG	-0.2658	0.2591	-1.03	0.306	-15.2503***	3.2652	-4.67	0.000	
UNEMR	-0.0035	0.0032	-1.09	0.275	0.0228	0.0622	0.37	0.714	
Constant	1.5451**	0.7836	1.97	0.050	50.5420***	12.3229	4.10	0.000	
Adjusted R-squared				29.72%	12.30%				
F-Statistics	4.33				6.94				
Probability	0.0000				0.0000				
Banks	218				218				
Observation	1526				1526				

Notes: \*, \*\* and \*\*\* significant at the level of 10%, 5% and 1%

The Robust FEM results shown in Table 3 provide an Adjusted R-squared value of 29.72% for DTAR and 12.30% for DTER with F-Statistics (Probability) of 4.33 (0.0000) and 6.94 (0.0000) respectively. These figures show the magnitude of

the influence of all the predictor variables, namely the independent and control variables, on the dependent variables of DTAR and DTER. In addition, it indicates that the Robust FEM model developed has met the goodness of fit.

Some important results of the Robust FEM model are successively explained as follows: First, the relationship between LGOW and DTAR gives a coefficient value of -0.0013 with  $P > |t|$  of 0.991, which means an insignificant negative relationship. Meanwhile, the relationship between LGOW and DTER gives a coefficient value of -2.2562 with  $P > |t|$  of 0.027, which means a significant positive relationship at the level of 5%. Second, the relationship between INOW and DTAR gives a coefficient value of 0.4312 with  $P > |t|$  by 0.023, which means a significant positive relationship at the level of 5%. Meanwhile, the relationship between INOW and DTER gives a coefficient value of 1.8418 with  $P > |t|$  by 0.174, which means a positive relationship is not significant. Third, the relationship between MGOW and DTAR gives a coefficient value of 0.0067 with  $P > |t|$  by 0.775, which means an insignificant positive relationship. Meanwhile, the relationship between MGOW and DTER gives a coefficient value of -0.2897 with  $P > |t|$  0.677, which means an insignificant positive relationship. Fourth, the relationship between WNOW and DTAR gives a coefficient value of -0.1653 with  $P > |t|$  of 0.005, which means a significant negative relationship at the 1% level. Meanwhile, the relationship between WNOW and DTER gives a coefficient value of -2.4857 with  $P > |t|$  by 0.004, which means a significant negative relationship at the level of 1%.

## 5. Discussion

### Local government ownership.

The results of the study indicate that local government ownership is not related to the capital structure of BPRs as measured by Debt to assets ratio, but local government ownership has a significant positive relationship with the capital structure of BPRs as measured by debt-to-equity ratio. This finding indicates that local government ownership pays more attention to the total debt to total equity ratio compared to the total debt to total assets ratio because they are more interested in the funds invested by the owners, especially their own funds. The empirical evidence found is consistent with agency theory (Jensen & Meckling, 1976) which considers debt as an important instrument to reduce agency conflicts that occur in companies. This finding is in line with (Zou & Xiao, 2006) who argue that companies with strong government ownership must use a high debt ratio to effectively monitor managers' actions and ensure that these actions are consistent with the in-

terests of the owners. This is because government ownership is associated with low company performance due to the many social agendas that are carried out, which often cause conflicts of interest with other shareholders in the company (Aguilera et al., 2021).

### Institutional ownership.

The findings suggest that institutional ownership has a significant positive relationship with debt-to-assets ratio, but Institutional ownership does not show any relationship with debt-to-equity ratio. In contrast to local government ownership, these findings show that Institutional ownership prioritizes the ratio of total debt to total assets rather than the ratio of total debt to total equity because they believe the debt-to-assets ratio reflects more of the capital structure strategy implemented by banks than debt-to-equity ratio. The empirical evidence found corresponds to agency theory (Jensen & Meckling, 1976), which states that high returns are associated with high risk, including funding risk. These findings are consistent with (George et al., 2005) which prove that institutional investors encourage managers to take greater risks, including financing risks through debt, with the aim of achieving higher company performance. Similarly, Tayachi et al. (2023) revealed that institutional ownership increases the debt ratio of manufacturing companies in developed and developing countries.

### Management ownership.

The findings show that management ownership is not related to the capital structure of BPR as measured by debt-to-assets ratio and debt-to-equity ratio. The findings of this study imply that management ownership does not consider debt as the primary tool for banks to achieve high performance; Instead, they may focus on how to improve the effectiveness and efficiency of the bank's operations in achieving high performance. This result is different from agency theory which argues that debt is an important way to discipline managers' actions to match investor expectations. Similarly, this finding is in contrast to (Sheikh & Wang, 2012) who argued that management ownership degrades the capital structure of Pakistani non-financial firms. This is because the interests of management ownership are often aligned with the interests of other shareholders, as a result, the role of debt as an instrument to lower agency conflicts is reduced. Furthermore, these findings are not in line with (Le & Tannous, 2016) which re-

ports that management ownership positively affects the debt ratio of non-financial companies in Ghana as they have a high motivation to increase the value of companies by increasing debt financing.

### Female ownership.

The findings show that women's ownership is negatively related to the capital structure of BPR as measured by debt to assets ratio and debt-to-equity ratio. These findings reflect the fact that the proportion of debt in the bank's capital structure is decreasing along with the increase in the number of BPR shares owned by women. The study's findings are consistent with agency theory, which states that when women serve on boards of directors will reduce information asymmetry (Le & Chizema, 2011; Connelly et al., 2011; Abad et al., 2017; Shao, 2019) while also reducing agency conflicts, allowing them to replace debt as an important tool for overcoming agency conflicts. These findings are consistent with (Loukil & Yousfi, 2016)

Loukil & Yousfi (2016), Abobakr & Elgiziry (2016), Usman et al. (2019) which reported a negative relationship between female directors and short-term debt. This is in line with the phrase that states that the presence of women on the board of directors improves the quality of corporate governance norms which have the potential to replace debt as a tool to discipline managers (Awwad et al., 2023). Thus, this study shows that women have the same mindset, i.e. avoid excessive debt ratios when they are members of the board of directors and shareholders.

### Control variables.

The results of the analysis of the control variables are provided below: Bank-specific factors, as measured by SIZE, are associated with higher debt to equity ratio, ROA is associated with lower debt to assets ratio and debt to equity ratio, and operating income growth is positively associated with debt to assets ratio; Meanwhile, macroeconomic indicators, as measured by real GDP growth, are negatively associated with the BPR debt to assets ratio in West Java, Indonesia.

## 6. Conclusion and Suggestion

This study's findings show that local government and institutional ownership are positively connected to BPR capital structure, female

ownership is negatively related, and management ownership is unrelated to BPR capital structure. This study fills the literature gap on the relationship between the ownership structure and the capital structure of banks, especially BPRs in West Java, Indonesia. Furthermore, this study offers additional understanding and insight to BPR practitioners in Indonesia, policymakers, investors, and management. Policymakers can develop more effective regulations to regulate BPR ownership, focusing on types of ownership that are too risk-taking. Owners must consider the benefits and dangers of debt and assist management to create an optimal capital structure for BPR. Before making a decision on the capital structure, the management of the BPR must consider the input of the owner on the increase or reduction of debt, either directly or through the board of commissioners. The study had at least three limitations. First, the sample includes BPR in West Java, Indonesia. Second, the ownership structure is provided with four types of ownership. Third, the capital structure is measured by debt to assets ratio and debt to equity ratio. Future research is recommended to study conventional and sharia commercial banks that go public. The ownership structure can consider other holdings such as board ownership and offshore institutional ownership. Finally, other measures of the capital structure, such as the ratio of short-term debt to total assets, the ratio of long-term debt to total assets, and market leverage also seem to be important.

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