

Banking Regulation, Risk Management and Capital Structure Decisions: A Study on Rural Banks in Indonesia

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Abstract

The purpose of this study are: (1) examining effect the banking regulations on capital structure decisions, (2) examining effect of risk management on capital structure decisions, (3) examining the role of banking regulations to moderate effect of risk management on capital structure decisions. Research was conducted in rural banks on North Sulawesi and Gorontalo, Indonesia in 2011. There are 20 banks analyzed which are appointed based on population criteria. Generalized Structural Component Analysis (GSCA) method is used in this study. The findings of this study discover that the banking regulations determines capital structure decisions. The practice of risk management determines the capital structure decisions. The findings of this study show that the banking regulations has no role in strengthening risk management in determining capital structure decisions.

Keywords: Banking Regulation, Risk Management, Capital Structure Decisions

1. Introduction

Strategic role of bank capital in the banking business primarily related to the specific characteristics of the banking business. Banks borrow money to make money (Hasan 1997). Banks and other financial institutions are a specialized business where capital structure is influenced by a number of conditions unique to the banking business, such as government regulations and access to government safety net which includes deposit insurance and loan (Kwan 2009). Deposit insurance contracts which provide liquidity is a contract that allows depositors to withdraw their funds on demand, and it is related to the sustainability of the bank (Diamond & Dybvig 1983). In particular the sustainability of the bank's operations to be dangerous when a bank is illiquid savings rely on bank loans to finance illiquid.

Bank at the same time are the company, the financial intermediary, and the regulated entity so that the form of incentive regulation imposed by rule determines a unique interaction between bank capital and behavior (Marques & Santos 2004). In addition, the bank's operations are run by the prudential banking for banks as financial intermediaries borrow operating funds from one agency and then lend again to the other agents. Consequently, the banking institutions tend to have high leverage because of the security functions and intermediary (Boyd & Presscott 1986). Banking institutions also must operate under strict environmental regulations that vary even among different banks, the minimum capital adequacy ratio is one important tool for regulators to maintain the stability of the financial system. Until the end of the 1990s the international regulatory bodies and governments have implemented requirements are more stringent capital adequacy on banks in an effort to reduce the chances of bank failures .

Mandatory requirements in determining bank capital standards on capital structure decisions can be voluntary and involuntary (Besanko & Kanatas 1996). Capital structure decisions voluntarily executed the same in principle as in manufacturing firms, while the capital structure decision shall run with the provisions set forth by the regulator as set forth in the rules of capital adequacy requirements.

Debate in the literature about the bank's capital structure is mainly due to differences in character between the banking business and manufacturing companies. Previous studies on capital structure is generally done at the manufacturing companies making capital structure models used are considered less appropriate or not appropriate to banking. Bank's assets and its function is not the same as in manufacturing firms (Diamond & Rajan 2000).

Understanding determinants of bank capital structure should begin by modeling functions are executed by the bank and further questioned the role of this model (Diamond & Rajan 2000). This approach shows that the bank's capital structure affects its ability to create liquidity and credit related to creating stability. Consequences of exchange implications for bank capital structure.

Bank management is essential to determine the capital structure policy in support of bank operations, particularly in lending. Allocation of funds to bank lending also need large financing, because if not, would interfere with the bank's liquidity. Every credit expansion plan must be supported by the presence of additional capital, because if not then the credit expansion will impact on the declining capital adequacy ratio (CAR) of the bank. This case

shows the importance of the bank's management to determine their capital structure policy. Capital structure policy is a policy concerning the 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 profits company in order to achieve a high value of the firm (Gitman 2009) .

Capital structure associate with firm value and profitability, it is important for banks to determine decisions about optimal capital structure. The main source of theoretical and empirical research on capital structure derived from testing many phenomena in the United States (Marques & Santos 2004). The implication is that the findings of studies on capital structure difficult to be generalized in other countries, which generally have the economic, financial, and institutional different. Information and operating efficiency, and liquidity are the feature of financial markets which may play a role in determining the combination of corporate financing (Demirguc-Kunt & Maksimovic 1995). Therefore more research are needed on testing to strengthen the capital structure prediction ability.

Further studies on the capital structure hypothesis needed to improve the robustness of the prediction (Rajan & Zingales 1995) and (Harris & Raviv 1990). This now needs that still continues to be debated, the capital structure empirical tests were performed in the context of different environments, such as country, time and industry. The investigation may help to better understand the implications of environmental and behavioral factors on capital structure decisions, and thus contribute to expand the explanatory and predictive power of existing theories.

Research on capital structure has been done, but there is still disagreement among experts. Research carried out for this much done in manufacturing companies, and the few studies conducted on the capital structure of banks, particularly small banks with special characteristics such as rural banks.

Previous studies have attempted to examine the theory of capital structure on banking companies, but so far most of the studies take the object at the big banks that have been listed in the capital market. Although research on capital structure has been carried out on the banks, but are still limited to major banks, especially banks listed in the United States and Europe. Still rare to find research conducted at banks outside the United States and Europe, in particular banks in Asia.

Results of studies on the regulation of the banking public sector in India found that banking regulations affect banks' capital structure decisions (Ghosh *et al.* 2003). These findings support the notion that banking regulation, in this case the regulatory capital requirements affect bank capital structure (Mishkin, 2000).

In contrast to the findings stating that banking regulation does not affect the bank's capital structure decisions (Groop & Heider 2009). This is supported by Flannery (1994), Myers & Rajan (1998), and Diamond & Rajan (2000) which states that banking regulation, in this case does not affect the capital adequacy requirements of bank capital structure decisions. It is interesting to be studied and developed further because the study results indicate that there are still differences.

Results of previous studies showed research gaps. This opens up opportunities for researchers to conduct further research and testing of the relationship between risk management, banking regulations and capital structure decisions, to explain the inconsistent results. Besides, it is necessary to study for the test and explain the role of banking regulation as a variable that moderates the impact of risk management on bank capital structure decisions as long as it has not found any research that does so.

Motivated from the statements and findings of the above study, this study aims to examine the effect of risk management and banking regulations on capital structure decisions on banks, especially rural banks in the province of North Sulawesi and Gorontalo, Indonesia.

Chosen rural banks, because of unique things that are owned by the bank. Rural bank is a commercial bank as usual, but the rural banks have specificities that serve the needs of communities in rural areas and small micro enterprises in the form of deposits (savings and time deposits) and credit. There are some differences between rural banks with commercial banks, namely: rural bank capital just under 100 billion rupiahs, the product rural banks are only savings deposits, rural banks can not issue checks and giro such as commercial banks, rural banks can not do transaction clearing, rural banks operating region is limited in scope only one province, and most of the rural banks business are a family business.

Besides, there are a number of problems that must be faced by rural banks in the course of their business, especially in the face of increasingly fierce competition today. The problem that faces them is its limited capital, so the selection of capital structure decisions is critical to get attention. Other problems are associated with the risk it faces as well as compliance with banking regulations that limit the movement of the leadership of the bank in carrying out its operations.

This study aims to: (i) Examine the influence of banking regulations on capital structure decisions, (ii) Examine the influence of risk management on capital structure decisions, (iii) Examine the role of banking regulation to strengthen the influence of risk management on the capital structure decisions. Theoretical contribution of this research is the development of knowledge about the financial management of funding decisions, particularly

through the development of models of risk management, banking regulations and capital structure relations. Practically, this research also contributes to the leadership of rural banks in an effort to improve risk management practices, the obedience to banking regulations and capital structure decisions that can increase the value and profitability of banks. Another practical contribution for investors is that they place their funds in rural banks that have management credibility.

2. Literature Review And Hypothesis Development

2.1 *The influence of the banking regulations on capital structure decisions*

There are different views about the application of financial theory to corporate finance, which shows that without regulation and deposit insurance on corporate capital structure decisions similar to the banks (Buser, Chen and Kane 1981). Generally, the deposit insurance company intentionally set insurance premiums under market value to entice customers without certain banking membership to follow and subject to the provisions of deposit insurance agency. Banks and other depository institutions are the specific business in which capital structure is influenced by a number of unique conditions in the banking industry, such as banking regulation and deposit insurance (Kwan 2009). Capital structure needed to encourage by banks to maintain larger capital. Another banking research focus on the unique functions of the bank, such as lending and create liquidity. The bank's capital structure can be affected this function. Banks create liquidity by offering demand deposits (Diamond & Rajan 2000).

In Indonesia, the impact of bank capital requirements examined by Yudhisthira (2003). He provides new evidence of the influence of bank capital requirements in Indonesia. In investigating the impact of capital requirements, he constructs a simple model of the banking firm suggests that the impact of capital regulation on bank behavior and likewise have a possible effect on the economy. In making estimates, he uses monthly data around the bank panel that is between the years 1997-1999, during the crisis and regulatory forbearance. Overall, the study results indicate that the regulatory capital took part in the change of behavior of banks in Indonesia. Bank credit was found to weaken but reduced from prior government to apply clearances capital requirements. The view that banks choose to shrink their balance sheet activities during the period of capital shock is consistent with his findings.

Banking regulations do not affect the bank's capital structure decisions (Groop & Heider 2009). These results support the findings of research conducted by Flannery (1994), Myers & Rajan (1998), Diamond & Rajan (2000), and Allen *et al.* (2009) state that banking regulation, in this case does not affect the capital adequacy requirements of bank capital structure decisions. In contrast to Ghosh *et al.* (2003) in a study of public sector banks in India. They found that banking regulations affect banks' capital structure decisions. This supports the opinion expressed by Mishkin (2000) which states that banking regulation, in this case the regulatory capital requirements affect bank's capital structure. Formulation of the hypothesis is:

H1. The banking regulations have a significant effect on the capital structure decisions.

2.2 *The influence of risk management on the capital structure decisions*

Business risks are negatively correlated with debt ratio (Low & Chen, 2004). This shows that the company have a great business risk tend to have low debt ratios. Business risk had no significant effect on leverage (Cassar & Holmes, 2003), but the consistency of the direction of business risk coefficient for leverage is negative. This finding was supported by Welch (2002) stated that the risk was significantly negatively related to the capital structure.

Banks that increase their ability to manage risks in this case to manage credit risk can operate with high leverage, and could lend greater assets at risk borrowers (Cebenoyan & Strahan, 2004). Good risk management practices will make banks more effectively choose their capital structure decisions. This means that risk management has a positive effect on the capital structure. Formulation of hypotheses in this study is:

H2. The risk management have a significant effect on the capital structure decisions.

2.3 *Relationship between banking regulations, risk management, and capital structure decisions*

The relationship between capital and risk adjustments, depending on the amount of capital that the bank retained beyond the minimum regulatory capital buffer. In Germany, banks with low capital reserves trying to rebuild capital reserves to be sufficient to raise capital while at the same time reduce the risk (Heid *et al.* 2004). In contrast, banks with large reserves trying to defend their capital reserve ratio by increasing risk when capital increased. These findings support the theory of capital buffer.

Banks affected by the regulations governing capital above minimum regulatory (Barrios & Blanco 2003). Although the regulatory limit was one of the factors related to additional capital at commercial banks in Spain, but not the most important. Instead the pressure of market forces is the main determinant of bank capital requirements. Regulatory capital that banks take far too stringent credit bid, as a result, will improve bank failures in increasing productive investment (Santomero & Watson 1977). Banking regulations do not affect the relationship between risk and capital structure (Flannery & Rangan 2008). In contrast to the findings Calomiris

& Wilson (2004) which suggests that there is a negative relationship between risk and capital structure when there is no banking regulations.

Pressure regulation is an important driver of risk management for market order, credit and operational risk (Syer, 2003). While the regulation could negatively impact and can be viewed as a barrier to innovation. Formulation of hypotheses in this study is:

H3. The banking regulations have a significant effect to moderate the risk management towards the capital structure decisions

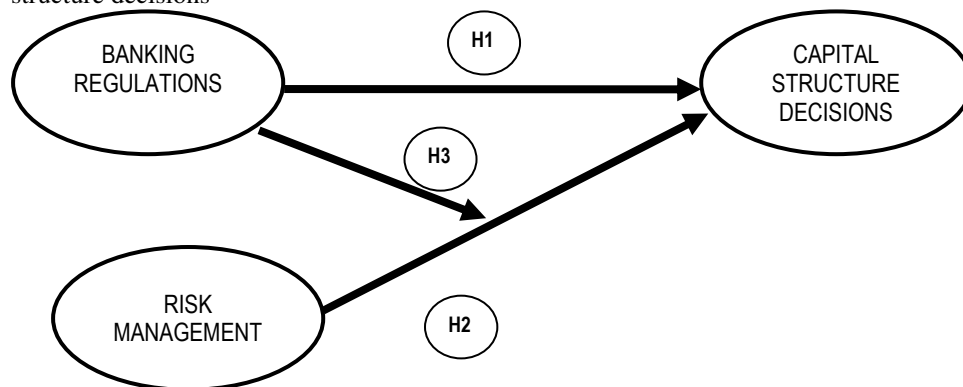


Figure 1. Research Concept Framework

3. Research Methods

This study is quantitative approach using perception of bank's CEO. The research was conducted in rural banks listed on the office of Bank Indonesia Manado and Gorontalo in 2011. The study population was all rural banks in the province of North Sulawesi and Gorontalo as many as 21 banks, which consists of 17 banks in the province of North Sulawesi and 4 banks in the province of Gorontalo. Members of the population who serve as research objects selected by criteria of rural banks are healthy and are not categorized under the supervision of Bank Indonesia's status. The number of banks are found to fit the criteria of 20 rural banks. The sampling technique used in this study is population sampling. The unit of analysis in this study are rural banks in the province of North Sulawesi and Gorontalo.

The data collected in this study derived from primary and secondary data. Primary data were collected through questionnaires. Secondary data was collected from the office of Bank Indonesia Manado and Gorontalo, the central bank of Indonesia (Bank Indonesia), North Sulawesi central bureau of statistics, and Gorontalo central bureau of statistics. Some secondary data obtained directly from Bank Indonesia.

Generalized Structural Component Analysis (GSCA) method is used in this study. This method aims to replace the factor with a linear combination of indicators in the SEM analysis. This analysis approach using least square method in the parameter estimation process. GSCA program was developed to avoid the shortcomings of the PLS (Partial Least Square), which is equipped with a global optimization procedures, and also retains a local optimization procedure. GSCA method is a new method of component-based SEM that can be used for the calculation of scores (not scale) and can also be applied to very small samples (Solimun 2012).

4. Analysis And Results

This study aims to examine and explain the effect of risk management on capital structure decisions by banking regulations as moderating. Hypothesis testing is done using analysis of structural equation models with generalized structured component analysis approach. Summary of hypothesis testing results are presented in Table 1.

Hypothesis 1: Hypothesis test results in Table 1 shows that path coefficients of the banking regulations on capital structure decisions is 0.571 with significant value at Critical Ratio (CR) = 3.18. According to Ferdinand (2006) if the value of CR (Critical Ratio) ≥ 2.00 means has qualified a hypothesis received. So the value of CR = 3.18 indicates that the value is above the requirements of CR ≥ 2.00 with a significance level of 0.05 (5%). This analysis provides decision that path is significant. It means that data of this study support research hypothesis 1. Positive path coefficients means the relationship between banking regulations and capital structure decisions is unidirectional.

Table 1. Test Results of Hypothesis

Hypothesis	Path Coefficients					Description
	Independent Variables	Dependent Variables	Estimate	SE	CR	
H1	Banking regulations	Capital Structure Decisions	0.571	0.179	3.18*	Significant
H2	Risk Management	Capital Structure Decisions	0.839	0.138	6.06*	Significant
H3	Interaction Banking Regulations and Risk Management	Capital Structure Decisions	-0.334	0.612	0.54	No Significant

CR* = significant at .05 level

Hypothesis 2: Hypothesis test results in Table 1 shows that path coefficients of the risk management on the capital structure decisions is 0.839 with significant value at CR = 6.06. It indicates that the value is above the requirements of $CR \geq 2.00$ with significance level 0.05 (5%). This analysis provides decision that path is significant. It means that data support research hypothesis 2. Positive path coefficients means the relationship between risk management and capital structure decisions is unidirectional.

Hypothesis 3: Hypothesis test results in Table 1 shows that path coefficients of interaction between banking regulations and risk management towards capital structure decisions is -0.334 with significant values at CR = 0.54. It indicates that the value is below the requirements of $CR \geq 2.00$ with a standard significant 0.05 (5%). This analysis provides decision that the path is not significant. It means that data do not support research hypothesis 3. Negative path coefficient means relationship of interaction between banking regulations and risk management towards capital structure decisions is in opposite direction.

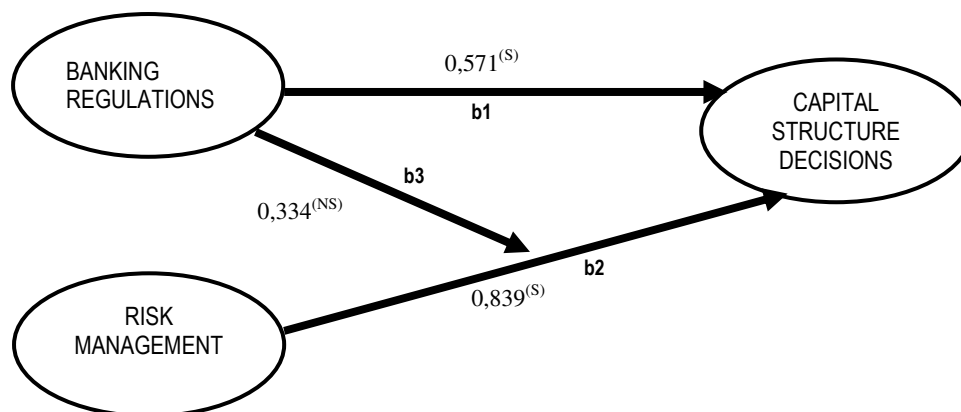


Figure 2. Path Diagram of Hypothesis Testing Results

Description: S = significant; NS = non significant

Moderator variables are variables that are strengthened or weakened the influence of explanatory variables on the dependent variables. Moderating variable types can be identified through the coefficients b2 and b3 in Figure 2. Predictor variables moderation is moderating variables that only served as predictor variables in the model of moderation relationships between predictor variables and the dependent variable (Solimun 2012). The results showed that the coefficient was significant b2 and b3 coefficient is not statistically significant. It means moderating variable is only acting as predictor variables in the model established relationship.

The conclusion that can be derived from the structural model test results in Table 1 is the banking regulations as a moderator in influencing the risk management on the capital structure decisions is not significant. Predictive negative value indicates that the moderating effect given is negative, meaning that banking regulations give effect to weaken the influence of risk management on capital structure decisions, but the results were not significant.

5. Discussion of Research Findings

5.1. The Influence of Banking Regulations on Capital Structure Decisions

Based on the analysis, banking regulations significantly influence capital structure decisions, as shown in Table 1. This means that the research hypothesis states the higher obedience to banking regulations will determine the

capital structure decision proved to be better received. These results imply that banking regulations as measured by obedience to minimum capital requirements, the provisions of legal lending limit, the provisions of statutory reserves and provisions LDR able to explain the variation in changes in capital structure decisions.

Table 1. meant that the higher banking regulations significantly impact on the capital structure decisions better. This suggests that the higher banking regulations can directly lead to an increase in capital structure decisions better. The high level of obedience to banking regulations require a clear understanding of the basic principles of the bank regulations issued by Bank Indonesia. When this is done then the bank can benefit decision making better capital structure, primarily through increased awareness of the importance of obedience to banking regulations. It can be explained by looking at indicators of banking regulations. Indicators of banking regulations, which is an indicator of operational practices always comply with the bank's capital adequacy ratio has the highest value of parameter estimation. This suggests that obedience to banking regulations that reflect high obedience to the provisions of the minimum capital adequacy ratio (CAR).

Strict regulation in the banking industry, it is necessary given the inherent risk in the banking system, because banks related to a product that is used by all clients that money. The greater risks, the greater required capital of a bank. On this basis the regulatory authorities require banks to have sufficient capital to absorb the risks, in this case a bank's capital levels should be based on the level of risk (risk-based capital). To keep the banks still have enough capital to absorb risk then formed a regulatory requirement of capital. This Regulation relates closely with the bank's capital structure. This finding is consistent with the findings of Mishkin (2000) and Ghosh *et al.* (2003) that banking regulations has significant and positive effect on banks' capital structure decisions. It means the higher banking regulations then the better capital structure decisions. This finding is also inconsistent with findings of Flannery (1994), Myers & Rajan (1998), Diamond & Rajan (2000), Allen *et al.* (2009), and Groop & Heider (2009) that banking regulations has not significant effect on the bank's capital structure decisions.

5.2. *The Influence of Risk Management on Capital Structure Decisions*

Based on the analysis, risk management significantly influence capital structure decisions, as shown in Table 1. It means that the hypothesis that good risk management practices will determine the capital structure decision proved to be better received. These results imply that risk management is measured by credit risk management, market risk management, operational risk management, liquidity risk management, legal risk management, reputation risk management, strategic risk management and compliance risk management are able to explain the variation in changes in the capital structure decisions.

Risk and risk management practices should always be considered and adequately considered in running a good business (Kendrick 2004). Risks are things that can result in unexpected losses. Risk measurement focuses on the unexpected loss of bank earnings volatility, which starts from a low income, loss of balance, until the potential bankruptcy. In general, bank risks are classified into the category of market risk, credit risk, operational risk, liquidity risk, strategic risk, and business risk (Jorion 2000).

The process of identifying the risks faced by an organization and how to choose the most appropriate technique for dealing with risk is called risk management (Rejda 2006). Further added that risk management is the identification, assessment, and priority risks that accompanied the implementation of economical and coordinated resources to minimize, monitor, and control the possible impact of unfavorable events (Njogo 2012). So risk management practices aimed at minimizing and controlling risk.

The most important aspect of risk management is capital controls (Cai & Wheale 2009). There are two main concepts that a critical role in managing equity portfolios of banks according to Rowe *et al.* (2004) as follows: (1) Assess and manage risk, banks need to effectively and accurately determine the amount of capital required to absorb unexpected losses stemming from exposure to market risk, credit risk and operational risk, and (2) Profit derived of various business activities need to be evaluated relating to capital requirements to address risks.

Practice good risk management is able to determine the capital structure decisions better. Risk management practices that will lead to the better conditions of belief will have a positive impact on the capital structure decision so that it can improve the support of the CEO in making better capital structure. This in turn is expected to direct the CEO will encourage rural banks to make capital structure decisions better. Good risk management practices will lead to capital structure decisions better. The findings of this study in accordance with the opinion of Cebenoyan & Strahan (2004) which states that the bank is improving its ability to manage risk can operate with high leverage, and could lend greater assets at risk borrowers. Good risk management practices will make banks more effectively choose their capital structure decisions. It means risk management has a positive effect on the capital structure decisions.

Formed risk management of credit risk management, market risk management, liquidity risk management, operational risk management, legal risk management, reputation risk management, strategic risk management, and compliance risk management as an incentive for CEO in determining the capital structure decisions better. Credit risk management has estimated the value of the highest weight in the form of risk management. Credit risk management is carried out properly will minimize the risk that comes from lending. Giving credit to the

community is a key activity that carries the risk that banks can affect the survival of a bank. Returns non-current loans will affect the bank's capital. Therefore, credit risk management is one of the shapers of risk management will affect the capital structure decisions.

The analysis revealed that risk management has a positive influence on bank capital structure. Risk management is aimed at controlling risk to reduce or minimize the risks faced by the bank. The results showed that the average respondent agrees to practice risk management in their bank. Risk management is carried out properly can reduce the risk. This encourages banks to raise debt or raise more funds from the public. The bigger funds raised from the community, the greater funds could be channeled through the credit, so that the greater gain can be obtained. Reduced risk as a result of good risk management practices encourage banks to prefer funding from the public through savings and time deposits (external funding) than the funding of shareholder capital (internal funding) thereby increasing the bank's capital structure. The study's findings are in line with the finding of Cebenoyan & Strahan (2004) that the higher or better risk management practices, the better banks choose their capital structure decisions.

5.3. The role of Banking Regulations as a Moderating to Influence of Risk Management on Capital Structure Decisions

Flannery & Rangan (2008) suggests that the banking regulation does not affect the relationship between risk and capital structure. Unlike the Calomiris & Wilson (2004) who argue that there is a negative relationship between risk and capital structure when no banking regulations. But they did not explain further how the relationship between risk and capital structure when no banking regulations. Barrios & Blanco (2003) suggests that the bank is affected by the banking regulations to be on top of the minimum capital. Although the banking regulations are one of the factors associated with additional capital to banks, but banking regulations are not the most important factor in determining the bank capital structure. They argue that the main determinants of bank capital structure is the pressure of market forces.

Santomero & Watson (1977) show that capital regulation is too tight causing banks reduce lending, thus resulting in increased bank failures in increasing productive investment. Pressure regulation is an important driver in the risk management practices for controlling market risk, credit risk and operational risk. Regulation can stifle innovation (Syer 2003).

Have not found previous studies examining the relationship these three variables, namely the banking regulation, risk management, and capital structure are studied together. In addition, previous studies have also found that examines the role of the banking regulations to moderate the effect of risk management on capital structure decisions, both in itself and in the banking institution manufacturing company, so this could be a study proving the originality of this study. This research is a study of the perceptions of internal financial management by respondents are CEO rural banks in the province of North Sulawesi and Gorontalo, Indonesia.

Based on the analysis, banking regulation as moderation variable does not significantly influence the capital structure decision. It means the research hypothesis stating obedience to banking regulations will strengthen the influence risk management on capital structure decision better is not enough evidence to be accepted. These results imply that the interaction between obedience to banking regulation and risk management is not able to explain the variation in changes in capital structure decisions.

The findings of this study indicate that obedience to banking regulations did not significantly moderate the effect of risk management practices on determining the capital structure decisions. Weak and does not significantly influence the direction of a negative relationship, which means that the higher the level of obedience to banking regulations would likely weaken the influence of risk management in determining capital structure decisions. This result is in contrast to the previously predicted that banking regulation would moderate the effect of risk management on capital structure decisions. This is the originality of the research findings in the field of financial management. The test results throughout the coefficient parameters as in Table 1. shows that banking regulation act as a moderating predictor variable, where the variable banking regulation act only as a predictor variable in determining the capital structure decisions. It means variable the obedience to banking regulations could only be the deciding factor in determining the capital structure decisions. Banking regulation can not act as moderating the relationship between risk management with capital structure decisions.

6. Implication and Research Originality

The results of this study are expected to provide additional insights for financial theory, in particular capital structure and risk management in the banking business. Banks that have the capability of risk management will determine their capital structure decisions are getting better so that it can increase the value of companies that will provide higher profits.

The findings of this study are expected to further encourage bank leaders to improve risk management practices and compliance with banking regulations, it is important for banks not only to guarantee the bank's operations could run well, but more importantly is able to determine the capital structure decisions that could increase the

value and profitability of the company so that the bank is able to continue to exist and grow in today's competitive era.

Researchers have not found a previous study that examined the relationship these three variables, namely the banking regulations, risk management, and capital structure are studied together. In addition, previous studies also have not found that examines the role of the banking regulations on moderate the effect of risk management on capital structure decisions, both in itself in the banking institution and manufacturing company, so this could be a study proving the originality of this study. This research is a study of the perceptions of internal financial management by respondents is CEO rural banks in the province of North Sulawesi and Gorontalo, Indonesia.

7. Conclusion and Limitations of Research

Risk management practices are important determinants of bank capital structure decisions. The better risk management practices, the better CEO make decisions in determining the bank's capital structure. Risk management practices in rural banks in North Sulawesi and Gorontalo are implemented by either increasing the bank's leadership decisions in determining their capital structure as the embodiment of decision making by the top management (CEO) of the bank for the better. Risk management is carried out properly can reduce the risk of forcing the banks to raise debt or raise more funds from the public. Increasing the funds raised from the community to provide opportunities for banks to channel more funds through credit, thereby increasing profit that can be obtained.

Banking regulations determine banks' capital structure decisions. Banking regulations issued by the monetary authority, in this case the Bank Indonesia regulations must be obeyed and implemented by the rural banks in North Sulawesi and Gorontalo, Indonesia. But there are still few rural banks that have not been able to run and comply with regulations issued by Bank Indonesia. The high obedience to banking regulations that make capital structure decisions for the better. Banking regulation does not act as a decisive factor in strengthening risk management in affecting capital structure decisions. The high obedience to banking regulations weaken risk management in raising capital structure decisions. In contrast, the lower obedience to banking regulations actually strengthening risk management in raising capital structure decisions. It means rural banks have not been able to run the risk management practices and the obedience to banking regulations properly.

There are several limitations to this study, namely: (1) The study was limited only to use the data on the respondents' perception of his activities as the board of directors and board of commissioners of rural banks, (2) qualitative information that supports this study were obtained from direct observations and interviews with some respondents limited research information from the CEO (directors and commissioners) rural banks. Though the information of the employees and managers of rural banks and bank supervisors, in this case the Bank Indonesia should also be explored to support the research.

Further research is recommended to develop a sample outside rural banks so as to increase the generalizability of research results, especially how banks create an effective risk management in determining the capital structure decisions. Expected in the next study region can develop the sample population and to strengthen the contribution of the research on a broader generalization region.

References

- Allen, F., A. Babus, and E. Carletti. (2009). Financial Crises: Theory and Evidence. *Annual Review of Financial Economics* 1, 97–116
- Barrios, Victor E., and Juan M. Blanco. (2003). The Effectiveness of bank capital adequacy regulation: A Theoretical and empirical approach. *Journal of Banking and Finance*, 27, 1935-1958
- Besanko, David and George Kanatas. (1996). The Regulation of Bank Capital: Do Capital Standards Promote Bank Safety?. *Journal of Financial Intermediation*, 5, 160-183
- Boyd, John H., and Edward C. Prescott. (1986). Financial Intermediary-Coalition. *Journal of Economics Theory*, 38, 211-232
- Buser, Stephen A., Andrew H. Chen, and Edward J. Kane. (1981). Federal Deposit Insurance, Regulatory Policy, and Optimal Bank Capital. *The Journal of Finance*, 36 (1), 51-60
- Cai, Zhuang and Peter Wheale. (2009). Managing Efficient Capital Allocation with Emphasis on the Chinese Experience. *Journal of Business Ethics*, 87, 111-135
- Calomiris, Charles W., and Berry Wilson. (2004). Bank Capital and Portfolio Management: The 1930's "Capital Crunch" and Scramble to Shed Risk. *The Journal of Business*, 77 (3), 421-455
- Cassar, Gavin., and Scott Holmes. (2003). Capital Structure and Financing of SMEs: Australian Evidence. *Accounting and Finance*, 43, 123-147
- Cebenoyan, A. Sinan and Philip E. Strahan. (2004). Risk Management, Capital Structure and Lending at Banks. *Journal of Banking & Finance*, 28, 19-43

- Demirgüç-Kunt, Asli and Vojislav Maksimovic. (1995). Stock Market Development and Corporate Finance Decisions. *Finance and Development* 33(2), 47-49
- Diamond, Douglas W. and Raghuram G. Rajan. 2000. A Theory of Bank Capital. *The Journal of Finance*, LV(6), 2431-2465
- Diamond, D.W. and P.H. Dybvig. (1983). Bank Runs, Deposit Insurance and Liquidity. *Journal of Political Economy* 91, 401-419
- Ferdinand, Augusty. (2006). *Metode Penelitian Manajemen: Pedoman Penelitian untuk Penulisan Skripsi, Tesis dan Disertasi Ilmu Manajemen*. Edisi Kedua. Badan Penerbit Universitas Diponegoro. Semarang
- Flannery, M. (1994). Debt maturity and the deadweight cost of leverage: Optimally financing banking firms. *American Economic Review*, 84, 320-331
- Flannery, M. and Rangan, K. (2008). What caused the bank capital build-up of the 1990s?. *Review of Finance* 12, 391-429
- Ghosh, Saibal., D.M. Nachane, Aditya Narain, and Satyananda Sahoo. (2003). Capital Requirements and Bank Behaviour: An Empirical Analysis of Indian Public Sector Banks. *Journal of International Development*, 15, 145-156.
- Gitman, Lawrence. (2009). *Principles of Managerial Finance*. (Twelfth Edition). The Addison Wesley Publishing.
- Gropp, Reint and Florian Heider. (2009). *The Determinants of Bank Capital Structure*. European Central Bank. Working Paper Series No. 1096, September 2009.
- Harris, M. and Raviv. A. (1990). Capital Structure and The Informational Role of Debt. *Journal of Finance*, 45, 321-349.
- Hasan, M.R., (1997). *The Determinants of Capital Structure of Banks: An Empirical Investigation*. Dissertation. Kent State University Graduate School of Management.
- Heid, Frank, Daniel Porath, and Stephanie Stolz. (2004). *Does capital regulation matter for bank behaviour? Evidence for German savings banks*. Discussion Paper Series 2: Banking and Financial Supervision No 03/2004.
- Jorion, P. (2000). *Value at Risk: The Benchmark for Controlling Market Risk*. (Second Edition), McGraw-Hill Companies.
- Kendrick, Terry. (2004). Strategic risk: am I doing ok?. *Corporate Governance*, 4, (4), 69-77
- Kwan, Simon., (2009). *Capital Structure in Banking*. FRBSF Economic Letter 2009-37. Available: <http://www.frbsf.org/publications/economics/letter/> (March 6, 2010).
- Low, Pek Yee. And Kung H. Chen. (2004). Diversification and Capital Structure: Some International Evidence. *Review of Quantitative Finance and Accounting*, 23, 55-71
- Marques, Manuel O., and Mário Coutinho dos Santos. (2004). *Capital Structure Policy and Determinants: Theory and Managerial Evidence*. SSRN Working Paper Series, May 2004.
- Mishkin, Frederic S. (2000). *The Economics of Money, Banking and Financial Markets*, (Sixth Edition). Addison Wesley. New York.
- Myers, Stewart C. and Raghuram Rajan. (1998). The paradox of liquidity. *Quarterly Journal of Economics*, 113, 733-771.
- Njogo, Bibiana Oluchukwu. 2012. Risk Management In The Nigerian Banking Industry. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 1(10), 100-109
- Rajan, Raghuram and Luigi Zingales. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. *The Journal of Finance*, 1 (5), 1421-1460
- Rowe, D., D. Jovic and R. Reeves. (2004). Basel II and Economic Capital. *US Banker*, April 2004, 28-62.
- Santomero, Anthony M. and Watson, Ronald D. (1977). Determining an optimal capital standard for the banking Industry. *Journal of Finance*, 32 (4), 1267-1282
- Solimun. (2012). *Pemodelan Persamaan Struktural Generalized Structured Component Analysis (GSCA)*. Program Studi Statistika, Fakultas MIPA Universitas Brawijaya.
- Syer, David. (2003). Dealing with Basel II: operational risk – encouraging best practice. *Balance Sheet*, 11 (4), 24-25
- Welch, Ivo., (2002). *Columbus' Egg: The Real Determinant of Capital Structure*. NBER Working Paper, No. 8782. February 2002.
- Yudistira, Donsyah. 2003. The Impact of Bank Capital Requirements in Indonesia. Available: <http://129.3.20.41/eps/fin/papers/0212/0212002.pdf> (January 28, 2010)

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