THE EFFECT OF OWNERSHIP STRUCTURE ON CAPITAL STRUCTURE: EVIDENCE FROM INDONESIA BANKS

by Hamdi Agustian

Submission date: 20-Feb-2020 01:35PM (UTC+0800)
Submission ID: 1260671557
File name: 1.pdf (251.84K)
Word count: 7389
Character count: 39482

International Journal of Advanced Research in Management and Social Sciences
ISSN: 2278-6236
Impact Factor: 4.400

THE EFFECT OF OWNERSHIP STRUCTURE ON CAPITAL STRUCTURE: EVIDENCE FROM INDONESIA BANKS

Hamdi Agustin*

Abstract: *Bank institutions in Indonesia have three form of ownership structure. There are private, government and regional development banks. One of the unique banking in Indonesia is that there are regional development banks (RDB), which is a government-owned bank districts. This research investigates the effect ownership structure on the leverage decision of Indonesia banks. The sample of this study consists of 15 regional development banks, 56 private banks, and 3 central government banks from 1995 to 2006. Using panel data methodologies, we find that the central government bank negative effect on leverage, while regional development banks positive effect on leverage. This shows the role of central government banks use equity to maintain bankrupt because the bank did not give a great effect on public confidence in the banking system in Indonesia. While the regional development banks to get funding from local government through cash savings in the form of demand deposits. The crisis dummy expected a negative, is not statistically significant. In addition our result showed that ROE, assets tangible and total assets positive effect on leverage and ROA has a negative effect on leverage.*

***Key words**: Ownership Structure, Capital Structure, Leverage, Government banks.*

*Department of Management, University Islam of Riau, Pekanbaru, Indonesia

INTRODUCTION

Bank institutions in Indonesia have three form of ownership structure. There are private, government and regional development banks. Government bank established and owned by the government. Government bank was divided into two are central government and regional development banks. One of the unique of banking systems in Indonesia are the existences of regional development banks (RDB), which govern and owned by local government. RDB categorized as focused bank, i.e. the bank with regional focus. Thus, RDB able to create a healthy banking structure and able to meet the needs of the regional and promote the ongoing economic development in Indonesia.

Determining an optimal capital structure is very hot issue in the literature of finance (Amjad et al., 2012). Among the issue in the district is the first. Results showed that government-owned enterprises negative effect on capital structure (Lin et al., 2009; Dewenter & Malatesta., 2001; Siringoringo, 2012) while the study Li et al. (2009) and Poyry and Maury (2009) found that government-owned enterprises is positive on capital structure. Since there are differences in the findings between ownership structure and capital structure, then a more detailed study of the influence of private ownership of banks, central government banks and regional development banks to the capital structure in Indonesia. Second, this study also supports the Indonesian Financial Sector Master plan (Indonesian bank architecture), where in 2011, all Indonesian bank ownership must have a minimum capital of IDR 100 billion. Bank Indonesia introduced regulations to allow banks face crucial moments such as the current financial crisis. Third, Indonesia's financial and political crisis that occurred in mid-1997 until 1999. These crises resulted in decreased performance of most banks. Banks are also experiencing problems with financial difficulties and bankruptcy threats.

This research investigates the effect ownership structure on the leverage decision of Indonesia banks. Agency cost theory, as proposed by Jensen and Meckling (1976), suggests that agency cost and ownership structure have important effects on a firm's capital structure. In few studies of the benefits of government ownership have the efficiency arguments for government ownership been supported (Hart et al., 1997). In contrast, most studies have found that government-owned firms do not better serve the public interest (Grossman & Krueger, 1993). In fact, that government-owned firms are typically extremely

inefficient (Boycko et al., 1995; Dewenter & Malatesta, 2001). The conclusion from these studies is generally that government-owned companies' disregard of social objectives combined with their extreme inefficiency is inconsistent with the idea that government ownership can lead to performance efficiency that profit maximizing privately-owned firms cannot achieve. Additionally, political bureaucrats often have goals that are in conflict with social welfare improvements but are dictated by political interests.

The main purpose of the study: The study will to fill this gap by determining which factors have significant effect on capital structure decision of banking sector of Indonesia during 1995 to 2006. This research is to study the effect of different explanatory variables of capital structure internal and external factors. The external variables of the economy of a country in Indonesia are ownership structure, economic crisis and bank policy of government (Regional autonomy and Indonesia bank architecture). The internal factor or characteristics of an individual bank are profitability, tangible assets and size.

LITERATURE REVIEW

Though theoretical and empirical studies have shown that profitability, tangibility, firm size, non-debt tax shields, growth, managerial ownership, and some others factors effect on capital structure (Titman & Wessels, 1988; Harris and Raviv, 1991; Rajan & Zingales, 1995; De Jong et al., 2008). Although the determination of factors that affect the capital structure will typically be an interesting debate (Titman & Wessels, 1988; Haris & Raviv, 1991). A number of factors were studied in this regard which would have effect on the capital structure of any organization. Prior research indicates a link between ownership structure, institutional development and the leverage decision of a firm. The underlying theories and previous empirical evidence are also reviewed. First, the external variables are ownership structure, economic crisis and bank policy of government are factors that affect the capital structure. Second we present the internal factors firm-level variables are profitability, tangible assets and size.

External variables

Ownership Structure: Optimal capital structure policy can be affected by the ownership structure. Ownership structure usually associated with the proportion of ownership by shareholders which entitles them to control (source of power) and have participated in the company's policies. Indonesian bank ownership structure seen in the perspective of banking

control are government ownership, domestic private and foreign ownership. The amount of ownership by individuals indicates that the ownership structure of banks in Indonesia is concentrated on a number of owners. Consequently managers only an extension of the controlling shareholder. The manager's decision and in line with the interests of the majority shareholder.

Ownership appears to play an important role in firms' capital structure decisions. Sapienza (2004) finds that government-owned banks tend to lend to large firms. In Indonesia, many large bank are government ownership,. Our results suggest that government-owned firms are inefficiently highly levered, while better management and governance practices associated with private ownership lead to lower leverage. According to Shleifer and Vishny (1994), direct government ownership is often associated with the pursuit of political objectives at the expense of other stakeholders in the firm. Government ownership is significantly and negatively associated with leverage (Lin et al., 2009; Siringoringo, 2012), while the results of the study by Poyry and Maury (2009) and Li et al. (2009) found that government-owned enterprises has positive influence on capital structure.

Equity: Financial economists have recently placed more emphasis on the role of a legal system in the domain of financial decisions (Demirgüc¸ -Kunt and Maksimovic, 1996, 1998; La Porta et al., 1997, 1998). Recently, a variety of papers have examined the adoption of different legal systems and their effect on corporate finance. La Porta et al. (1997, 1998) find that the legal environment plays a decisive role in the development of capital markets, because it effects accounting standards, shareholders' rights, and creditors' rights. They indicate that Common law countries benefit from having both good accounting standards and strong investor protection.

In Indonesia had the Banking Master Plan Indonesia (Indonesia bank architecture, API), where in the year 2011, all acquisitions of banks in Indonesia must have a minimum equity of IDR 100 billion. Bank Indonesia introduced rules to allow banks face crucial moments like the current financial crisis. Therefore, this study will look at the effect of minimum capital requirements on bank capital structure. This study will test the appropriateness of this decision. If smaller banks are less likely to withstand severe economic downturn, then the coefficient of equity, which will be proxy by Dummy equity should be effect on leverage. However, it could also be argued that smaller banks will be more responsible in their lending

activities since they know that imprudent lending decision would more likely to lead to bankruptcy as compared to larger banks. Banks can increase the amount of bank equity can increase the amount of debt.

Banking Crisis: Indonesian banking crisis began when the "net open position" increases, the value of capital ratio becomes negative and bad debt ratio to 50%. It is then followed by negative bank earnings as a result of the sharp rise in interest rates since the middle of the second half of 1997. The financial crisis has led to the banking system has experienced financial difficulties and banking structure changed very significantly. This is due to the various weaknesses in banking and is exacerbated by the financial crisis, liquidity crisis and bankrupt crises experienced by the conglomerate in Indonesia. This resulted in many banks experiencing financial difficulties and the banking sector is a threat of bankruptcy. Therefore, this study will look at the effect of economic crisis on bank capital structure. The results Fosberg (2012) showed that a negative effect crisis on Leverage.

Internal Variables

Profitability: The trade-off hypothesis pleads for the low level of debt capital of risky firms (Myers 1984). The higher profitability of firms implies higher debt capacity and less risky to the debt holders. So, as per this theory, capital structure and profitability are positively associated. But pecking order theory suggests that this relation is negative. Since, as government earlier, firm prefers internal financing and follows the sticky dividend policy. If the internal funds are not enough to finance financial requirements of the firm, it prefers debt financing to equity financing (Myers 1984). Thus, the higher profitability of the enterprise implies the internal financing of investment and less reliance on debt financing. Most of the empirical studies support the pecking order theory. The studies of Titman and Wessels (1988), Fama and French (1998), Gleason at al. (2000), Hovakimian et al. (2001), Deesomsel et al. (2004), Cheng and Shiu (2007), Shah and Khan (2007), Gill et al. (2009), Céspedes et al. (2010) Gropp and Heider (2010), Khrawish and Khraiwesh (2010), Ellili and Farouk (2011), Afza and Hussain (2011), Alves and Ferreira (2011), Siringoringo (2012), Sanistyaningrum and Gandakusuma (2012), Amjad et al. (2012) and Sharif et al. (2012) show that a negative effect profitability on leverage. While DeAngelo and Masulis (1980), Aggarwal (1994) and Burgman (1996) are finding a positive profitability on leverage.

Size: Leverage is expected to be positively influenced by size. The most plausible reason to explain such relationship is bankruptcy costs (Warner, 1977; Marsh, 1982; Rajan and Zingales, 1995). That is: first, large firms have, on average, lower bankruptcy costs – this type of costs are in, general, more fixed – than small firms; second, large firms have in principle more diversified portfolios, with less probability of bankruptcy; third, financial institutions, because they have less information about a small firm, need to allocate more resources concerning the firm's monitoring, and penalise it by asking for higher interest rates. Although the vast majority of research shows a positive relationship between size and leverage, such as Rajan and Zingales (1995) and Shenoy and Koch (1996), there is also some research that reveals the opposite results, namely those obtained by Titman and Wessels (1988). The bankruptcy cost theory explains the positive relation between the capital structure and size of a firm. The large firms are more diversified, have easy access to the capital market, receive higher credit ratings for debt issues, and pay lower interest rate on debt capital. Further, larger firms are less prone to bankruptcy (Titman and Wessels 1988) and this implies the less probability of bankruptcy and lower bankruptcy costs. The bankruptcy cost theory suggests the lower bankruptcy costs, the higher debt level.

Wald (1999), Fama and French (2002), Baral (2004), Deesomsak at al. (2004), Istaitieh and Rodríguez-Fernández (2006), Cheng and Shiu (2007), De Jong at al. (2008), Serrasqueiro and Rogão (2009), Lin et al. (2009), Céspedes et al. (2010), Gropp and Heider (2010), Khrawish and Khraiwesh (2010), Ellili dan Farouk (2011), Siringoringo (2012), Sanistyaningrum dan Gandakusuma (2012), Guney et al. (2011), Amjad et al. (2012) and Sharif et al. (2012) size shows a positive effect on leverage. While, Shah and Khan (2007) and Mishra and Tannous (2010) results size a negative effect on leverage.

Tangibility: Tangibility is used to measure the level of collateral a firm can offer to its debtors. Tangibility is positively related to a firm's leverage as it assures the lender that his loan is backed by some collateral assets. According to trade-off theory, a higher fixed to total assets ratio ensures higher level of security, thus offering more value to liquidate assets in case of bankruptcy. Pecking order theory suggests that selling secure debt may be beneficial for the organization as it reduces the cost which may arise from information asymmetry between insiders (mangers) and outsiders (investors) and organization can get advantage of this opportunity. Agency cost theory of Jensen and Meckling (1976) also

suggests that in case of default, debt holders can recover more if firm's assets have more collateral value.

The results tangibility a positive effect on leverage are Titman and Wessels (1988), Fernández and Aplicada (2005), Gaud at al. (2005), Nivorozhkin (2005), Omet (2006), Supanvanij (2006), Shah and Khan (2007), Cheng and Shiu (2007), Delcoure (2007), Mitton (2008), Céspedes et al. (2010), Khrawish and Khraiwesh (2010), Gropp and Heider (2010), Yang et al. (2010), Voutsinas and Werner (2011) and Guney et al. (2011). While the results tangibility the negative effect on leverage are Chiarella et al. (1992), Pandey (2001), Jõeveer (2006), Daskalakis and Psillaki (2008), Gill et al. (2009) and Afza and Hussain (2011).

DATA AND METHODS

Sample: The population consists of 124 banks which are 5 government banks, 92 private banks and 27 regional development banks. The study did not include foreign banks and mixed bank because of difficulty in getting the data. From the 124 banks, only 74 banks were selected to be the sample. The banks are 56 private banks, 3 government banks, and 15 regional development banks. The period under study is from 1995 to 2006. The data are taken from banks' annual reports.

Data Analysis: In this study using panel data and analysis using pooled ordinary least square (OLS) and random effect. While fixed effect is not used in the analysis because the number of banks has not changed to any bank during the study period and there were three dummy variables. The test capital structure of Indonesia banks, the following model is estimated:

$$LEV_{it} = \beta_0 + \beta_1*DGOV_{it} + \beta_2*DRD_{it} + \beta_3*DEQUITY_{it} + \beta_4*DCRISIS_{it} + Z^T\alpha + e_{it}$$

where

LEV_{it} : Leverage that total debt to total assets of bank *i* in period *t*,

$DGOV_{it}$: A dummy variable that takes on a value of one if bank *i* is controlled by central government in period *t*, zero otherwise,

DRD_{it} : A dummy variable that takes on a value of one if bank *i* is controlled by local government in period *t*, zero otherwise,

$DEQUITY_{it}$: A dummy equity variable that takes on a value of one if bank *i* has equity in excess of IDR 100 million in period *t*, zero otherwise.

$DCRISIS_{it}$: A dummy crisis variable that takes on a value of one if *t* is from 1997 to 1999, zero otherwise,

Z : A matrix of control variables, which included net income to total assets (ROA), net income to total equity (ROE), fixed assets to total assets (TAG) and natural logarithm of total assets (ASSETS).

e_{it} : error term of bank *i* in period *t*.

FINDING AND DISCUSSION

Table 1 shows that in term of size, government-owned banks are the largest followed by private banks. Government banks have the greatest amount of total equity, total fixed assets and debt. However, in term of total equity and net income are not statistically different from the other three types of banks. In fact, in term of net profit, only regional development banks show positive amount. Net profit between regional development banks and private banks is significantly different at 5%. Total debt to total assets is significantly different at three types of banks. Regional development banks have better ROA than government or private banks but the different is only significant between regional development banks and private banks at 1%. In term of ROE, government banks have the highest ROE but it is not statistically significantly different to regional development banks. ROE of either regional development banks or government banks is significantly higher than that of private banks. Fixed assets to total assets are not significantly different at three types of banks and Natural logarithm of assets is significantly different at three types of banks.

Table 1 Comparisons of mean (standard deviation) of selected variables between different types of banks

Variables	Private banks (n=672)	Regional development banks (n=180)	Government banks (n=36)	Significant difference
Total assets	5,888,263,308,119 (17,216,649,359,33)	2,705,277,110,697 (3,388,437,285,49)	65,075,719,062,671 (47,834,105,072,59)	a, d, g
Total equity	325,201,955,434 (2,471,358,412,290)	223,679,169,368 (291,013,420,157)	2,051,270,550,874 (11,089,950,599,00)	ns1, ns2, ns3
Total fixed assets	1,072,487,032,230 (4,967,036,088,551)	2,133,891,420,226 (277,031,442,961)	10,431,857,082,370 (19,945,329,260,219)	a, d, g
Total debt	5,563,061,352,685 (16,148,294,740,00)	2,481,597,941,329 (3,117,959,152,00)	63,024,448,511,797 (42,831,945,446,45)	a, d, g
Net income	-121,599,584,877 (2,118,300,115,365)	49,304,411,726 (83,151,837,810)	-1,213,154,933,578 (10,079,114,101,965)	b, ns2, ns3
Total debt to total assets (LEV)	87.764% (12.755%)	90,819% (3.904%)	105.427% (35.430%)	a, d, h
Return on assets	0.293%	1.729%	-6.638%	a, ns2,

(ROA)	(9.146%)	(2.537%)	(31.070%)	ns3
Return on equity (ROE)	7.885% (78.592%)	21.770% (95.041%)	81.048% (231.147%)	b, f, ns3
Fixed assets to total assets (TAG)	8.3815% (18.4415%)	7.7888% (16.6929%)	12.5392% (20.8426%)	ns1, ns2, ns3
Natural logarithm of assets (LNASSET)	27.37547 (1.88338)	27.85738 (1.37877)	31.50691 (0.81903)	a, d, g

a,b,c, or ns1 shows that the mean difference of a variable between private and regional development banks is significant at either 1%, 5%, 10%, or not significant at all.

d,e,f, or ns2 shows that the mean difference of a variable between private and government banks is significant at either 1%, 5%, 10%, or not significant at all.

g,h,i, or ns3 shows that the mean difference of a variable between regional development and government banks is significant at either 1%, 5%, 10%, or not significant at all.

Table 2 Correlation matrix

	LEV	DGOV	DRD	DEQUITY	DCRISIS	ROA	ROE	TAG	ASSETS
LEV	1.000								
DGOV	0.1281	1.000							
DRD	0.1916	-0.0980	1.000						
DEQUITY	-0.2343	-0.2282	-0.1019	1.000					
DCRISIS	-0.1096	-0.0484	0.0119	0.1989	1.000				
ROA	-0.1897	0.0881	0.0492	-0.0348	-0.0129	1.000			
ROE	-0.0401	0.0839	0.0447	-0.0873	-0.0094	0.7391	1.000		
TAG	0.1415	0.0386	-0.0114	-0.0715	0.0200	0.0620	0.0438	1.000	
ASSETS	0.4727	0.4041	0.0735	-0.7841	-0.2030	-0.0197	0.0558	0.1365	1.000

Table 2 provides information on the degree of correlation between the explanatory variables used in the multivariate regression analysis. The matrix shows that in general the correlation between the variable that are used in the analysis is not strong suggesting that multicollinearity problem are either not severe or non-existent. Kennedy (2008) and Gujarati (2009) points out that multicollinearity is a problem when the correlation is above 0.8, which is not the case here. To ensure that there is no problem of multicollinearity, variance inflation factor (VIF) is estimated and since the results show that the VIF are below 10.

Table 3 Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
LEV	888	.2794	2.3144	0.8910	.1373
DGOV	888	0	1	0.0405	.1973
DRD	888	0	1	0.2027	.4022
DEQUITY	888	0	1	0.5935	.4915
DCRISIS	888	0	1	0.2500	.4333
ROA	888	-1.4028	.6312	0.0030	.1025
ROE[1]	869	-9.3119	9.5348	0.0909	.7362
TAG	888	-2.7881	.9480	0.0843	.1820
ASET (Millions of rupiah)	888	19,443	176,798,726	7,642,555	21400678

[1]For ROE, 19 bank-years are dropped since these banks have negative total equity.

Table 3 provides summary statistics for the variables that are used in the analysis. The LEV have a mean of 89.10% of total assets and a standard deviation of 13.73%. This shows the bank's assets were largely derived from debt. The ROA have a mean of 3:03% of total assets and a standard deviation of 10:25%. The mean ROE is 9:09% but with the standard deviation of 73.62%, the high values of standard deviation Indicated that the profitability of the sample banks is somewhat inconsistent. The mean ASSETS IDR 7,642,555 million is the amount maximum176, 798,726 and minimum19, 443. This suggests there are a difference in the amount of bank assets is quite high.

DGOV, DRD, DEQUITY and DCRISIS are dummy variables in this study. Government bank dummy value (DGOV) is 4.05%, which shows that the total annual government bank data used in this study is 36. The value of regional development bank dummy (DRD) is 20.27% which shows total annual RDB data is 180. Dummy average total equity (DEKUITI) is 59.35%, which shows that more than half of annual data bank, which is 527, does not minimum amount of equity of IDR 100 billion. The TAG has a mean of 8.43% of total Assets and a standard deviation of 18.20%. This shows the number of banks Assets fixed fraction of bank assets. Total bank assets are between IDR 19.44 and IDR 178.8 billion and average of IDR 7.6 trillion.

Table 4 presents the pooled regression results without adjusting standard errors and with robust standard errors for heteroscedasticity. When we test for heteroscedasticity using Breusch-Pagan test, we find that we can reject the null hypothesis of equal variances. Thus, a better estimation model should account for heteroscedasticity Table 2 reports the results

based on adjusted standard errors using heteroscedasticity-adjusted standard error. We find that all coefficients are significant for LEV except DCRISIS variable. The result regression with random effects show consist with based on adjusted standard errors using heteroscedasticity-adjusted standard error while all coefficients are significant for LEV except DCRISIS variable (table 5).

Table 4 Regression without adjusting and with robust standard errors

Dependent variable: LEV

Variable	OLS without standard errors		OLS with robust standard errors	
	Coef.	p-value	Coef.	p-value
Constan	-.0113531	0.849	-.0113531	0.890
DGOV	-.026837	0.044**	-.026837	0.017**
DRD	.0350465	0.000***	.0350465	0.000***
DEQUITY	.0593709	0.000***	.0593709	0.000***
DCRISIS	-.0078419	0.140	-.0078419	0.195
ROA	-.4861108	0.000***	-.4861108	0.002***
ROE	.0169325	0.000***	.0169325	0.021**
TAG	.0368677	0.003***	.0368677	0.099***
ASSETS	.0308716	0.000***	.0308716	0.000***
R-squared	0.3534		0.3534	
Adjusted R-squared	0.3474		-	
Prob > F	0.0000		0.0000	
Number observation	869		869	

*, ** and *** denote significance at the 10%, 5% and 1% level, respectively, p-value in parentheses

Table 5 Regression with random effects

Dependent variable: LEV

Variable	Coef.	p-value
Constan	-.0115111	0.862
DGOV	-.0345617	0.098*
DRD	.0336048	0.000***
DEQUITY	.0523516	0.000***
DCRISIS	-.0072778	0.105
ROA	-.2356792	0.000***
ROE	.0088317	0.019**
TAG	.0571923	0.000***
ASSETS	.0308779	0.000***
R-squared	0.3381	

Prob > chi2	0.0000	
Number observation	869	

*, ** and *** denote significance at the 10%, 5% and 1% level, respectively, p-value in parentheses

DISCUSSION

DGOV has a negative effect on LEV. This shows that government banks tend to use their own capital as a source of funding than private-owned bank. This suggests that's government banks tend to use the equity intention to require any risk cover. This may tend to moderate government in compiling portfolios due to their strict supervision to keep bankrupt bank because the federal government will not let the government banks will go bankrupt because it had a great effect on investor confidence in Indonesia's banking system and safeguard the national interest banking stability in Indonesia. Additionally a bank with majority ownership of government debt tends decrease in determining the source of funding, or in other words the government ownership of banks tends to use equity as a source of funding. It is possible that the higher the proportion of government holdings the greater government capital assistance via grants or policy lending, indicating government benevolence and support. Thus, a reduced cost of debt may be associated for higher firm performance more retained earnings thus less reliance on debt. Government grants may also reduce the need for debt financing, although this is not indicated in the results above. The results consistent with Dewenter and Malatesta (2001), Li *et al.* (2009) and Siringoringo (2012) which government banks a negative effect on leverage.

DRD has a positive effect on LEV. This indicates that the district development banks tend to use debt as a source of funding than private banks, which is consistent with Li et al. (2009) and Poyry and Maury (2009) which also show that government bank tend to have higher leverage ratios. This result also indicates that the dual roles of the Indonesian government as the owner of bank being supported by the government through heavily subsidized, leading to excessive leverage on banks. In addition, RDB get huge funds from the local government through cash deposit. This suggests that's controlled by local government of banks, has weak Controls Because in principle applicable government bank is an agent with the agent, not the agent of the principal that's tend to use debt as a control agency to Reduce of Conflict. In addition, the incentives given to managers do not increase their

motivation to work vigorously and the government did not take action against the manager who has not been working hard. The government had not met its promise to protect the company from political purposes until finally action bound to behavior management bureaucracy and politics that ignore the original purpose of which is to increase shareholder wealth.

DEQUITY has a positive effect on LEV. This suggests that bank has equity greater than IDR 100 billion more to increase to the amount of debt due to bank can increase the amount debt by an increase in equity. This condition is to maintain the bank's financial risk in the amount of the debt to equity ratio. Bank will be able to increase the amount of debt to be distributed on loan. A result of this study related to ROE has a positive effect on LEV. This shows the bank will increase the amount of equity if the amount of debt increased to reduce financial risk.

The relationship between LEV and DCRISIS, while a negative expected, is not statistically significant. A result of this study not related to indicate that financial crisis in Indonesia, RDB reduces the amount of debt due to deduct interest payments on debt are high and keep the bank from bankruptcy. This finding is contrast with Fosberg (2012) who find a negative effect of crisis on leverage.

ROA has a negative effect on LEV. This indicates that firms with high profitability tend to use lower levels of debt to finance its funding activities. Banks with high accumulation profitability would prefer to use internal funds than external funds. This result is consistent with the pecking order theory explains that the companies will first use internal funds over external funds to finance all of its funding activities. The result is consistent with previous research study conducted by Gropp and Heider (2010), Khrawish and Khraiwesh (2010), Ellili and Farouk (2011), Afza and Hussain (2011), Alves and Ferreira (2011), Siringoringo (2012), Sanistyaningrum and Gandakusuma (2012) and Sharif et al. (2012).

The finding showed that TAG positive effect on LEV. The result are consistent with the trade-off theory in which a higher fixed to total assets ratio ensures higher level of security, thus offering more value to liquidate assets in case of bankruptcy. Tangible assets can be used as collateral to obtain the trust of customers to save their money in banks. Although the characteristics of financial data banks in Indonesia shows the proportion of fixed assets owned banks relative fraction of total bank assets. The result is consistent with previous

research study conducted by Céspedes et al. (2010), Khrawish and Khraiwesh (2010), Gropp and Heider (2010), Yang et al. (2010), Voutsinas and Werner (2011) and Guney et al. (2011). The finding showed that ASSETS positive effect on LEV. These results are consistent with the trade-off theory in which the ASSETS of large banks tend to use more debt in comparison small bank. Bank with large size bank indicates that the bank has a large asset such as this tend to use bank debt in the capital structure have greater access easier to obtain bank loans because these are considered to have a smaller risk of bankruptcy than small banks. The result is consistent with previous research study conducted by Wald (1999), Fama and French (2002), Baral (2004), Deesomsak at al. (2004), Istaitieh and Rodríguez-Fernández (2006), Cheng and Shiu (2007), De Jong at al. (2008), Serrasqueiro and Rogão (2009), Lin et al. (2009), Céspedes et al. (2010), Gropp and Heider (2010), Khrawish and Khraiwesh (2010), Ellili and Farouk (2011), Siringoringo (2012), Sanistyaningrum and Gandakusuma (2012), Guney et al. (2011), Sharif et al. (2012).

CONCLUSION

The aim of this study is to examine the relationship between the leverage level and a set of explanatory variables by using panel data analysis to establish the determinants of capital structure of bank over the period 1995-2006, and explore whether the main theories of bank financing can explain the capital structure of the bank. Determinants of capital structure are analyzed in this paper are ownership structure, economic crisis and bank policy of government, profitability, tangible assets and size. Our study uncovers interesting results. We find that dummy government has a negative effect on leverage and dummy regional development banks has a positive effect on leverage and dummy equity has a positive effect on leverage. This shows the role of central government banks use equity to maintain bankrupt because the bank did not give a great effect on public confidence in the banking system in Indonesia. While the regional development banks to get funding from local government through cash savings in the form of demand deposits. The dummy crisis a negative expected is not statistically significant. In addition our result showed that ROE, assets tangible and total assets positive effect on leverage. While ROA has a negative effect on leverage. Therefore, the study may provide some useful information for future research on the capital structure of the banks in the developing countries. In future research to

obtain better results expected in order to addition the variable and comparing with other country.

RERERENCES

1. Afza, T., & Hussain, A. (2011). Determinants of Capital Structure across Selected Manufacturing Sectors of Pakistan. International Journal of Humanities and Social Science, 1(12), 252-262.
2. Aggarwal, R. (1994). International differences in capital structure norms: an empirical study of large European companies. MIR: Management International Review, 34, 5-18.
3. Alves, P. F. P., & Ferreira, M. A. (2011). Capital structure and law around the world. Journal of Multinational Financial Management, 21, 119–150.
4. Amjad, S., Bilal., & Tufail, S. (2012). Determinants of capital structure: What can be the Determinants of Capital Structure of Banking Sector of Pakistan?. Proceedings of 3rd International Conference on Business Management. School of Business and Economics University of Management and Technology, Lahore, Pakistan
5. Baral, K.J. (2004). Determinants of capital structure: A case study of listed companies of Nepal. The Journal of Nepalese Business Studies, 1(1), 1-13.
6. Boycko, M., Schleifer, A., & Vishny, R.W. (1995). Privatizing Russia. M.I.T. Press, Cambridge, MA.
7. Burgman, T. A. (1996). An empirical examination of multinational corporate capital structure. Journal of International Business Studies, 553-570.
8. Céspedes, J., González, M., & Molina, C. A. (2010). Ownership and capital structure in Latin America. Journal of Business Research, 63(3), 248-254.
9. Cheng, S. R., & Shiu, C. Y. (2007). Investor protection and capital structure: International evidence. Journal of Multinational Financial Management, 17(1), 30-44.
10. Chiarella, C., Pham, T., Sim, A. B., & Tan, M. (1992). Determinants of corporate capital structure: Australian evidence. Pacific Basin Capital Markets Research, 3, 139-158.
11. Daskalakis, N., & Psillaki, M. (2008). Do country or firm factors explain capital structure? Evidence from SMEs in France and Greece. Applied Financial Economics, 18(2), 87-97.
12. De Jong, A., Kabir, R., & Nguyen, T. T. (2008). Capital structure around the world: The

roles of firm-and country-specific determinants. Journal of Banking & Finance, 32(9), 1954-1969.

13. DeAngelo, H., & Masulis, R. W. (1980). Optimal capital structure under corporate and personal taxation. Journal of financial economics, 8(1), 3-29.
14. Deesomsak, R., Paudyal, K., & Pescetto, G. (2004). The determinants of capital structure: evidence from the Asia Pacific region. Journal of Multinational Financial Management, 14(4), 387-405.
15. Delcoure, N. (2007). The determinants of capital structure in transitional economies. International Review of Economics & Finance, 16(3), 400-415.
16. Demirg-Kunt A., & Maksimovic V. (1999). Institutions, financial markets, and firm debt maturity. Journal of Financial Economics 54, 295–336.
17. Demirgüc¸ -Kunt, A., & Maksimovic, V. (1996). Stock market development and financing choices of firms. World Bank Economic Review. 10, 341–369.
18. Demirgüc¸ -Kunt, A., & Maksimovic, V. (1998). Law, finance and firm growth. Journal of Finance 53, 2107–2137.
19. Dewenter, K.L., & Malatesta, P.H. (1997). Public offerings of state-owned and privately-owned enterprises: an international comparison. Journal Finance 52, 1659–1679.
20. Dewenter, K.L., & Malatesta, P.H. (2001). State-owned and privately-owned firms: an empirical analysis of profitability, leverage, and labor intensity. Amer. Econ. Rev. 91, 320–334.
21. Ellili, N.O.D., & Farouk, S. (2011). Examining the capital structure determinants: Empirical analysis of companies traded on Abu Dhabi stock exchange. International Research Journal of Finance and Economics, 67, 82-96.
22. Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. Review of financial studies, 15(1), 1-33.
23. Fernández, V. P., & Aplicada, U. d. C. C. d. E. (2005). What Drives Capital Structure?: Evidence from Chilean Panel Data: Centro de Economía Aplicada, Departamento de Ingeniería Industrial, Universidad de Chile.
24. Fosberg, R.H. (2012). Capital structure and the financial crisis. Journal of Finance and Accountancy, 1-11.

25. Gaud, P., Jani, E., Hoesli, M., & Bender, A. (2005). The capital structure of Swiss companies: an empirical analysis using dynamic panel data. European Financial Management, 11(1), 51-69.
26. Gill, A., Biger, N., Pai, C., & Bhutani, S. (2009). The determinants of capital structure in the service industry: evidence from United States. The Open Business journal, 2, 48-53.
27. Gleason, K. C., Mathur, L. K., & Mathur, I. (2000). The interrelationship between culture, capital structure, and performance: evidence from European retailers. Journal of Business Research, 50(2), 185-191.
28. Gropp, R., & Heider, F. (2010). The Determinants of Bank Capital Structure. Review of Finance, 14(4), 587-622.
29. Grossman, G., & Krueger, A. (1993). Environmental impact of a North-American free trade agreement. In: Garber, P. (Ed.), The U.S. –Mexico Free Trade Agreement. M.I.T. Press, Cambridge, MA.
30. Gujarati, D. N. (2009). Basic Econometrics (5th ed.). New York: McGraw-Hill.
31. Guney, Y., Li, L., & Fairchild, R. (2011). The relationship between product market competition and capital structure in Chinese listed firms. International Review of Financial Analysis, 20(1), 41-51.
32. Harris, M., & Raviv, A. (1991). The theory of capital structure. Journal of finance, 297-355.
33. Hart, O., Shleifer, A., & Vishny, R.W. (1997). The proper scope of government: theory and an application to prisons. Quart. J. Econ. 112, 1127–1161.
34. Hovakimian, A., Opler, T., & Titman, S. (2001). The debt-equity choice. Journal of Financial and Quantitative Analysis, 36(1), 1-24.
35. Istaitieh, A., & Rodríguez-Fernández, J. M. (2006). Factor-product markets and firm's capital structure: A literature review. Review of Financial Economics, 15(1), 49-75.
36. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of financial economics, 3(4), 305-360.
37. Jõeveer, K. (2006). Sources of capital structure: Evidence from transition countries. [CERGE-EI Working Paper No. 306.].
38. Kennedy, P. (1998). A Guide to Econometrics. Malden Mass: Blackwell Publishing.

39. Khrawish, H. A., & Khraiwesh, A. H. A. (2010). The Determinants of the Capital Structure: Evidence from Jordanian Industrial Companies. JKAU: Econ. & Adm., 24(1), 173-196. doi: 10.4197/Eco. 24-1.5.
40. La Porta, R., de Silanes, F., Shleifer, A., & Vishny, R. (1997). Legal determinants of external finance. Journal of Finance, 52, 1131–1150.
41. La Porta, R., de Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. Journal of Political Economy 106, 1113–1155.
42. La-Porta R., Lopez-de-Silanes F., & Shleifer A. (2002). Government ownership of banks. Journal of Finance 57, 265–301.
43. Li. K., Yue, H., & Zhao, L. (2009). Ownership, Institutions and capital structure: Evidence from China. Journal of Comparative Economics, 37, 471-490.
44. Lin, X., Zhang, Y., & Zhu, N. (2009). Does bank ownership increase firm value? Evidence from China. Journal of International Money and Finance, 28, 720-737.
45. Marsh, P. (1982). The choice between equity and debt: an empirical study. Journal of Finance 37, 121–144.
46. Mishra, D., & Tannous, G. (2010). Securities laws in the host countries and the capital structure of US multinationals. International Review of Economics & Finance, 19(3), 483-500.
47. Mitton, T. (2008). Why have debt ratios increased for firms in emerging markets?. European Financial Management, 14(1), 127-151.
48. Myers, S. C. (1984). Capital structure puzzle: National Bureau of Economic Research Cambridge, Mass., USA.
49. Myers. C, S., & Majluf. N. (1984). Corporate Financing and In-vestment Decisions When Enterprises Have Information Investors Do Not Have. Journal of Finance, 187-221.
50. Nivorozhkin, E. (2005). Financing choices of firms in EU accession countries. Emerging Markets Review, 6(2), 138-169.
51. Omet, G. (2006). Ownership structure and capital structure: evidence from the Jordanian capital market (1995-2003). Corporate Ownership Control, 3(4), 99-107.
52. Pandey, I. (2001). Capital Structure and the Firm Characteristics: Evidence from an Emerging Market. IIMA Working Paper No. 2001-10-04.

53. Poyry, S., & Maury, B. (2010). Influential ownership and capital structure. Managerial and Decision Economics, 31(5), 311-324.
54. Rajan, R., Zingales, L., 1995. What doweknow about capital structure? Some evidence from international data. Journal of Finance, 50, 1421–1460.
55. Sanistyaningrum, L.K., & Gandakusuma, I. (2012). Struktur permodalan bank: Studi terhadap 31 bank yang terdaftar di BEJ periode 2006-2010. Manajemen Usahawan Indonesia, 41(4), 389-405.
56. Sapienza, P. (2004). The effect of government ownership on bank lending. Journal of Financial Economics 72, 357-384.
57. Serrasqueiro, Z. M. S., & Rogão, M. C. R. (2009). Capital structure of listed Portuguese companies: Determinants of debt adjustment. Review of Accounting and Finance, 8(1), 54-75.
58. Shah, A., & Khan, S. (2007). Determinants of capital structure: Evidence from Pakistani panel data. Int. Rev. Bus. Res. Paper, 3(4), 265-282.
59. Sharif, B., Naeem, M. A., & Khan, A. J. (2012). Firm's characteristics and capital structure: A panel data analysis of Pakistan's insurance sector. African Journal of Business Management, 6(14), 4939-4947.
60. Shenoy, C., & Koch, P. (1996). The firm's leverage-cash flow relationship. Journal of Empirical Finance 2, 1–19.
61. Shleifer A., & Vishny, R.W. (1994). Politicians and firms. Quarterly Journal of Economics, 109, 995–1025.
62. Siringoringo, R. (2012). Karakteristik dan fungsi intermediasi perbankan di Indonesia. Buletin Ekonomi Moneter dan Perbankan, 61-83.
63. Supanvanij, J. (2006). Capital structure: Asian firms vs. multinational firms in Asia. Journal of American Academy of Business, 10(1), 324-330.
64. Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. Journal of finance, 1-19.
65. Voutsinas, K., & Werner, R. A. (2011). Credit supply and corporate capital structure: Evidence from Japan. International Review of Financial Analysis, 320–334.
66. Wald, J. K. (1999). How firm characteristics affect capital structure: an international comparison. Journal of Financial Research, 22(2), 161-187.

67. Warner, J. (1977). Bankruptcy costs: some evidence. Journal of Finance 32, 337–347.

68. Yang, C. C., Lee, C., Gu, Y. X., & Lee, Y. W. (2010). Co-determination of capital structure and stock returns--A LISREL approach:: An empirical test of Taiwan stock markets. The Quarterly Review of Economics and Finance, 50(2), 222-233.

THE EFFECT OF OWNERSHIP STRUCTURE ON CAPITAL STRUCTURE: EVIDENCE FROM INDONESIA BANKS

ORIGINALITY REPORT

28%	28%	19%	19%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	thescholedge.org Internet Source	7%
2	Submitted to University of Maryland, University College Student Paper	5%
3	docentes.fe.unl.pt Internet Source	5%
4	www.jurnalkiatuir.com Internet Source	4%
5	ro.uow.edu.au Internet Source	2%
6	ideas.repec.org Internet Source	2%
7	www.nepjol.info Internet Source	2%

Exclude quotes	On	Exclude matches	< 2%
Exclude bibliography	On		