The link between ownership structure, Loan to Deposit Ratio, Nonperforming Loan and Return on Equity: evidence from the Indonesian banking industry

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ABSTRACT: Concentration of ownership has caused quite a lengthy debate by academics. Various studies show the benefits of concentration of ownership, but in other parts it proved the opposite. The high concentration of ownership in the banking sector in Indonesia Stock Exchange is very interesting to study in order to provide empirical evidence about the effect of the concentration of stock ownership. This research aims to provide evidence of the effect of concentration of ownership, the loan to deposit ratio and non-performing loans on Return on Equity in the banking sector in Indonesia Stock Exchange. Tests using the issuer's annual report on the 2009-2013 period bank 30 bank issuers with a concentration of ownership of more than 40 percent recorded the Indonesia Stock Exchange. Simultaneous regression analyzes with SPSS version 20.0 is used to provide evidence of research results. The research proves that the ownership concentration has not significant negative effect on return on equity, Nonperforming loans havesignificant negative effect relation with dependent variable return on equity.

KEYWORDS: Ownership Concentration, LDR, NPL, ROE, Bank

I. INTRODUCTION

Financial liberalization in Indonesia is characterized by changes in government regulations, where the ownership of banks is possible up to 99%, including by foreign investors, the impact of financial liberalization can be seen from the two opposing sides, one side of financial liberalization could strengthen the development of the financial sector and lead to higher growth in the long term, while on the other hand, financial liberalization may encourage high risk taking due to increasing competition, increasing the volatility of macroeconomic variables, and lead to the onset of the financial crisis in the economy of the concerned country [1]. The number of issuers listed on the Indonesia Stock Exchange (IDX) per December 2014 is as much as 498 companies, 39 of them are listed banks. Banking stocks is one of the leading investors to invest. Sound banking is essential for a healthy financial system. It is based on the unique characteristics of the banks that are susceptible to incursions people who withdraw funds on a large scale, the spread losses among banks very quickly through the contagion effect that could potentially lead to system problems, the loss of public confidence in the banks as intermediary institutions could generate pressures in the financial sector, financial sector instability will affect macroeconomic conditions associated with the functions of banks in monetary policy transmission, and the process of resolving troubled banks require a small cost [2]. The proportion of share ownership is a factor that can lead to conflict between the owner and management. Some of the conflicts that may arise from the spread of ownership determines the company's strategy, both corporate strategy and functional strategy. Determination of functional strategies is reflected in the policies determined by each division. One of the policies in the finance division is funding policy. Funding policy conducted by the management is closely related to the amount of resources used in the operation [3].

Principal relationship with agents associated with activities that include operational decisions, funding policy or other investment decisions. The statement shows the funding is one of the activities undertaken by management in accordance with the contract between the owners (principal) with the management (agent). Funding policy which is reflected in the debt equity ratio (DER) greatly affect the achievement of the profit earned by the company [3]. Higher DER affects the profits (return on equity) reached by the company [4]. If the cost of debt (which is reflected in the cost of borrowing) is greater than the cost of equity capital, the average cost of capital (weighted average cost of capital) will be even greater so that the return on equity (ROE) would be diminished; and vice versa [5]. The form of share distribution (shareholder dispersion) between shareholders from outside (outside shareholders), that institutional Investors may reduce agency cost as ownership represents a source of power (source of power) that can be used to support or otherwise of the existence of management, then the concentration or distribution power into a matter of relevant [6].

Shareholding by management (insider) gave a positive and significant effect on the return on equity (ROE) [7]. Empirical evidence proves that the Institutional Ownership has given positive effect on ROE [8,9]. Different results found in testing that shows results of that institutional ownership has negative effect on ROE [10]. Another researcher found that institutional ownership has no significant influence on the ROE in the banking industry listed on the JSE period 2001-2003 [11]. Ownership structure affect the financial performance. In concentrated ownership, the owners opted management opportunities that fit with the expectation is greater. Furthermore, the owner is more able to conduct monitoring and control over the management. The intensity of the owner of the management control will affect the management or operation of the daily technical and organizational performance [12]. Distribution of bank credit is the main activity, which will give outstanding loans interest income for the bank. The use of indicators Loan to Deposit Ratio (LDR) to compare entire bank loans with funds. The higher ratio of LDR gives an indication of the growing ability of banks to extend credit. But the success of the bank intermediation function is not sufficient be measured from the credit growth and the growth of third party funds, but should also assess the extent of non-performing loan (NPL). NPL measures nonperforming loans to total loans disbursed by banks [13].

II. REVIEW OF LITERATURE AND HYPOTESIS TESTING

2.1. Ownership concentration and Return on Equity

There are two contrasting theories of ownership between companies that are concentrated and dispersed corporate ownership. Ownership dispersed companies is defined as an ownership by the public with the proportion of ownership not concentrated on a single owner. At dispersed ownership can arise any asymmetric information. The problems are associated with managerial opportunism where managers do not making maximum efforts to achieve the goal of achieving the owner's interests and personal gain at the expense of the company [14]. Concentration of ownership affects the stock price. Entrenchment effect pushed the majority shareholders to take advantage on the organization's resources for personal gain and limit the information to outside parties including to minority shareholders. This situation will be responded negatively and indicated by the decline in stock prices. Furthermore, alignment effect pushes the majority shareholder to align their interests with the interests of minority shareholders. The majority shareholder has committed to build a reputation and does not utilize the organization's resources for personal interests. In addition, they will try to improve the quantity and quality of information companies. It will be indicated by positive stock price increases [15]. Concentration of ownership could be internal mechanisms of disciplining management as one of the mechanisms used to increase the effectiveness of monitoring, because of the ownership of large shareholders have information access that is significant enough to offset the advantage owned informational management [16].

In a modern company, there are shareholders in a large number of shares in which their behaviors are different from each other. The shareholders in large numbers this has a significant impact on the decisions taken by the company thus affecting the overall performance of the company [17]. Empirical research shows that stock ownership by management (insider) have a significant positive influence on the return on equity (ROE) [7], further research findings indicate a negative effect on ROE between institutional ownership, so that further research needs to be done regarding the influence of institutional ownership of the ROE [18]. Shareholding Concentration influence on return on equity showed inconsistent results. Institutional Ownership has positive effect on ROE [8,9]. The different results found in testing that showed that institutional ownership negative effect on ROE [10,19]. Other studies prove that institutional ownership is not significantly influence on the ROE in the banking industry [11,20].

H₁: Ownership concentration has a positive and significant influence on return on equity

2.2. Loan to Deposit Ratio and Return on Equity

Intermediary is the basic function of the banks. Collecting funds from the public and distribute it in the form of loans. Distribution of bank credit is a basic function of the intermediary function. Lending activities provide interest income at the bank. It is confirmed that the loan portfolio is measured by loan-to-deposit ratio (LDR) which is an important source of income for the banks. The greater lending, the greater interest income [21].LDR is a liquidity measurement that measures the amount of funds placed in the form of loans originating from the funds collected by banks (mainly public funds). The higher LDR showed increasingly risky bank liquidity conditions, otherwise the lower the LDR showed a lack of effectiveness of the bank in lending. The higher LDR, the higher the fund distributed to third parties. This will affect bank earnings (ROE) [22]. Empirical evidence shows that the loan to deposit ratio (LDR) has positive influence on return on equity as a proxy of profitability [23,24].

H₂:Loan to deposit ratio haspositive and significant impact on Return on Equity

2.3. Nonperforming Loan and Return on Equity

Nonperforming loans is one of the risks in the bank's credit system. The amount of nonperforming loans to total loans is measured by non-performing loan (NPL). Total credit is meant loans granted to third parties and does not include loans to other banks. The higher non-performing loans indicates that the banks are not professionals in credit management. Giving the indication that the level of lending risk tobanks are quite high. The smaller non-performing loans indicates the better management of credit and positive effect on the net interest margin [25]. One measurement of financial performance that are relevant from the point of view of shareholders is Return on Equity (ROE). ROE shows the performance in terms of operating efficiency as indicated by the profit margin and the efficiency of capital use. Through ROE, shareholders may obtain an overall picture of the operational performance. Empirical evidence shows that the NPL negatively affect the bank profitability [26]. H₃: Nonperforming loans has negative significant effect on Return on Equity

III. RESEARCH METHOD

The data used in this research is secondary data, especially data that has been published by the Indonesia Stock Exchange (BEI) in the form IDX 2003-2012 and 2003-2012 Annual Report IDX. These data are the annual report covering the years 2009-2013: ownership structure, LDR, NPL, and ROE. The population in this study are all listed banks on the Stock Exchange, amounting to 39 issuers. Criteria for the sample in this study among others: there is a concentration of ownership that is more than 40 percent, the data available for the five-year study includes initial share price, LDR, and NPL, the bank issuer during the study period did not perform corporate actions such as rights issue and stock split, and the shares were never in suspension by BEI authority. Based on these criteria, there are 30 listed banks are being sampled in this study. Multiple regression analysis was used to test and analyze the effect of the concentration of bank ownership, the loan to deposit ratio, and Non-performing loans to the Return on Equity. Then, to get a good regression model, will be applied to the classical assumption test consisting of multi colinearity test, autocorrelation test, normality test, and test tools heterokedastisitas with SPPS version 20.0

IV. RESULTS AND ANALYSIS

4.1. Regression Equation Model

Table 1. Effect of Ownership concentration, LDR, and NPL to ROE

Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---------------|--------------------------------|------------|------------------------------|--------|------|-------------------------|-------|
| | В | Std. Error | Beta | | | Tolerance | VIF |
| 1(Constant) | 15.689 | 6.655 | | 2.357 | .026 | | |
| Concentration | .013 | .044 | .048 | .301 | .765 | .998 | 1.002 |
| LDR | .214 | .078 | .028 | 2.743 | .019 | .996 | 1.004 |
| NPL | -1.718 | .462 | 588 | -3.716 | .001 | .998 | 1.002 |

a. Dependent Variable: ROE

Results of data management in Table 1 are used as a basis for modeling regression equation shown as follows:

 $Y = 15.689 + 0.048X_1 + 0.028X_2 + -0.588X_3 + e$

V. RESULTS AND DISCUSSION

5.1. The effect of ownership concentration to ROE

The influence of the concentration of ownership of shares Return on Equity (ROE), shows the value of regression coefficient of 0.048 with a positive sign. While the significance level obtained a value of 0.765. Thus concluded that the concentration of stock ownership is not a significant positive effect on ROE. The concentration of ownership has a positive effect and no significant effect on ROE. The negative sign explains that the higher the concentration of ownership, the lower the rate of profit is measured by ROE, but the effect was not statistically significant. Arguments that could explain the relationship; First, because of moral hazard management, that the concentration of ownership may adversely affect or do not contribute to the performance of the company because of the intervention of the owner of the management. These conditions can hamper the efforts and management actions. High interventions can affect the operational management leadership and supervision so as to reduce the power of creation and innovation managers to manage the company [14].

In addition, the companies with concentrated ownership, management tends to do the behavior of discretion, namely the tendency of management behavior that does not want the company growing too quickly because they feel thattheymight lose jobs and control over the company. Secondly, the argument motif transfer of wealth. That the concentration of bank ownership affect the level of risk. Great strength of the voting rights of shareholders to make expropriate or encourage certain parties to exercise the right of ownership as a controller which can be detrimental to the minority owners. Majority owners tend to transfer wealth from the banking control. These conditions make management of the entrenched position that allows the emergence of tunneling and managerial opportunism as actions that benefit themselves.. The third is entrenchment effects perspective. That the presence of foreign bank ownership raises stability influence that brings instability of national finance since foreign bank financing, especially on projects that are high-risk speculative. Banks with foreign ownership tend to divert funds obtained from a country with the aim of financing in other countries through its international financial network. This argument supports the agency entrenchment than agency convergence.

The implications of the results of this study explains the concentration of ownership of listed banks in Indonesia Stock Exchange whichdid not significantly affect the financial performance so that the hypothesis put forward unacceptable (H_1 = Rejected). This study supports previous research findings that institutional ownership is not significantly influence on the ROE in the banking industry [10,11,18,19,20]. Then resisting findings provide evidence that ownership by management (insider) and a significant positive effect on return on equity (ROE) [7,8,9].

5.2. The effect of loan to deposit ratio toward ROE

Effect of Loan to Deposit Ratio (LDR) to the Return on Equity (ROE) showed regression coefficient of 0.028 with a positive sign. While the significance level of 0.019 was obtained. Thus concluded that LDR hassignificant positive effect on ROE. Loan to Deposit Ratio (LDR) hassignificant positive effect on ROE. Positive sign explains that the higher the loan portfolio is measured by (LDR), the lower the rate of profit is measured by ROE. Arguments that could explain the relationship; First, as a source of income LDR Bank. The basic function of banks is intermediary, collecting funds from the public and distribute it in the form of loans. It is confirmed that the loan portfolio is an important source of income for banks. The greater lending indicated by the LDR, the greater the interest income of the bank, conversely the lower the LDR showed a lack of effectiveness of the bank in lending. The higher the higher LDR funds channeled to third party funds. The high distribution of third party funds positive effect on bank earnings [21].

Second, the decline in interest rates by Bank Indonesia. During 2009 to 2013, interest from Bank Indonesia (BI rate) tends to decrease. BI rate in 2009 was set at 7.5 percent level, then at 6.5 per cent in 2010-2011, at the level of 6.0 percent in 2012, and 5.75 percent in 2013. As a result, reduction in the BI rate, pushing the bussinessworld attempted to apply for credit in the bank. This is reflected in the increase of the average LDR of banks in Indonesia from 73.23 percent in 2009, rose to 75.42 in 2010, 76.61 percent in 2011, 83.12 percent in 2012, and to 85, 54 percent in 2013. LDR is high means that the bank credit expansion or lend high, so if the interest income earned on the loan is greater than the interest expense on deposits or deposits, the bank will increase profits anyway.Results of this study prove that the Loan to Deposit Ratio has significant positive effect against ROE, so the hypothesis is proven acceptable ($H_2 = \text{Support}$), these findings support previous research, that the loan to deposit ratio (LDR) positive effect on return on equity as proxy of profitability [23,24].

5.3. The effect of nonperforming loans toward ROE

Effect of Non Performing Loan (NPL) to Return on Equity (ROE) shows the value of regression coefficient of -0.588 with a negative sign. While the significance level obtained a value of 0.001. Thus concluded that the NPL have significant negative effect on ROE. Nonperforming loan (NPL) gavenegative and significant effect on ROE. The negative sign explains that the higher problem loans is measured by (NPL), the lower the rate of profit is measured by ROE. Arguments that could explain the relationship;

First, credit management effectiveness. High and low non-performing loans (NPL) showed effectiveness in managing bank lending. Based on average data bank NPL yan listed on the Indonesia Stock Exchange in 2009 to 2013 showed a declining tendency. In 2009, the average NPL of 3.15 percent, then to 3.20 percent (in 2010), declined to 2.28 percent (in 2011), 2.06 percent (in 2012), and continued to decline to only 1, 87 percent (in 2013). This shows that the bank issuers listed on the Indonesia Stock Exchange has effectively manage credit problems indicated by a decrease in NPL. The existence of non-performing loans will reduce interest income, so that the lower NPL positive effect on profits as measured by ROE.

Secondly, the argument effectiveness of supervision by Bank Indonesia. Regulating the intensive supervision of the bank that has the potential difficulties endangering its survival. One of the criteria that banks have the potential difficulties and endangering its survival, based on the level of NPLs.NPL (non performing loans) net basis more than 5% (five percent) of the total credit will be included in the category of banks with intensive supervision. All banks must manage non performing loan, including making various efforts such as renegotiate or rescheduling of non-performing loans.

These efforts have succeeded in reducing the average NPL bank and affect the profit increase. The research proves that the non-performing loans has significant negative effect on ROE, so the hypothesis proved to be acceptable (H_3 = Support) the evidence supporting the findings indicate that the NPL negatively affect the banking profitability [26].

VI. CONCLUSION AND RECOMMENDATIONS

The research proves ownership concentration but no significant negative effect on the Return on Equity, Loan to Deposit Ratio positive and hassignificant impact on Return on Equity and Non-Performing Loans hassignificant negative effect on return on equity in the banking sector in Indonesia Stock Exchange. Results of this study provide recommendations to the majority shareholders that the concentration of ownership of the bank provides no significant effect on the financial performance, mainly because of moral hazard considerations, the motive of the owners of wealth transfer, and the entrenchment effect of factors related to the tendency of international corporate owners to divert funds to finance the country others through the international banking network. Therefore, the majority shareholder should build trust by aligning their interests with the interests of minority shareholders and do not use the organization's resources for their own interests.

For the management of the bank. Changes in stock prices are an important feedback to management due to changes in stock prices reflects the public's assessment of the performance of management. This needs to be supported by operational management capabilities that can create a sense of security and comfort for the customers. In addition to increasing the growth of third party funds necessary to create confidence and convenience for customers. Confidence is influenced by the quality of the information presented to the public, stability of income, the bank's capital and guaranteed by the government for funds placed depositors. While comfort is determined by the price of products services, geographical distribution of services, facilities and the types of financial products or services offered to customers.

Other recommendations addressed to the banking authorities, that the effect of the concentration of bank ownership has no effect on the financial performance. Therefore, the banking authority should assess the maximum limit of foreign ownership of domestic banks up to 99 per cent today, given the banks a means of transmission of the monetary policy of the government. In addition, the concentration of bank ownership by foreigners to 99 percent on domestic banks should also be examined, including its effect on competition in the national banking industry, as proven concentration of bank ownership does not give effect to the financial performance. Lastly, the research recommends to the advanced research that the limitation in this study is when exactly the effect of bank ownership concentration (KKB), the loan to deposit ratio (LDR), and non-performing loan (NPL) effect on Return on equity (ROE) and to index stock price. Based on the limitations of this study can be developed a study involving other modeling and also the timing of the occurrence of changes in the price of each share under the influence of bank ownership concentration (KKB), LDR, NPL, and ROE.

REFERENCES

- [1] Ranciere, R., Tornell, A., &Westermann, F. (2006). Decomposing the effects of financial liberalization: Crises vs. growth. Journal of Banking & Finance, 30(12), 3331-3348. http://dx.doi.org/10.1016/j.jbankfin.2006.05.019
- [2] Nasution, A. (2003). Masalah-MasalahSistemKeuangandanPerbankan Indonesia. In Seminar Pembangunan HukumNasional VIII yang diselenggarakanolehBadan Pembinaan Hukum Nasional Departemen Kehakiman dan Hak Asasi Manusia RI tanggal 14 18 Juli 2003 di Denpasar.
- [3] Lambert, R. A. (2001). Contracting theory and accounting. Journal of accounting and economics, 32(1), 3-87. $\frac{\text{http://dx.doi.org/}10.1016/S0165-4101(01)00037-4}{\text{http://dx.doi.org/}10.1016/S0165-4101(01)00037-4}$
- [4] Ang, R. (1997). BukuPintarPasar Modal Indonesia (The Intelligent Guide to Indonesian Capital Market). Jakarta: Mediasoft Indonesia.
- [5] Brigham, F. Eugene (1983). "Fundamental of financial Management". The Dryden Press: Holt-Sounders Japan, Third Edition.
- [6] Moh'd, M. A., Perry, L. G., &Rimbey, J. N. (1998). The Impact of Ownership Structure On Corporate Debt Policy: a Time-Series Cross-Sectional Analysis. Financial Review, 33(3), 85-98. http://dx.doi.org/10.1111/j.1540-6288.1998.tb01384.x
- [7] Murali, R., & Welch, J. B. (1989). Agents, owners, control and performance. Journal of business finance & accounting, 16(3), 385-398. http://dx.doi.org/10.1111/j.1468-5957.1989.tb00025.x
- [8] Chaganti, R., &Damanpour, F. (1991). Institutional ownership, capital structure, and firm performance. Strategic Management Journal, 12(7), 479-491. http://dx.doi.org/10.1002/smj.4250120702
- [9] Husnan, S. (2001). Corporate Governance danKeputusanPendanaan: PerbandinganKinerja Perusahaan denganPemegangSahamPengendali Perusahaan MultinasionaldanBukanMultinasional. JurnalRisetAkuntansi, Manajemen, Ekonomi, 1(1), 1-12.
- [10] Setyarta. (2005). AnalisisPengaruhKepemilikanSahamInstitusi, KepemilikanSahamManajemendan Debt To Equity Ratio Terhadap Return On Equity, Tesis UNDIP Yang tidakDipublikasikan.
- [11] Sugiharto, Anton. (2007). AnalisisFaktor-faktor yang berpengaruhterhadap Return on Equity, Tesis UNDIP Yang tidakDipublikasikan.
- [12] Earle, J. S., Kucsera, C., &Telegdy, Á. (2005). Ownership Concentration and Corporate Performance on the Budapest Stock Exchange: do too many cooks spoil the goulash?. Corporate Governance: An International Review, 13(2), 254-264. http://dx.doi.org/10.1111/j.1467-8683.2005.00420.x
- [13] Siamat, Dahlan, (2009). Manajemen Bank Umum. Cetakan Pertama, Jakarta, Intermedia.

- [14] Heugens, P. P., Van Essen, M., & van Oosterhout, J. H. (2009). Meta-analyzing ownership concentration and firm performance in Asia: Towards a more fine-grained understanding. Asia Pacific Journal of Management, 26(3), 481-512. http://dx.doi.org/10.1007/s10490-008-9109-0
- [15] Gul, F. A., Kim, J. B., &Qiu, A. A. (2010). Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. Journal of Financial Economics, 95(3), 425-442. http://dx.doi.org/10.1016/j.jfineco.2009.11.005
- [16] Ooghe, H., & De Langhe, T. (2002). The Anglo-American versus the Continental European corporate governance model: empirical evidence of board composition in Belgium. European Business Review, 14(6), 437-449. http://dx.doi.org/10.1108/09555340210448794
- [17] Kang, D. L., & Sorensen, A. B. (1999). Ownership organization and firm performance. Annual review of sociology, 121-144. http://www.jstor.org/stable/223500
- [18] Suranta, E., &Midiastuty, P. P. (2003). AnalisisHubunganStrukturKepemilikanManajerial, Nilai Perusahaan danInvestasidengan Model Persamaan Linear Simultan. The Indonesian Journal of Accounting Research, 6(1).
- [19] Arman, Agus.(2014). Pengaruh Kepemilikan Asing Terhdap Tingkat Laba dan Harga Saham Emiten Perbankan di Bursa Efek Indonesia. Call for Paper Seminar Nasional Universitas Pendidikan Bandung, 2014.
- [20] Sahata. (2007). Pengaruhkepemilikaninstitusi, net profit margin, debt to equity ratio, dan ratio ratio bank terhadap return on equity. UNDIP
- [21] Ben Naceur, S., Goaied, M., &Belanes, A. (2005). A re-examination of dividend policy: A dynamic panel data analysis. Available at SSRN 856384.
- [22] Nusantara, Ahmad Buyung. (2009). AnalisisPengaruh NPL, CAR, LDR, DAN BOPO TerhadapProfitabilitas Bank (Perbandingan Bank Umum Go Publikdan Bank Umum Non Go Publik di Indonesia PeriodeTahun 2005-2007. Tesis Program Studi Magister Manajemen. UniversitasDiponegoro.
- [23] Gul, S., Irshad, F., &Zaman, K. (2011). Factors affecting bank profitability in Pakistan. The Romanian Economic Journal, 39, 61-87.
- [24] Zakaria.(2014). Pengaruh Kepemilikan Saham Asing Terhadap Kebijakan Dividen dan Kinerja Saham Sektor Perbankan di Bursa Efek Indonesia. Call for Paper Konferensi Nasional Riset Manajemen, PPM School of Management, Denpasar 2014..
- [25] Abdullah, Faisal.(2003). Manajemen Perbankan, Teknik Analisis Kinerja Keuangan Bank, Edisi Pertama, Yogjakarta, UMM Press.
- [26] Alexiou, C., &Sofoklis, V. (2009). Determinants of bank profitability: Evidence from the Greek banking sector. Economic annals, 54(182), 93-118.