The Relationship between Risk Management, Banking Regulation and Decision of Capital Structure: Rural Banks' CEO Perception

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Abstract: *The purpose of this study is to examine and explain the perceptions of CEO of Rural Banks on: (1) risk management relationship with capital structure decision, (2) banking regulation relationship with capital structure decision, and (3) banking regulation and risk management relationship to capital structure decision. This research was conducted at the existing rural banks (BPR) in the provinces of North Sulawesi and Gorontalo (SULUTGO) in 2010-2013. The bank analyzed amounted to 20 banks determined based on population criteria. The analysis method used is Generalized Structural Component Analysis. The results of this study found that risk management has a significant relationship with capital structure decisions. The banking regulation has a close relationship of capital structure decisions. However, the relationship between banking regulation and risk management weakens capital structure decisions.*
Keywords: *Risk Management Banking, Regulation, Capital Structure Decision and Rural Bank*

I.   Introduction

Capital in the bank is not only a role to fund the business but also has another important role. Bank capitals as the security protector provide protection against shareholders and depositors from temporary losses or unexpected losses (Allen and Santomero, 1999). Bank capital can serve as a tool used by banks to signal the public about their financial well-being, and can also be a good consideration for competitors, customers and rating agencies as a proxy of their strengths or health, which is an indication of the value of shareholders (Jorion, 2000). Therefore, the existence of bank capital has strategic aspect related to operational sustainability, bank profitability and safety net to risk taking. The relationship between capital and adjustment to risk depends on the excess capital maintained by the bank against the minimum capital reserves (Cai and Wheale, 2009).

The strategic role of bank capital in the banking business is mainly related to the specific characteristics of the banking business. Banks borrow money to make money (Hasan, 1997). Banks and other financial institutions are special businesses whose capital structure is affected by a number of unique conditions for the banking business, such as government regulation and access to government safety nets covering savings and loans (Kwan, 2009). Savings agreement contracts that provide liquidity are contracts that allow depositors to withdraw their funds on demand, and this relates to bank sustainability (Diamond and Dybvig, 1983). In particular, the operational sustainability of the bank becomes dangerous when a bank relies on a liquid deposit to finance an illiquid bank loan. Banks at the same time are enterprises, financial intermediaries, and regulated entities so that the form of incentives imposed by regulatory rules determines a unique interaction between bank capital and its behavior (Marques and Santos, 2004). The bank's operational activities are carried out under the prudent principle because banks as the financial intermediaries operationally borrow funds from one agent and then lend again to other agents. Consequently, banking institutions tend to have high debt levels due to their security and intermediation functions (Boyd and Presscott, 1986). Banking institutions should also operate under strict regulatory environments so that even among different banks, the minimum capital adequacy ratio is one of the important tools for regulators to maintain financial system stability.

The capital structure is related to firm value and profitability, therefore it is important for banks to determine decisions about optimal capital structure. Bank management needs to determine the policy of capital structure in supporting the bank's operational activities, especially in lending. The large allocation of funds for bank loan disbursement also requires substantial financing, because otherwise it will disrupt the bank's liquidity. Every loan expansion plan should be supported by additional capital otherwise credit expansion will affect the decrease of bank capital adequacy ratio (CAR). This shows the importance of bank management to determine its capital structure policy. The capital structure policy is a policy that involves an optimal combination of the use of various sources of funds to be used to finance an investment and also to support the company's operations in an effort to increase the company's profit in order to achieve high corporate value (Gitman, 2009).

The main sources of theoretical and empirical research on capital structure come largely from the testing of phenomena in the United States (Marques and Santos, 2004). The implication is that the findings of studies on capital structure are difficult to generalize in other countries that generally have different economic, financial and institutional conditions. Information and operating efficiency and liquidity are features of financial markets that can play a role in determining the combination of corporate financing (Demirguc-Kunt and Maksimovic, 1995). Therefore more research is needed on capital structure testing to strengthen its predictive ability.

Further research on the capital structure hypothesis is needed to increase the robustness of its predictions (Rajan and Zingales (1995) and Harris and Raviv (1990)). The current need which continues to be debated is empirical testing of capital structure in different environmental contexts, such as country, time and industry. Such investigations can help to better understand the implications of environmental and behavioral factors on capital structure decisions, and thus contribute to expanding the explanatory and predicting powers of the existing theory.

Motivated from the above statement and research findings, this study aims to examine and explain the effect of risk management and banking regulation on capital structure decisions on banks, especially rural banks in the provinces of North Sulawesi and Gorontalo (SULUTGO).

Rural banks are elected because of the unique things owned by these banks. Rural Banks are banks as common commercial banks do, but Rural Banks have the specificity of serving the needs of people in rural areas and small micro enterprises in the form of savings (savings and deposits) and credit. There are several differences between Rural Banks and commercial bank, such as: Rural Banks capital is only below Rp. 100 billion, Rural Banks products are only savings and time deposits, Rural Banks can't issue checks and bilyet giro like commercial banks, Rural Banks can't conduct clearing transactions, Rural Banks operational areas are limited to only one province, and most of the Rural Banks business is a family business.

II.   Literature Review

Some of the research that has been done by previous researchers, especially those related to capital structure that reflect the role of corporate managers is crucial in determining the capital structure for future growth in order to increase shareholder wealth. Leland (1988) argues that the optimal capital structure reflects the tax savings on interest costs on debt and agency costs. Agency costs limit the amount of debt and debt maturity, and increase yield, but the role is relatively small.

Titman (2002) argues that capital markets are often not integrated, and their effect on funding strategies. The condition of the capital market is determined by the institutions and individuals that supply capital can affect the company in seeking capital. Welch (2002) argues that firms are generally passive, so that the corporate capital structure in the United States can now be explained by the capital structure of the previous period as a basis for determining stock prices. Decision making of capital structure is determined by debt ratio target, such as minimizing corporate tax or bankruptcy cost.

Frank and Goyal (2003) suggests there are 39 important factors in decision-making capital structure of public companies in the United States. The findings are consistent with taxes and bankruptcy costs in the trade-off theory. The most reliable factors are the median of industrial debt, the risk of bankruptcy, firm size, dividend payout, intangible assets, and collateral.

Empirical evidence obtained from research Chen (2004) is the coefficient of profitability and growth opportunities are significant for total debt. Profitability coefficients, growth opportunities, tangibility, and firm size are significant for long-term debt. This study shows that the model offers similar but somewhat different results in the level of significance, both in assessing total debt and in estimating long-term debt. The coefficient of firm size is negative and very significant in estimating long-term debt but is positive and significant in estimating total debt. However, firm size coefficient is positive for total debt ratio and not significant in the influence model. It can be concluded that large companies use more short-term financing and instead use less long-term funding. The relationship between profitability and debt is negative, (2) The relationship between growth opportunity and debt is positive, (3) The relationship between the tangibility and the debt Is positive, and (4) The relationship between the size of the firm and the long-term debt is negative.

The above explanation shows that companies prefer internal finance compared with external finance. This suggests that the favorable profitable companies are more likely to be conservative in using debt for their operations. Meanwhile, less profitable companies tend to use internal sources of funds first and then cover the shortfall by borrowing in debt. They are less interested to immediately add new shares to finance the company for lack of funds. This is done to reduce the spread of corporate internal information to the public so that the public spotlight when issuing new shares. From this point of view pecking order theory says the market will not be efficient or there will be inequality of information between companies, corporate managers and investors.

Deesomsak *et al*. (2004) found the capital structure determinants of firms operating in the Asia Pacific region, in four countries with different legal, financial and institutional environments, Thailand, Malaysia, Singapore and Australia. The decisions of a firm's capital structure are influenced by the environment in which they operate as the company's specific factors are identified in the wider literature. The 1997 financial crisis had a significant impact on the decision of the company's capital structure throughout the region.

Psillaki and Daskalakis (2009) conducted a study aimed at investigating the determinants of the capital structure of small and medium enterprises (SMEs) of Greece, France, Italy and Portugal. This study compares the capital structure of small and medium enterprises between countries and differences in characteristics, asset structure, firm size, profitability, risks, and growth of each country and how its effect on the choice of capital structure.

The results show that small and medium enterprises in each country determine their capital structure in the same way. Company size is positively related to debt, while the relationship between debt with asset structure, profitability and risk is negative. Growth is not statistically significant as a determinant of debt in these four countries. Each company is more influential than the state in explaining the differences in the choice of small and medium enterprise capital structure.

Teker *et al*. (2009), in his research examining a special combination of debt and equity, called the firm's capital structure decisions, using theories that have been developed in various literatures, such as MM theory, trade-off theory and signaling theory. The study was conducted on 42 selected companies traded in the Instanbul Stock Exchange ISE-100 index. The data used are time series and cross section data in the form of panel data methodology to calculate the leverage ratio of each company during the period of 2000-2007. The result Return on Assets (ROA) and tangible assets have a positive and statistically significant influence on the company's capital structure ratio, while the total depreciation ratio to total assets and profit margin sales has a negative and significant effect on the company's capital structure.

Research of Hasan (1997) failed to detect the significance of three hypotheses: (1) relationships following the U-shaped pattern between optimum debt levels and business risk; (2) the opposite relationship between capital structure and weighted asset ratio based on risk to total assets; And (3) a positive relationship between debt ratio and bank size. The findings of this study show that these three hypotheses are not proven and not support the expected relationship to capital structure theory. The result of this study raises the question of how suitable capital structure theory in industrial companies can be applied to banking companies.

The Marques and Santos (2004) study uses a capital structure theoretical framework of nonfinancial corporations to develop a capital structure theory testing framework within a banking firm. The findings of this study are: (1) Supporting the irrelevant M & M hypothesis that strategic financing decision making is not random, so decisions about capital structure at the bank level are a problem, (2) Sufficient support of capital-trade structure theory but with little evidence of conformity With the theory of capital structure of pecking order, (3) Changes in regulation are the main external factors affecting CEO decisions about bank capital structure, and (4) Relevant internal factors determining bank capital structure decisions are ownership and managerial control structures, investment policies, Growth opportunities, financing flexibility, and bank reputation in credit and savings markets. This study can prove the generalization of the theory of capital structure decision theory.

Research of Gropp and Heider (2009) to test whether capital requirement is the main determinant of bank capital structure. The study used time series and cross section variations with a sample of large public banks from 16 countries (United States and 15 European countries) from 1991 to 2004. The tests were conducted using the empirical enterprise financial literature that has been tested on the capital structure of non-financial companies.

This study proves that there is a very big similarity between the bank's capital structure and the capital structure of non-financial companies. The findings of this research are: (1) The determinant of the capital structure of the company also applies to large banks in the United States and Europe, except the banks that approach the minimum capital requirement, (2) The high level of bank capital freedom could not be explained by the buffer (3) The consistency between non-financial firms and banks does not extend the leverage components (deposit and non-deposit liabilities), (4) the unobserved time-invariant bank's unmistakable importance in Explanation of variations in bank capital structure. Like non-financial companies, banks have a stable capital structure at the specific level of each individual bank, (5) There is no significant influence on savings deposits in the bank's capital structure, and (6) Empirical facts state that capital regulation and capital buffer Is second only to determining the capital structure of most banks.

III. Research Method

This research uses a quantitative approach supported by in-depth interview. This study uses descriptive analysis to find out the perception of respondents. Descriptive statistical analysis is used to complete the empirical description of the conceptual model that has been tested hypothesis and to describe the management logic of the various processes implicit in the tested hypothesis and is intended to know the frequency distribution of answers from the questionnaire (Ferdinand, 2006).

This research was conducted at rural banks registered at Bank Indonesia Office of Manado and Gorontalo in 2010-2013. The population of this research is all rural banks in North Sulawesi and Gorontalo as many as 21 banks, consisting of 17 banks in North Sulawesi province and 4 Banks in the province of Gorontalo. Members of the population used as research objects are selected by criteria of rural banks that are categorized as healthy and not in problem condition or in supervisory status from Bank Indonesia. The number of banks found according to these criteria is 20 rural banks (BPR). Sampling technique used in this study is the census method or the entire population in this study sampled (population sampling). The unit of analysis of this research is a rural credit bank located in the province of North Sulawesi and Gorontalo (Sulutgo).

The data collected in this study comes from primary data and secondary data. Primary data were collected through research instruments, which contained a number of closed and open statements compiled based on theoretical studies, literature and experiential research. Primary data were also obtained from in-dept interviews with informants used to support the results of quantitative analysis. Secondary data were collected from Bank Indonesia offices Manado and Gorontalo, central Bank Indonesia, BPS of North Sulawesi province and BPS of Gorontalo province. Some secondary data is obtained directly from Bank Indonesia.

This study also uses inferential analysis to test empirical models and hypotheses proposed in a study. Inferential statistical analysis is used to perform the management conception tests expressed in the research hypothesis (Ferdinand, 2006). The method of analysis used in this research is Generalized Structural Component Analysis (GSCA) method. This approach of analysis uses the least squares method in the parameter estimation process. The GSCA program was developed to avoid the shortcomings of the PLS (Partial Least Square), which is equipped with global optimization procedures, and also maintains local optimization procedures, such as the PLS. The GSCA method is a new method of component-based SEM that is very important and can be used for scoring calculations (not scales) and can also be applied to very small samples (Solimun, 2012).

IV. Results And Discussion

Descriptive Analysis

In understanding the respondent's perception of the research variables, the following description is the respondent's answer to the statement submitted in the questionnaire. Interpretation of respondents score follows Likert scale with scale range 1 = strongly disagree, 2 = disagree, 3 = neutral / enough, 4 = agree, 5 = strongly agree.

To measure consumer perceptions of risk management, eight dimensions are used: credit risk management, market risk management, liquidity risk management, operational risk management, legal risk management, compliance risk management, risk management strategy, and compliance risk management.

The result of calculation using descriptive statistic about mean value dimension of risk management variable shows that the mean value of risk management dimension is 4,23 can be interpreted that respondent give good value to risk management practice. This indicates that the respondent's average rating on risk management practice is agreed to have practiced risk management in their respective banks, meaning that the rural bank management agrees to run the risk management practice well. The dimension of compliance risk management received the highest response of 4.39 compared with the mean of other indicators, while the market risk management dimension received the lowest response of 3.91.

To measure the respondent's perception of banking regulation, four statements indicator is used, the bank always obeys the minimum capital requirement (CAR), the bank always obeys the minimum lending limit (BMPK), the bank always comply with the Minimum Reserve Requirement (GWM) requirement, and the bank always adhere The terms of the Loan to Deposit Ratio (LDR).

The calculation results using descriptive statistics about the average value of the banking regulatory variables indicate that the average value of indicators of the banking regulation variable is 4.29 can be interpreted that the respondent gives good value to the banking regulation. The average value of respondent response if observed further there is still a value of 2 on the third indicator, the bank always comply with the minimum statutory reserve requirements, it means there are some respondents who still judge that the bank always obeyed the minimum statutory reserve requirement has not been executed. Although the respondents stated that they do not agree that the bank's indicators always comply with the minimum statutory reserve requirement, some respondents (55%) agree, while the bank indicator always comply with the minimum capital requirement, the provision of credit limit and Loan to Deposit Ratio, Most respondents (94% and above) agreed, which means that banking regulations have been adhered to or adhered to well. Judging from the average value

of the three indicators is relatively balanced with each other, except bank indicators always comply with the minimum statutory reserve requirement. This illustrates that the bank always obeys the minimum capital requirement, the provisions on the maximum crediting limit and the Loan to Deposit Ratio provisions support compliance with banking regulations. Bank indicators always adhere to the minimum capital requirement to get the highest response of 4.63, while the indicator of the bank always obey the minimum statutory reserve requirement to get the lowest response of 3.66.

The measurement of respondent perception on capital structure decision variable using five indicators, namely capital structure decision always consider the requirement of capital adequacy ratio, capital structure decision always consider the target of debt to equity ratio, capital structure decision always consider the guarantee of deposit, capital structure decision always consider management risk management Banks, and capital structure decisions always take into account tax deductible incentives for debt.

The result of calculation using descriptive statistic about mean value of decision variable of capital structure shows that mean value of decision variable of capital structure is equal to 4.25 can be interpreted that respondent give good value to decision of capital structure. The average value of respondents if observed further there is still a value of 2 on the third and fifth indicator, namely the guarantee of savings and tax deductibility incentives to the debt, it means there are some respondents who still think that the deposit guarantee and tax deductibility incentives to debt need not be considered in the decision Bank capital structure. Although respondents stated that there is no agreement that savings and tax incentives should be considered, most respondents (70%) agree, meaning that capital structure decisions need to take into consideration the requirements of the capital adequacy ratio, debt to equity ratio, Savings, bank risk management, and tax deductibility incentives. Viewed from the mean values of the five indicators are relatively balanced with each other, this illustrates that the requirement of capital adequacy ratio, debt ratio to capital target, underwriting, control of bank management risk, and tax deductibility incentive to debt, need to be considered in determining the decision of capital structure good. The capital structure decision indicator needs to consider the requirement of capital adequacy ratio (CAR) to get the highest response equal to 4.47 compared to other indicators, while the capital structure decision indicator need to consider the tax deduction incentive to get the lowest response that is equal to 3.92.

Inferential Statistics Analysis

This study aims to examine and explain the relationship between risk management, banking regulation and decision of capital structure. Hypothesis testing is done by using structural equation model analysis with generalized structured component analysis approach.

A summary of hypothesis testing results is presented in Table 1.

Table 1. Hypothesis Testing Results

Hypothesis	Path Coefficients					Description
	Independent Variabel	**Dependent Variabel**	**Estimate**	**SE**	**CR**	
H1	Risk Management	Capital Structure Decision	0.614	0.276	2.22[*]	Significant
H2	Banking Regulation	Capital Structure Decision	0.597	0.214	2.79[*]	Significant
H3	Interaction Risk Management and BankingRegulation	Capital Structure Decision	-0.351	0.609	0.23	Unsignificant

CR* = significant at .05 level

Relationship between Risk Management and Capital Structure Decision

Risks and risk management practices should always be considered and well considered in running a good business (Kendrick, 2004). Risks are things that can lead to unexpected losses. Risk measurement focuses on unexpected losses that lead to the volatility of bank earnings, ranging from low profits, balance sheet losses, to potential bankruptcies. In general, banking risk is classified into categories of market risk, credit risk, operational risk, liquidity risk, strategic risk, and business risk (Jorion, 2000).

The most important aspect of risk management is capital control (Cai and Wheale, 2008). There are two main concepts that are critical role of capital in managing bank portfolio according to Rowe *et al*. (2004): (1) Assess and manage risk, the bank must determine effectively and appropriately the amount of capital required to absorb unexpected losses arising from market risk exposure, credit risk and operational risk, and (2) Profit derived Of various business activities need to be evaluated in terms of capital needs to address risks.

Good risk management practices are able to determine better capital structure decisions. Improved risk management practices will lead to confidence conditions will have a positive impact on capital structure decision making so that it can increase CEO support in making better capital structure decisions. This is ultimately expected to directly encourage CEOs of rural banks to make better capital structure decisions. Good risk management practices will lead to better capital structure decisions. The findings of this study are in

accordance with the opinion of Cebenoyan and Strahan (2004) which states that banks that increase their ability to manage risks can operate with large debts, and can lend more assets to risky borrowers. A good risk management practice will make the bank more effective in choosing its capital structure decisions, which means that risk management positively affects the capital structure.

The results of the analysis show that risk management has a positive influence on bank capital structure. Risk management is a risk controller that aims to reduce or minimize risks faced by banks. The results showed that the average respondent agreed to practice risk management in their bank. Well-run risk management can reduce risk. This encourages banks to increase debt or raise more funds from the public. The greater the funds collected from the community, the greater the funds that can be channeled through credit, so the greater the profit (profit) obtained. Reduced risk as a result of good risk management practices encourages banks to prefer community funding through savings and deposits (external funding) rather than funding from shareholder capital (internal funding) thereby increasing the bank's capital structure.

The findings of this study are in line with the results of Cebenoyan and Strahan (2004) research which states that the higher or better the risk management practices the better the bank chooses the decision of its capital structure.

Relationship between Banking Regulation and Capital Structure Decision

Strict regulation in the banking industry is much needed given the inherent risks to the banking system, due to the bank of a product used by all customers ie money. The greater the risk faced, the greater the capital required by a bank. On this basis the regulatory authority requires banks to have sufficient capital to absorb the risks faced, in which case the capital level of a bank should be based on the degree of capital risk. Therefore, to keep the bank in possession of sufficient capital to absorb the risk, a capital requirement regulation is established. This regulation is closely related to the bank's capital structure.

The high level of adherence to banking regulations requires a clear understanding of the basic principles of regulations issued by Bank Indonesia. When this is done the bank can benefit the decision-making of capital structure better, especially through increased awareness of the importance of adherence to banking regulations. This can be explained by looking at the indicators of banking regulation.

Banking regulation indicator, which is an operational practice indicator of the bank always comply with capital adequacy ratio (CAR) has the highest estimated parameter value. This shows that adherence to high banking regulations reflects compliance with the minimum capital adequacy ratio (CAR).

Rural banks that become the object of this research in general have most of the above CAR is required in banking regulations. The CAR owned by the rural banks in this study averaged 41.44 percent, well above the regulations requiring banks to have CARs above 8 percent.

The results of this study support the statement proposed by Mishkin (2000) and Ghosh *et al*. (2003) stating that banking regulation influences the decision of bank capital structure. The test results do not support statements from Flannery (1994), Myers and Rajan (1998), Diamond and Rajan (2000), Allen *et al*. (2009), and Groop and Heider (2009) who found that banking regulation did not affect the decision of the bank's capital structure.

Banking regulation and risk management relationship to capital structure decision

Flannery and Rangan (2008) argue that banking regulation does not affect the relationship between risk and capital structure. In contrast to Calomiris and Wilson (2004) who argue that there is a negative relationship between risk and capital structure when there is no banking regulation. But they do not explain further how the relationship between risk and capital structure when there is banking regulation.

Barrios and Blanco (2003) argue that banks are affected by regulations governing capital to be above the minimum capital. Although banking regulation is one of the factors associated with additional capital in banks, but banking regulation is not the most important factor in determining bank capital structure. They argue that the main determinant of the bank's capital structure is the pressure of market forces.

Santomero and Watson (1977) show that too strict regulation of capital causes banks to reduce their credit distribution, resulting in increased bank failures in increasing productive investment. Regulatory pressure is an important driver of risk management practices to control market risk, credit risk and operational risk. Regulation can hamper innovation (Syer, 2003).

The findings of this study indicate that compliance with banking regulations has no significant effect on relationship between risk management practices and capital structure decisions. The influence is weak and insignificant with the direction of the negative relationship, which means that higher levels of compliance with banking regulations will weaken the influence of risk management in determining capital structure decisions.

The test results show that compliance with banking regulations has no significant effect on risk management practices in determining capital structure decisions, which, although their influence is weakened by

negative coefficient, is not significant. This implies that high compliance with banking regulations will not have any effect on risk management practices in determining capital structure decisions.

The results of this test indicate that the higher compliance with banking regulations will weaken risk management practices in determining capital structure decisions. Conversely, the lower levels of compliance with banking regulations will further strengthen risk management practices in determining capital structure decisions.

V. Conclusions And Recommendations

Risk management practice is a key determinant of bank capital structure decisions. The better the risk management practice the better the bank leader makes decisions in determining the structure of his capital. Risk management practices in rural credit banks in North Sulawesi and well-implemented Gorontalo enhance bank managers' decisions in determining their capital structure as a manifestation of decisions made by top management of banks. Well-run risk management can reduce risk, encouraging banks to increase debt or raise more funds from the public. Increased funds raised from the community provide an opportunity for banks to channel more funds through credit, so as to increase the profit (profit) that can be obtained.

The banking regulation determines the decision of the bank's capital structure. Adherence to high banking regulations makes better capital structure decisions. Bank regulations issued by the monetary authority, in this case Bank Indonesia must be obeyed and implemented by the existing rural banks in North Sulawesi and Gorontalo. However, there are still some rural banks that have not been able to run and comply with the regulations issued by Bank Indonesia.

Banking regulation does not serve as a decisive factor in strengthening risk management in influencing capital structure decisions. High levels of adherence to banking regulations weaken risk management in improving capital structure decisions. Conversely, the level of adherence to low banking regulation actually strengthens risk management in improving capital structure decisions. This is because risk management practices and compliance with the banking regulations of some rural banks are still pseudo because they have not been able to run them well.

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