HUMANIS
(Humanities,Management and Science Proceedings)

Vol. 2 • No. 1 • Desember 2021

Pege (*Hal.*) : **475 – 483**

ISSN (*online*) : 2746 - 4482
ISSN (*print*) : 2746 - 2250

JL.Surya Kencana No.1 Pamulang, Tangerang Selatan – Banten
Telp. (021) 7412566, Fax (021) 7412491
Email : humanisproccedings@gmail.com

Special Issue :
ICoMS2021
The 2nd International Conference on Management and Science

Website. :
http://www.openjournal.unpam.ac.id/index.php/SNH

The Effect Of Loan To Deposit Ratio And Debt Equity Ration On Return On Equity

(Empirical Study At Bank Rakyat Indonesia (Persero), Tbk Period 2009 – 2019)

May Randi Putra[1]; Ernawati Dwi Ayu[2]; Ayu Sindi Aprilia[3]); and Tomi[4]

Universitas Pamulang, Tangerang Selatan, Indonesia

E-mail: [a]mayrandiputra@gmail.com; [b]erdwiayu@gmail.com; [c] ayusindi98@gmail.com
[d] m.ttom28@gmail.com

Abstract: This study aims to determine the effect of Loan to Deposit Ratio (LDR), and Debt to Equity Ratio (DER) on Return to Equity Ratio (ROE) at Bank Rakyat Indonesia (Persero), TBK. The research method used is a quantitative method with a descriptive approach, namely analyzing financial statements and the data technique used is secondary data. This study uses a summary of financial report data from 2009 to 2019 at Bank Rakyat Indonesia (Persero), Tbk. the method used is multiple linear regression. And statistical data processing using SPSS version 22 software. The results showed that LDR had a negative and significant effect on ROE partially. This can be seen from the value of tcount -2.400 > ttable 2.364 with a significance value of 0.043 <0.05. DER has no significant positive effect on ROE partially. This can be seen from tcount 1.316 < ttable 2.364 with a significance value of 0.225 > 0.05. Simultaneously obtained Fcount 15,419 > Ftable 4.46 with a significance value of 0.002 <0.05, which means that LDR and DER have a significant effect on ROE simultaneously. The equation of the results of linear regression analysis Y = 71.008-0.675 (LDR) +0.011 (DER) + e. And the coefficient of determination is 0.794. This value explains that the effect of LDR, DER has an effect of 74.9% on ROE while 20.4% is influenced by other variables.

Keywords: loan-to-deposit ratio (LDR), debt-to-equity ratio (DER) and return to equity ratio (ROE)

INTRODUCTION

In the context of economic development that continues to grow, the banking sector is one of the financial institutions that has a fairly good level of public trust. Almost all business entities require banking services. As an institution that relies on customer trust, banks will certainly continue to provide convenience to customers to increase profits and encourage the development of the banking world.

The rapid development of the banking world and the large complexity of banking will affect banking performance. In order for banks to carry out good management, banks must have sufficient working capital so that bank operations can run as planned according to their objectives. Effective working capital management is a hope for banks today considering the existence of banks in a highly competitive banking industry.

Banks need to pay attention to the strength of a bank, which is very dependent on the owner and manager of the bank. Provisions related to banking integrity are intended as a benchmark for bank management to assess whether bank management has complied with applicable regulations. The strength of a bank can be assessed by analyzing its financial statements. The financial reports produced are intended to provide information to stakeholders regarding the financial performance and responsibilities of bank management.

Calculation of financial performance can be done in various ways, one of them with financial ratios. Financial ratios are activities to compare numbers in financial statements by dividing one number by another. There are many financial ratios used, including liquidity ratios, solvency ratios, profitability ratios. Where each ratio has its own purpose.

The liquidity ratio is one of the indicators of financial performance that measures the level of liquidity. The importance of liquidity can be seen by considering the impact of the company's ability to pay off its short-term debt (liabilities). In other words, it can return depositors' funds when billed and can respond to credit requests submitted. One way to measure bank liquidity is LDR. The loan/deposit ratio is a ratio that shows the amount of loans funded by third party funds. Bank Indonesia Regulation No. 13/24/DPNP dated October 25, 2011 set the LDR ratio between 80% to 110%. The higher the LDR, the higher the bank's profit (assuming the bank can channel its credit effectively). With the increase in bank profits, the bank's performance also increases

The solvency ratio is designed to see the company's ability to meet its total debt. In other words, how much debt is borne by the company compared to its assets. The solvency ratio is used to measure the company's ability to pay all of its debts. One of the methods used is the Debt to Equity Ratio. DER shows the ratio of debt to capital. This ratio is important because it relates to stock trading, which can have a positive or negative impact on the capital and profits of the company itself.

Profitability ratios are ratios that determine a company's ability to profit from revenue related to sales, assets, and equity based on a certain measure. The purpose of this ratio is to see the development of the company in a certain time span. One method that can be used is Return on Equity. ROE is a ratio to measure the company's ability to obtain profits available to shareholders. This ratio is influenced by the size of the company's debt, namely the greater the amount of debt owned, the greater the ratio.

To be significant some financial ratios must be able to be compared with company estimates, the historical value of the company or similar company ratios. Some ratios may not be representative and should be used as indicators or combined with other ratios to give an idea of the company's situation. The company's financial ratios may change from time to time.

During the period 2009-2019, BRI bank (Persero) experienced fluctuations in ROE. In 2009-2010 there was an increase of 4.47%, in 2011 the ROE decreased by 0.57%, while in 2012 the ROE decreased by 1.91%, in 2013 there was a decrease in ROE by 1.88%, in 2014 the ROE there was a decrease of 2.10%, in 2015 the ROE decreased by 2.36%, in 2016 the ROE decreased by 4.80%, while in 2017 there was a decrease in ROE by 0.36%, in 2018 the ROE increased by 0.14 %, and in 2019 ROE decreased by 1.02%.

During the period 2009-2010 LDR decreased by 6.10%, in 2011 LDR increased by 0.25%, in 2012 LDR increased by 3.65%, in 2013 there was an increase of 8.21% in LDR, in 2014 LDR decreased by 6.57%, in 2015 the LDR increased by 4.80%, in 2016 the LDR increased by 0.92, in 2017 the LDR increased by 0.14%, in 2018 the LDR increased by 1.42%, and in 2019 LDR increased by 1.22%.

DER in 2009-2010 decreased by 60.39%, in 2011 DER decreased by 159.21%, in 2012 DER decreased by 93.82, in 2013 DER decreased by 60, in 2014 DER increased by 31.15%, in in 2015 DER decreased by 44.03%, in 2016 DER decreased by 92.87%, in 2017 DER increased by 0.14%, in 2018 DER increased by 26.98%, and in 2019 DER decreased by 33, 29%.

Based on previous research, it will be described briefly because this research refers to several previous studies. In the research of H.M Khairunissa, et al (2016) who examined the effect of LDR on ROE, where the results showed that LDR had a negative and significant effect on ROE partially. Meanwhile, in the study of Jihan Aprilia, et al (2018), it was stated that LDR had no significant effect on ROE partially.

In the study of Zaki Imadudin, et al (2014) which examined the effect of DER on ROE, where the results showed that DER had an insignificant positive effect on ROE partially. Meanwhile, Adityo Joko Pratomo's research (2017) states that DER does not have a significant effect on ROE partially.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Management

The word management itself comes from the ancient French language, namely "management" which means the art of implementing and managing. In general terms management is an art in organizational science such as compiling, planning, building an organization and its organization, movement and control or supervision.

According to Malayu S.P Hasibuan (2016: 9) "management is the science and art of regulating the process of utilizing human resources and other resources effectively and efficiently to achieve a certain goal".

According to T. Hani Handoko (2012:8) "management is the process of planning, organizing, directing and supervising the efforts of organizations and the use of organizational resources in order to achieve predetermined organizational goals".

According to Irham Fahmi (2016:104) "management is the art of getting work done through other people. This definition means that a manager is in charge of organizing and directing others to achieve organizational goals.

From the above understanding it can be concluded that management is a process of planning, organizing, leadership, directing various resources in order to achieve company goals effectively and efficiently.

Financial management

In general, the notion of financial management is a process in the company's financial activities related to efforts to obtain company funds and minimize company costs and also efforts to manage the finances of a business entity or organization to be able to achieve the financial goals that have been set.

According to James C. Van Horne and John M. Wachowicz, Jr (2016:2) "financial management is related to assets, funding, and asset management based on several general objectives".

According to Sutrisno (2013: 3) "financial management or often called spending can be interpreted as all company activities related to efforts to obtain company funds at low costs and efforts to use and allocate these funds efficiently".

Meanwhile, according to Irham Fahmi (2016: 2) stated that "financial management is a combination of science and art that discusses, studies, and analyzes how a financial manager uses all company resources to seek funds, manage funds and distribute funds with the aim of providing profit or prosperity for shareholders and business sustainability for the company.

From the above understanding it can be concluded that financial management is a process of management activities to regulate the funding of the company's activities and minimize the company's financing to achieve the company's financial goals that have been set.

The main function of financial management is a tool to make decisions regarding investment, financing, and dividends for a company or organization.

According to Irham Fahmi (2016: 3) "financial management serves as a guide for company managers in every decision making". This means that a manager can make breakthroughs and activities, but all of them still do not apply the principles that apply in the science of financial management.

Financial statements

Financial reports are periodic reports that summarize the company's activities. Financial statements are generally used by buyers of capital such as creditors, investors, and by the company itself related to the interests of management and evaluating the company's performance.

According to Munawir quoted in Irham Fahmi's book (2016: 21) stated that "financial reports are a very important tool to obtain information in relation to the financial position and results achieved by the company concerned. Thus, financial statements are expected to help users to make economic decisions that are financial in nature.

According to Kasmir (2018:7) "financial statements are reports that show the company's financial condition at this time or in a certain period. The purpose of financial statements that show the current condition of the company is the current condition.

According to Irham Fahmi (2016: 21) "financial statements are information that describes the financial condition of a company, and more information can be used as a description of the company's financial performance".

Meanwhile, according to Sutrisno (2013: 9) "financial statements are the final result of the accounting process which includes two main reports, namely the balance sheet and profit and loss statements. Financial statements are prepared with the intention of providing financial information of a company to interested parties as material for consideration in making decisions.

Based on the above understanding, it can be concluded that the financial statements are the result of an accounting process in the form of a financial summary during the current financial year which is used as a tool for communication and decision making by interested parties.

Financial statements in general aim to provide financial information of a company, either at a certain time or a certain period to parties inside and outside the company who have an interest in the company.

According to Irham Fahmi (2016: 5) "the purpose of financial statements is to provide information to parties in need about the condition of a company from the point of view of numbers in monetary units".

From the above understanding it can be concluded that the purpose of financial statements is to provide complete information about the financial condition to external and internal parties in the company to be able to make the right decisions for the development of the company.

METHODS

Types and sources of data

The type of data used in this study is quantitative data, and the source of data used in this study is secondary data. Secondary data is a source of data obtained indirectly, namely through media intermediaries (obtained and recorded by other parties). Secondary data in this study comes from reports from companies listed on the Indonesia Stock Exchange. The data was obtained through the website www.idx.co.id.

In the sampling technique used purposive sampling technique. Where the sample is taken from the population that is determined based on the criteria that have been set in this study. The sample used in this study is the financial statements of PT. Bank Rakyat Indonesia (Persero), Tbk. the period 2009-2019 with a total of 11 data.

Dependent Variable

In this study, the dependent variable is Return on Equity (ROE). The ROE ratio can show the company's level of efficiency in the use of its own capital. The higher the ROE, the better. It indicates that the company's position will look stronger and vice versa. The formula that can be used is as follows:

$$ROE = \frac{Profit\ after\ tax}{Total\ equity} x100\%$$

Independent Variable

In this study, the variables tested as independent variables include the Loan to Deposit Ratio (LDR), and the X2 variable is the Debt to Equity Ratio (DER).

1. **Loan to Deposit Ratio (LDR)**

   According to kasmir (2018:225) "Loan to Deposit Ratio (LDR) is a ratio used to measure the composition of the amount of credit given compared to the amount of public funds and own capital used". The formula that can be used in calculating the ldr ratio is as follows:

$$LDR = \frac{Total\ \text{credit}}{\text{total third party funds}} x100\%$$

2. **Debt to Equity Ratio (DER)**

   According to Kasmir (2018:157) "Debt to Equity Ratio (LDR) is a financial ratio used to assess debt and company equity. This ratio is used to determine the total funds provided by the borrower (creditor) with the owner of the company. In other words, how much is the value of each rupiah of the company's capital that is used as debt security? The formula that can be used in calculating the der ratio is as follows:

$$DER = \frac{\text{Total Liability}}{\text{Total equity}} x100\%$$

Hypothesis testing

Test t

According to Ghozali (2016: 97) "the t-test statistic basically aims to show how far the influence of one explanatory/independent variable individually in explaining the dependent variable". This test can be done by comparing tcount with ttable with a significance of 5% (0.05) with degrees of freedom (df/2=n-k). With the following conditions:

1. If t-count > t-table, then there is a partial effect of the independent variable on the dependent variable.
2. If t-count < t-table, then there is no effect of the independent variable on the dependent variable partially.

For tests based on significance values:

1. If the significance value is <0.05, then the proposed hypothesis is accepted or said to be significant.
2. If the significance value is > 0.05 then the proposed hypothesis is rejected or said to be insignificant.

Test f

According to Ghozali (2016: 98), "the F test is used to show whether all independent or independent variables included in the model have a joint influence on the dependent or dependent variable. The test of this research can be done by comparing Fcount with ftable with a significance level of 0.05 with degrees of freedom (df/2=n-k). With the following criteria:

1. If F-count > F-table, the variable has no effect on the variable simultaneously.
2. If F-count < F-table, then the independent variable has no effect on these variables simultaneously.

For tests based on significance values:

1. If the significance value is <0.05, then the proposed hypothesis is accepted or said to be significant.
2. If the significance value is > 0.05 then the proposed hypothesis is rejected or said to be insignificant.

Determination Test

According to Ghozali (2016: 95) "the coefficient of determination (R2) essentially measures how far the model's ability to explain the variance of the dependent variable is". The value of the coefficient of determination is between zero and one. If the value of R2 is close to 1 (one), it can be said that the stronger the model in explaining the variance of the independent variable to the dependent variable. Conversely, if R2 is close to 0 (zero) then the variance of the independent variable will be weaker to explain the dependent variable.

RESULT AND DISCUSSION

Hypothesis testing

The results of statistical calculations from the Hypothesis test can be seen from the following tests:

Partial Test (t Test)

The t-test basically aims to show how far the influence of one explanatory/independent variable individually in explaining the dependent variable.

Table 1. Partial Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	71,008	28,051		2,531	,035
LDR	-,675	,281	-,608	-2,400	,043
DER	,011	,008	,333	1,316	,225

(Source: data processed by spss 22)

From the results of the table, the results of the partial test can be concluded as follows:

1. The results of hypothesis testing the effect of LDR (X1) on ROE (Y)
   It can be seen that the t-count value in the LDR is -2.400 and the t-table value is 2.306 with a significance value of 0.043 <0.05. So it can be concluded that LDR has a negative and significant effect on ROE partially.
2. The results of hypothesis testing the effect of DER (X2) on ROE (Y)
   It can be seen that the t-count value on the DER is 1.316 and the t-table value is 2.306 with a significance value of 0.225 > 0.05. So it can be concluded that DER has a positive and not significant effect on ROE partially.

Simultaneous Test (t Test)

The F test is used to show whether all the independent variables included in the model have a joint effect on the dependent variable. The calculation results can be seen in the table below.

Table 2. Simultaneous Test (t Test)

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	249,690	2	124,845	15,419	,002^b
Residual	64,773	8	8,097		
Total	314,463	10			

(Source: data processed by spss 22)

From the table results it can be seen that the f test results show that the Fcount value is 15,419 with a significance of 0.002 with degrees of freedom (df2=n-k) where n = 11 values and K = 3. While the F-table value is 4.46. With this it is known that the F-count value is 15,419 > F-table 4.46 with a significance value of 0.002 <0.05. So it can be concluded that LDR and DER have a positive and significant effect on ROE simultaneously.

Determination Test (R2)

The coefficient of determination (R2) essentially measures how far the model's ability to explain the variance of the dependent variable is. The value of the coefficient of determination is between zero and one. If the value of R2 is close to 1 (one), it can be said that the stronger the model in explaining the variance of the independent variable to the dependent variable. Conversely, if R2 is close to 0 (zero) then the variance of the independent variable will be weaker to explain the dependent variable. Then the following results can be obtained:

Table 3. Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,891[a]	,794	,743	2,84546

(Source: data processed by spss 22)

From the results of the table above shows the value of the coefficient of determination (R square). From the processed data, the coefficient of determination (R square) is 0.794 or 79.4%, meaning that the influence of the independent variables (LDR and DER) on the dependent variable (ROE) is 79.4%, the remaining 20.6% is influenced by other factors outside the independent variables studied.

CONCLUSIONS

This study examines whether Loan to Deposit Ratio (LDR) and Debt to Equity Ratio (DER) to Return On Equity Ratio (ROE) at PT. Bank Rakyat Indonesia (Persero), Tbk. In this case LDR and DER as independent variables and ROE as dependent variable.

Based on the results of the research that has been discussed in the previous chapter, the following conclusions can be drawn:

1. LDR has a negative and significant effect on ROE partially. This can be seen from the t-count -2.400 > t-table 2.306 with a significance value of 0.043 <0.05. Which means that LDR has a negative and significant effect on ROE partially.
2. DER has no significant positive effect on ROE partially. This can be seen from the count 1.316 < t-table 2.306 with a significance value of 0.225 > 0.05. Which means that DER has no significant positive effect on ROE partially.
3. LDR and DER have a positive and significant effect on ROE simultaneously. This can be seen from the F-count value of 15.419 > F-table 4.46 with a significance value of 0.002 <0.05.
4. From the multiple linear regression equation, the constant value of 71.008 means that if the LDR and DER are assumed to be constant, the Return on Equity will change by 71.008%.
5. coefficient of determination (R square). From the processed data, the value of the coefficient of determination (R square) shows the value of the coefficient of determination (R square) of 0.794 or 79.4%, meaning that the influence of the independent variables (LDR and DER) on the dependent variable (ROE) is 79.4% while the rest 20.6% is influenced by other factors outside the independent variables studied.

REFERENCE

Fahmi, I. (2012). *Analisis Laporan Keuangan Cetakan Ke 2.* Bandung: Alfabeta.

Fahmi, I. (2016). *Manajemen Sumber Daya Manusia Teori dan Aplikasi.* Bandung: Alfabeta.

Ghozali. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS.* Semarang: Badan Pernerbit Universitas Diponegoro.

Ghozali, I. (2016). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 23 Edisi 8.* Semaarang: Badan Penerbit Universitas Diponegoro.

Handoko, T. H. (2012). *Manajemen Personalia dan Sumber Daya Manusia.* Yogyakarta: BPFE.

Harahap, S. S. (2013). *Analisa Kritis Atas LAporan Keuangan.* Jakarta: Rajawali Pers.

Hasibuan, S. P. (2016). *Manajemen Sumber Daya Manusia Edisi Revisi.* Jakarta: Bumi Aksara.

Horne, J. C. (2016). *Prinsip-Prinsip Dasar Manajemen Edisi 13.* Jakarta: Salemba Empat.

Imadudin, Z. S. (2014). Pengaruh Struktur Modal Terhadap Kinerja Perusahaan. *Jurnal Wawasan Manajemen Universitas Lambung Mangkurat (Vol. 2, No. 1 Februari 2014)* , 115-122.

Kasmad. (2018). Perubahan Return On Asset (ROA) yang diakibatkan adanya perubahan pada NOn Performing Loan (NPL) dan Loant to Deposit RAtio (LDR) pada Bank Negara Indonesia Persero, Tbk. *Jurnal Kreatif Universitas Pamulang No. 1 Januari 2018* , 59-72.

Harras, H., Sugiarti, E., & Wahyudi, W. (2020). Kajian Manajemen Sumber Daya Manusia Untuk Mahasiswa.

Fajri, C., Rahman, Y. T., & Wahyudi, W. (2021). MEMBANGUN KINERJA MELALUI LINGKUNGAN KONDUSIF, PEMBERIAN MOTIVASI DAN PROPORSIONAL BEBAN KERJA. *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business*, *4*(1), 211-220.

Mawardi, S., Arsid, A., & Wahyudi, W. (2021). ANALISIS PERASAAN SENANG (KEPUASAN) TERHADAP HASIL KERJA YANG DIUKUR MELALUI KOMUNIKASI, EFIKASI DAN PENGHARGAAN DIRI. *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business*, *4*(4), 850-858.

Kasmir. (2018). *Analisis Laporan Keuangan.* Jakarta: Raja Grafindo Persada.

Kasmir. (2014). *Dasar-Dasar Perbankan Edisi Revisi.* Jakata: Raja Grafindo Persada.

Khairunissa, M. H. (2016). Pengaruh CAR, LDR, BOPO Terhadap Profitabilitas (ROA dan ROE) Bank Persero Indonesia Yang Dipublikasikan Bank Indonesia Periode 2010-2015. *Jurnal Ilmu Administrasi Bisnis (JAB) Universitas Diponegoro (Vol. 5 No. 4 2016)* , 264-271.

Martono. (2018). Pengaruh Return On Equity Dan Loan To Deposit Ratio Terhadap Price Earning Ratio Pada Perusahaan Rokok Yang Terdaftar Di Bursa Efek Indonesia Periode 2012-2016. *Jurnal Ekonomi Efektif Universitas Pamulang (Vol. 2 No. 1 Oktober 2019)* , 123-130.

Pratomo, A. J. (2017). Pengaruh Debt to Equity Ratio (DER) dan Current Ratio (CR) terhadap Return On Equity (ROE) Studi Empiris Pada Perusahaan Sub Sektor Kabel Yang Terdaftar Di Bursa Efek Indonesia Pada Tahun 2013-2016. *e-Journal Administrasi Bisnis 5(4) Universitas Mulawarman* , 942-956.

Solihin, I. (2010). *Pengantar Manajemen.* Jakarta: Erlangga.

Sugiyanto, S. (2019). The Liquidity, Profitability, Good Corporate Goverance, Corporate Value Committee. . *Proceedings Universitas Pamulang, 1(1)* .

Sugiyanto, S., & Tukiyat, T. (2021). inancial Contagion and Good Corporate Governance on Bank Companies Performance in Indonesian Stock Exchange. *EAJ (Economic and Accounting Journal, 4(3)* , 164-178.

Sugiyanto, S., Kartolo, R., & Ali, M. (2021). INTERVINING DEBT POLICY THE EFFECT FREE CASH FLOW AND INVESTMENT OPPORTUNITY SET TO DIVIDEND POLICY. *SCIENTIFIC JOURNAL OF REFLECTION: Economic, Accounting, Management and Business, 4(3)* , 642-652.

Sugiyono. (2013). *Metodologi Penelitian Kuantitatif, Kualitatif dan R&D.* Bandung: Alfabeta.

Sugiyono. (2017). *Statistika Untuk Penelitian.* Bandung: Alfabeta.

Sutrisno. (2013). *Manajemen Keuangan, Teori, Konsep dan Aplikasi Cetakan ke Sembilan.* Yogyakarta: Ekonisia.

Wahyu, W., & Salam, R. (2020). KOMITMEN ORGANISASI (Kajian: Manajemen Sumber Daya Manusia).

Surat Edaran Bank Indonesia No.13/24/DPNP Tanggal 25 Oktober 2011, Diakses Pada Tanggal 13 September 2019. Dari http://www.bi.go.id/

Surat Edaran Bank Indonesia No.6/23/DPNP Tanggal 31 Mei 2011, Diakses Pada Tanggal 13 September 2019. Dari http://www.bi.go.id/

Surat Edaran Bank Indonesia No.3/30/DPNP Tanggal 14 Desember 2001, Diakses Pada Tanggal 13 September 2019. Dari http://www.bi.go.id/

www.idx.co.id