# Analysis of the Determining Factors of Financial Distress (A Case Study at PT. Bank Rakyat Indonesia (Persero)

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#### **Abstract**

Economic misery is a circumstance in which the debtor can not satisfy his/her duties to creditors after they fall due. economic distress is the country of the company experiencing economic problems and is threatened with financial ruin. The motive of this study become to decide the impact of Capital Adequacy Ratio (vehicle), Operational costs on working profits (BOPO), Non appearing Loans (NPL), loan to Deposite Ratio (LDR), and go back On belongings (ROA) on monetary distress. This studies changed into conducted at PT (restrained enterprise) bank Rakyat Indonesia (Persero) Tbk. The number of samples is 32 with purposive sampling method. information became gathered using a documentation method, specifically through quarterly monetary document data from 2013-2020 posted at the monetary offerings Authority internet site, www.o.k.go.identity. The effects of speculation testing suggest that the Capital Adequacy Ratio (vehicle) variable has a positive impact on economic misery. Operational fees on running profits (BOPO) have a nice impact on economic distress. Non-appearing loan (NPL) has a terrible effect on financial misery. mortgage to deposit ratio (LDR) has a terrible impact on monetary distress. return on belongings (ROA) has a high quality impact on economic distress. therefore, Capital Adequacy Ratio (automobile), Operational price to operating profits (BOPO), Non acting mortgage (NPL), loan to Deposit Ratio (LDR), and return On assets (ROA) simultaneously affect economic distress.

**Keywords:** Capital Adequacy Ratio (vehicle), Operational fee on running earnings (BOPO), Non appearing loan (NPL), loan to Deposit Ratio (LDR), go back On belongings (ROA), monetary distress

## 1. Introduction

## 1.1 Introduce the Problem

The economy is growing very rapidly along with the many kinds of financial institutions that make the state of the economy continue to develop. The most developed financial institution and the biggest role in the economy are banking financial institutions. Bank is a financial institution that is a place for companies, government and private agencies, as well as individuals to store their funds.

Banking has the most important role in the economic sector. This is because the bank has the task of being an intermediary institution as a place for storing and distributing public funds which is very crucial and the bank is launching a payment system mechanism for all sectors of the economy.

PT (Limited Company) Bank Rakyat Indonesia (Persero) Tbk is one of the largest banks in Indonesia whose financial performance as seen from the soundness of the bank is very influential on customers and investors in investing their savings and shares in Bank Rakyat Indonesia, because currently Bank Rakyat Indonesia is more consistently focuses on providing services to the micro, small and medium enterprise (MSME) segment and services to customers. Bank Rakyat Indonesia is one of the State Companies (Persero Tbk) owned by the Indonesian government which provides banking services as well as government commercial banks and other national private commercial banks. To determine the bank's performance and financial condition at Bank Rakyat Indonesia, a financial ratio analysis can be used.

## 1.2 Explore Importance of the Problem

Financial ratio analysis is an analytical technique to help evaluate the company's financial statements by combining the numbers between profit and loss and balance sheets. Analysis of the company's financial ratios can provide information about the financial condition in a systematic way and provide an assessment process

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that aims to evaluate the financial position and results of operations of the company in the past and present. One of the objectives of financial ratio analysis is to estimate the survival of the company or the level of bankruptcy of the company.

Failure in one bank can cause a domino effect in another industry. The risk experienced would be very large, if the banking intermediation process stops, it will cause the payment system to crash and chaos can occur in various economic activities as a whole, resulting in negative impacts on all sectors of the economy (Synta, 2018). Financial institutions must improve their performance in order to avoid financial problems or financial distress.

monetary misery is a circumstance wherein the debtor can not satisfy his/her duties to lenders when they fall due. financial misery is wherein the corporation is experiencing financial difficulties and is threatened with bankruptcy. (Patunrui & Yati, 2017) stated that financial distress is a very severe liquidity problem and cannot be resolved without changing the operational size or structure of a company.

Financial distress conditions, namely the banking system that is unstable and not handled properly, will have the impact of experiencing bankruptcy and being forced to be liquidated and this requires very large rescue costs. This will be detrimental to external parties, especially investors.

The COVID-19 pandemic has resulted in uncertain economic conditions in Indonesia, and has given rise to a high risk of a company experiencing financial difficulties or even bankruptcy. Errors in predicting the continuity of a company's operations in the future can be fatal. Therefore, the importance of a bankruptcy prediction model for a company is something that is needed by various parties such as lenders, investors, governments, accountants, and management.

Altman Z-Score prediction model is one of the bankruptcy prediction models that can be used to identify bankruptcy. Altman Z-Score is a statistical technique used to predict bankruptcy by relying on financial ratios.

in the banking dictionary (Institut Bankir Indonesia) CAMEL is the factor that has the maximum have an effect on at the bank's monetary situation, which additionally impacts the steadiness of the financial institution. CAMEL is a benchmark that turns into the item of bank inspections executed via bank supervisors. The CAMEL ratios used to detect monetary distress include the capital adequacy ratio (vehicle), non-appearing mortgage (NPL), mortgage to deposit ratio (LDR), return on belongings (ROA), and operational charges on operating profits (BOPO). The ratios contained in CAMEL are considered with a purpose to help monetary establishments to evaluate the factors that would have an effect on the financial institution's overall performance (Number 3/30/DPNP dated December 16, 2011).

Corporations that have the ability to experience financial disaster with the emergence of financial misery in keeping with researchers are very fascinating to be studied because it's miles a risk that may be skilled by means of all companies no matter the sort or size of the organisation and the prevalence can show up at any time. Seeing the huge losses for various parties raises the idea that financial distress through prediction models need to be developed in the hope that they can be used as a reference to identify early on the conditions that lead to bankruptcy.

## 1.3 Describe Relevant Scholarship

Financial Distress is a reflection of the early stages in a company before going bankrupt. Common terms describing these situations are failure or inability to repay debt, negative financial performance, and liquidity problems (Aminah et al., 2019). A organization will enjoy monetary misery when the company's working coins glide cannot meet brief-time period obligations, which includes charge of mortgage hobby that is due. The more the liability of a company, the more hazard of financial distress. further, economic misery is a condition wherein a agency's working coins waft state of affairs can't be good enough, specifically to pay off its modern responsibilities which includes interest cost or alternate payables, and the enterprise could be pressured to take corrective motion.

Vehicle is a capital adequacy ratio that has a function to accommodate the threat of loss of a bank. According to (Mawardi, 2020) if the bank experiences capital difficulties, of course the depositors will experience a decrease in their sense of trust in the funds that have been distributed to the bank, automatically the depositors would doubt the bank's performance. The higher the auto, the higher the capacity of a bank to bear risks from credit score or productive property that can be at chance. If the auto price is high, the bank will be capable of finance an operational activity and can provide a massive enough profitability for the corporation.

The BOPO ratio is an performance ratio which can be used to measure the potential of financial institution control to govern operational prices on working profits. The low performance of operational expenses will minimize banks experiencing misery (Febriana, 2019), operating expenses are costs incurred by using the

financial institution to carry out its fundamental business sports, running income is the main earnings of the financial institution wherein interest earnings is received from putting price range in the form of credit score. A high BOPO ratio might illustrate the financial institution's lack of capability to reduce operational expenses in order that it could purpose losses because the financial institution is less green in managing its enterprise. The low price of the BOPO ratio is without delay proportional to the low value of the performance of banking operational prices.

NPL is a comparison between the amount of credit that has been given and the level of collectibility with the total credit that has been given by the bank (Hutasoit, MRF and Haryanto, 2016). Non Performing Loan is a ratio used to determine the quality of assets owned by the bank. From the calculation of the NPL, the value of non-performing loans will be obtained. A low NPL value indicates that the quality of the assets owned by the bank is better. Bank Indonesia sets the criteria for a good NPL ratio for banks to be 5% (Hutasoit, MRF and Haryanto, 2016).

The LDR ratio is a assessment between the entire credit score granted through the financial institution and the price range received through the bank. LDR explains how a great deal credit is given to offset the financial institution's duties to the owner of the price range. LDR indicates the extent of the financial institution's ability to channel the accrued 0.33 birthday party funds. The better the LDR ratio, the decrease the financial institution's liquidity capacity and the decrease the steadiness of the bank, and the higher the possibility of a financial institution going bankrupt (Nuranto & Ardiansari, 2017). If there is an growth in the LDR ratio, there could be a lower in bank liquidity that can reason monetary distress situations, due to the fact the financial institution does not have sufficient funds to satisfy the withdrawal of 1/3 celebration finances (Choirina et al., 2015).

ROA is a ratio used to see the extent to which the ability of the assets that have been invested in reciprocity in the form of profits is in line with expectations. The high level of profitability of a bank minimizes the possibility of the bank experiencing financial distress (Theodorus & Artini, 2018). The ROA ratio is used by banks to measure the ability of bank management to earn profit before being taxed which is sourced from the average total assets owned by the bank. The high and low income of a bank can be seen from the ROA ratio (Andari & Wiksuana, 2017). Furthermore, if the profit that has been obtained by the bank has increased, the better operational activities will have an impact on the probability of the occurrence of financial distress to be decreasing.

#### 2. Method

The place of research become at PT financial institution Rakyat Indonesia (Persero) Tbk with quarterly financial records from the years 2013 to 2020 accessed thru the www.alrightgo.id website. The statistics used is quantitative statistics within the form of numbers received from the quarterly reports of PT financial institution Rakyat Indonesia (Persero) Tbk. The records source used is secondary records within the form of economic statements for 2013-2020 with 32 samples received from the quarterly economic record records of PT bank Rakyat Indonesia (Persero) Tbk for 8 years from 2018-2020. Sampling was achieved with the aid of using a consultant purposive sampling technique in order that it suits the predetermined standards. The information series method used is a documentation approach in which facts is accrued by way of reading the information received from secondary data resources, accompanied by using recording and counting.

The information evaluation technique begins with descriptive records, classical assumption take a look at become done using normality test, multicollinearity check, heteroscedasticity test, autocorrelation check. The analytical model used includes a couple of linear regression, coefficient of determination test (R 3, partial check (t-check), simultaneous test (f-check). All statistics evaluation used the IBM SPSS software version 23.

#### 3. Results

Descriptive statistical analysis affords a description of facts visible from the common cost (imply), most cost, minimum fee, and wellknown deviation of every variable namely Capital Adequacy Ratio (automobile), working prices on running profits (BOPO), Non appearing Loans (NPL), mortgage to Deposit Ratio (LDR), return On belongings (ROA), and monetary distress. The consequences on this study may be described inside the description of every variable as follows:

## Capital Adequacy Ratio (X1)

The average value (suggest) is 20.2197 and the usual deviation cost is 1.73013 that is lower than the common fee, consequently indicating that there may be no fluctuation in Capital Adequacy Ratio (car). The maximum value is 22.96 and the minimal fee is sixteen.ninety nine.

#### 2. Operating costs to operating income (X2)

The common cost (mean) is sixty nine.0709 and the usual deviation is five.24486, that's decrease than the average fee, accordingly indicating that there is no fluctuation in working prices on operating profits (BOPO). The maximum cost is eighty one.22 and the minimum value is 60.46.

## 3. Non-performing loan (X3)

The average price (mean) is 1.4528 and the same old deviation price is 0.97126 that is lower than the common cost, for that reason indicating that there's no fluctuation in Non-performing loans (NPL). The maximum fee is 3.02 and the minimal value is 0.31.

## 4. Loan to deposit ratio (X4)

The average value (mean) is 89.0613 and the standard deviation is 3.72218 which is lower than the average value, thus indicating that there is no fluctuation in the Loan to deposit ratio (LDR). The maximum value is 95.27 and the minimum value is 80.47.

#### 5. Return on assets (X5)

The average value (mean) is 3.7572 and the standard deviation value is 0.78415 which is lower than the average value, thus indicating that there is no fluctuation in Return on assets (ROA). The maximum value is 5.03 and the minimum value is 1.98.

#### 6. Financial Distress (Y)

The average value (mean) is 1.46459 and the standard deviation is 0.379837, which is lower than the average value, thus indicating that there is no fluctuation in Financial Distress. The maximum value is 3,131 and the minimum value is 1,000.

Normality Test

## Resukt of Clasically Asumption follow:

- 1. The normality check used the non-parametric statistical Kolmogorov-Smirnov (KS) take a look at. If the opportunity (asymp.Sig) > 0.05 then H0 is universal and if the opportunity is < 0.05 then H0 is rejected. The outcomes of the SPSS output studies acquired an asymp.Sig price of zero.225 that's extra than the importance stage  $\alpha = 0.05$ , which means the residual facts is usually dispensed.
- 2. This multicollinearity test may be visible with the tolerance value and Variance Inflation component (VIF). it's far said that there may be no multicollinearity if the VIF value is much less than 10 and the tolerance price is more than zero.10. The outcomes of this take a look at suggest that the tolerance fee of the Capital Adequacy Ratio (automobile) variable is zero.629, the variable working costs to operating income (BOPO) is zero.130, the Non-performing mortgage (NPL) variable is 0.228, the mortgage to deposit ratio (LDR) variable is 0.748 and the go back on property (ROA) variable is zero.078 that's extra than 0.1 and the VIF value of the Capital Adequacy Ratio (vehicle) variable is 1.590, the variable operating prices on operating income (BOPO) is 7,684, the Non-acting mortgage (NPL) variable is 4,377, the mortgage to deposit ratio (LDR) variable is 1.338 and the go back on assets (ROA) variable of eight,868 is below 10. Then it is able to be said that the regression equation received is unfastened from the multicollinearity hassle.
- 3. Heteroscedasticity take a look at used the Park check by using raising the residuals after which in the herbal logarithm (Ln). The standards are if the significance value of the unbiased variable < 0.05 then heteroscedasticity occurs, and if the significance value of the independent variable > zero.05 then there is no heteroscedasticity. The effects of this observe are supplied in table 4 which suggests the significance cost of the Capital Adequacy Ratio (automobile) variable of 0.937, the running costs on operating earnings (BOPO) variable of zero.010, the Non-appearing mortgage (NPL) variable of 0.274, the variable loan to deposit ratio (LDR) ) is 0.248 and the return on property (ROA) variable is 0.006, that's extra than the zero.05 importance level. Then it can be stated that the received regression equation is loose from heteroscedasticity troubles.
- 4. Autocorrelation test become performed the usage of Durbin Watson check (DW take a look at). The consequences of this look at indicate that the value of Durbin Watson 2.034 is more than the fee of du 1.818, so it may be concluded that there's no autocorrelation.

#### **Multiple Linear Regression Analysis**

more than one linear regression analysis became used to take a look at the impact of the impartial variables Capital Adequacy Ratio (car), Operational prices on running profits (BOPO), Non-performing loans (NPL), mortgage to deposit ratio (LDR), and go again on property. (ROA) on financial distress. based totally totally on

the outcomes of SPSS, the acquired a couple of regression equation model is as follows:

Z-Score = 6814 DISTRESS + 0048 CAR + 0.077 BOPO + 0.120 NPL - 0014 LDR + 0.810 ROA + e

Based on the above results, the following can be explained:

- 1. constant price of 6814 suggests that the unbiased variables (automobile, BOPO, NPL, LDR, and ROA) are zero, then monetary misery will arise at 6,814.
- 2. The Capital Adequacy Ratio (vehicle) variable suggests a significance fee of 0.002 which has a importance price less than zero.05 with a regression coefficient of 0.048. as a consequence, it can be concluded that the Capital Adequacy Ratio (vehicle) variable has a high quality effect on monetary misery.
- 3. working charges on operating income (BOPO) variable shows a significance cost of 0.003 whose importance cost is less than zero.05 with a regression coefficient of zero.077. as a result it is able to be concluded that the variable running expenses on running income (BOPO) has a fine effect on economic distress.
- 4. The non-appearing mortgage (NPL) variable shows a significance value of zero.792, whose importance cost is greater than zero.002, that's much less than zero.05 with a regression coefficient of 0.120. hence it is able to be concluded that the Non-performing loan (NPL) variable has a advantageous impact on financial misery.
- 5. The loan to deposit ratio (LDR) variable shows a importance value of zero.491, whose significance cost is extra than zero.05 with a regression coefficient of -zero.014. for this reason it could be concluded that the mortgage to deposit ratio (LDR) variable has a terrible impact on financial misery.
- 6. The go back on property (ROA) variable indicates a importance cost of zero.003 whose importance cost is much less than 0.05 with a regression coefficient of zero.810. as a consequence it could be concluded that the go back on belongings (ROA) variable has a fine effect on economic misery.

#### The coefficient of determination (R 3

The coefficient of willpower (R2) basically measures how some distance the version's ability to provide an explanation for variations inside the established variable. The cost of the coefficient of dedication is between zero to one. From the check outcomes, the Adjusted R square value of 0572 is obtained, so that it could be calculated by means of the following equation:

$$D = 0572 \times 100\% = 57.2\%$$

primarily based on those calculations, it could be defined that the contribution of the effect of Capital Adequacy Ratio (vehicle), the operational costs on working income (BOPO), Non-acting loan (NPL), loan to deposit ratio (LDR), and go back on assets (ROA) variables to monetary misery at PT financial institution Rakyat Indonesia (Persero) Tbk amounted to fifty seven.2%, even as the remaining 42.8% become prompted by way of other variables that were now not included in this studies model.

## Partial Test (T-Test)

T-take a look at is used to decide in part whether the independent variable has a sizable or no effect on the dependent variable. If the significance fee is <0.05, then the independent variable individually affects the dependent variable. If the significance value is >0.05, the impartial variable in my opinion has no impact at the established variable. From the results of the SPSS output, the significance cost for each variable is acquired as follows:

- 1. The effects of the statistical check display the significance fee of the Capital Adequacy Ratio (vehicle) is 0.002 < zero.05. So it can be concluded that the Capital Adequacy Ratio (car) variable has a tremendous impact on monetary distress.
- 2. The results of statistical tests display the significance price of working expenses on operating earnings (BOPO) is zero.003 < 0.05. So it could be concluded that the running fees on working profits (BOPO) variable has a effective impact on monetary distress.
- 3. Statistical take a look at effects show a importance cost of Non-acting loan (NPL) is zero.002 <0.05. So it can be concluded that H3 is accepted, which means that the Non-performing loan (NPL) variable has a positive effect on financial distress.
- 4. The results of statistical tests show the significance value of Loan to deposit ratio (LDR) is 0.491 > zero.05. So it can be concluded that the mortgage to deposit ratio (LDR) variable has no impact on economic distress
- 5. The outcomes of the statistical test confirmed the significance cost of return on property (ROA) is 0.003

< zero.05. So it could be concluded that the variable return on property (ROA) has a fine effect on economic misery.

#### F Test / Simultaneous Test

The F test pursuits to decide the effect of all independent variables at the based variable. The criteria for choice making in the F test is if the importance value is <0.05, then the independent variables jointly affect the dependent variable. If the significance value is > zero.05 then the independent variables together don't have any impact on the established variable, it may be visible that the importance variety is 0.004. So it is able to be concluded that the significance wide variety is 0.004 that's smaller than 0.05, this means that the Capital Adequacy Ratio (car), Operational fees on operating profits (BOPO), Non performing Loans (NPL), loan to Deposit Ratio (LDR), and return On belongings (ROA) variables together (simultaneously) affect the monetary misery.

#### 4. Discussion

#### Effect of Capital Adequacy Ratio (CAR) on Financial Distress

primarily based on the analysis consequences, it is able to be visible that the importance fee of the capital adequacy ratio (automobile) variable of 0002 is smaller than 0.05 with a regression coefficient of 0048, so that H1 is rejected, in other words capital adequacy ratio (car) has a high-quality and sizeable impact on economic misery at PT financial institution Rakyat Indonesia (Persero) Tbk in 2013-2020. The regression coefficient is high high-quality in order that it shows the effect of the capital adequacy ratio (vehicle) at the financial distress of PT bank Rakyat Indonesia (Persero) Tbk in 2013-2020 is a effective affect, due to this the higher the auto ratio, the much less probably the financial institution will pass bankrupt, automobile is the capital adequacy ratio which has a characteristic to deal with the threat of loss of a economic organization. in step with (Mawardi, 2020) if the monetary institution reports capital problems, of direction the depositors will experience a reduced feel of consider inside the finances that have been disbursed to the bank, mechanically the depositors might doubt the monetary group's average performance. The better the automobile, the higher the potential of a financial organization to undergo the risk of credit score or efficient belongings that can be at danger. If the car fee is excessive, therefore the bank might be capable of finance an operational hobby and might offer a massive enough profitability for the company. This isn't always consistent with studies done by means of (Mawardi, 2020) and (Haq & Harto, 2019) which confirmed that the capital adequacy ratio (car) has a negative effect on monetary distress due to the presence of the bank experiencing capital difficulties, of route the depositors will reduce their agree with inside the finances which have been channeled to the bank, mechanically the depositors might doubt the financial institution's typical overall performance.

#### Effect of Operating Expenses on Operating Income (ROA) on Financial Distress.

based totally at the analysis outcomes, it is able to be seen that the significance price for the running expenses to running earnings (ROA) variable is 0.003 much less or less than 0.05 with a regression coefficient of zero.077, in order that H2 is obtained, in other words, operating costs on working income (BOPO) has a fine and good sized impact on monetary distress at PT bank Rakyat Indonesia (Persero) Tbk in 2013-202. The regression coefficient is positive so that it shows the effect of operating costs on operating income (BOPO) on financial distress of PT Bank Rakyat Indonesia (Persero) Tbk in 2013-2020 is a positive influence, this means that the higher the operating costs on operating income (BOPO), the higher the financial distress would be. this is due to the fact BOPO is a ratio that shows how a lot the financial institution's operating expenses are on the working profits generated by means of the bank. consequently, the excessive ratio can have an impact on increasing economic misery, which is a circumstance where the preliminary degree of bankruptcy is. With a sizable relationship between BOPO and monetary distress, it is able to be concluded that the BOPO ratio may be used as an Early warning system to save you monetary distress at PT bank Rakyat Indonesia (Persero) Tbk. that is in keeping with studies carried out (Theodorus & Artini, 2018) which showed that operational prices on working income (BOPO) have a superb impact on financial distress.

## Effect of Non-performing loans (NPL) on Financial Distress

Based on the analysis results, it can be seen that the significance value for the variable Non-performing loans (NPLs) is to 0.002 or less than 0.05 with a regression coefficient of 0.120, so that H3 received, in other words non-performing loan (NPL) has a positive and significant effect on financial distress at PT Bank Rakyat Indonesia (Persero) Tbk in 2013-2020. The regression coefficient is positive, so it shows the effect of Non-performing loans (NPL) on financial distress of PT Bank Rakyat Indonesia (Persero) Tbk in 2013-2020 is a positive influence, therefore, the higher the ratio of Non-Performing Loans (NPL), the worse the quality of bank

credit. so that the number of non-performing loans will be even greater, because the reserves that must be formed are greater and the opportunity costs borne by the Bank also increase. When the Bank is in such a position, it will cause the level of income to decrease, so that this situation will affect the condition of the banking financial distress. Non-performing loan (NPL) is a comparison between the amount of credit that has been given and the level of collectibility with the total credit that has been given by the bank (Hutasoit, MRF and Haryanto, 2016). Thus Non Performing Loan is a ratio used to determine the quality of assets owned by the bank. From the calculation of the NPL, the value of non-performing loans is obtained. This can be caused when the NPL value of a bank is getting higher because the bank is not selective in providing credit. The non-selectiveness of the bank's management can increase a bank's non-performing loans. The increasing number of non-performing loans which are part of total assets will affect the level of bank income. This result is not in line with research conducted by (Hutasoit, MRF and Haryanto, 2016) and (Theodorus & Artini, 2018) which concluded that non-performing loans (NPL) had a negative effect on financial distress.

## Effect of Loan to deposit ratio (LDR) on Financial Distress

based at the evaluation effects, it could be seen that the importance fee of loan to deposit ratio (LDR) variable of 0491 is greater than 0.05 with a regression coefficient of -0014, in order that H4 is acquired, in different phrases, loan to deposit ratio (LDR) has a bad and insignificant impact on economic misery at PT bank Rakyat Indonesia (Persero) Tbk in 2013-2020. The regression coefficient is terrible in order that it suggests the effect of the loan to deposit ratio (LDR) at the economic misery of PT BRI (Persero) Tbk in 2013-2020 is a negative impact, which means that the higher the LDR ratio, the decrease the bank's liquidity potential. The LDR ratio is a contrast among the full credit score that has been given via the bank and the funds that have been obtained by using the bank. LDR explains how much credit is given to offset the bank's obligations to the proprietor of the budget. If there may be an increase within the LDR ratio, there can be a decrease in bank liquidity which can purpose economic distress, due to the fact the bank does no longer have sufficient finances to satisfy the withdrawal of third birthday celebration budget (Choirina et al., 2015). The amount of the LDR ratio will affect the level of bank profitability in the opportunity to get interest from the loans provided, so that the larger the loans disbursed will increase the bank's income, but a LDR value that is too high will increase the possibility of disrupted bank liquidity. Funds lent to the public (loans) ideally mean that all funds are categorized in collectibility (current), but the ability of the community to return loan funds from banks in accordance with the agreement is not always the same. Complications of the community's ability to cause banks to be open to non-current credit risk. These results are in line with research conducted by (Mawardi, 2020), (Theodorus & Artini, 2018) which showed that the Loan to deposit ratio (LDR) has a negative effect on financial distress. .

#### The Effect of Return on Assets (ROA) on Financial Distress

based totally on the results of the analysis, it may be seen that the importance cost for the return on belongings (ROA) variable is 0.003 or much less than 0.05 with regresi coefficient of zero.810, so that H5 is rejected, in other phrases, return on belongings (ROA) ahs a advantageous and sizeable impact on financial misery at PT bank Rakyat Indonesia (Persero) Tbk in 2013-2020. The regression coefficient is effective so that it suggests the effect of go back on property (ROA) on the financial distress of PT BRI (Persero) Tbk in 2013-2020 is a superb have an impact on, which means that if the profitability value will increase it'll increase the fee of the economic misery variable, because of this that the increase within the economic misery (z-rating) quantity indicates that the company studies a healthful situation or reduces the prevalence of financial distress conditions . organizations that have a excessive degree of ROA suggest that the employer is capable of generate income that can be used for various things, both to fund the corporation's activities and pay its duties. as a result the agency is covered from economic distress. effective use of belongings to generate income both from sales and funding will make the company live to tell the tale and avoid monetary misery, these consequences are in keeping with research performed with the aid of (Haq & Harto, 2019) which showed that return on property (ROA) has a effective effect on financial distress.

## Impact of Capital Adequacy Ratio (automobile), Operational fees on running profits (BOPO), Non appearing Loans (NPL), mortgage to Deposit Ratio (LDR), and return On belongings (ROA) on monetary misery

This observe states that the Capital Adequacy Ratio (car), Operational charges on working income (BOPO), Non acting Loans (NPL), loan to Deposit Ratio (LDR), and return On belongings (ROA) to economic distress may be supported or popular. With a sig value of zero.004 this value is smaller than a importance stage of zero.05. So based on the results of the research, the Capital Adequacy Ratio (vehicle), Operational expenses on operating income (BOPO), Non acting Loans (NPL), mortgage to Deposit Ratio (LDR), and return On belongings (ROA)

simultaneously have an effect on financial misery. This suggests that the incidence of economic misery at PT financial institution Rakyat Indonesia (Persero) Tbk is due to the better ratio of Capital Adequacy Ratio (automobile) and mortgage to Deposit Ratio (LDR) of the corporation to decide financial misery. corporations that experience healthy conditions will provide awesome hope to investors who invest in those corporations. in order that bank control will enhance the satisfactory of the property owned in order that they may be higher in an effort to realise the expectancies of investors and can display the effectiveness of the business enterprise in producing income by means of optimizing the belongings owned on the way to minimize bank misery.

#### 5. Conclusion and Suggestions

Based on the discussion of the results of the research that has been carried out, it can be concluded that:

- Capital Adequacy Ratio (car) has a superb and enormous effect on financial distress at PT financial
  institution Rakyat Indonesia (Persero) Tbk in 2013-2020. this is evidenced by means of a importance fee of
  zero.002 <0.05 and a regression coefficient of 0.048. because of this the higher the auto ratio, the much less
  in all likelihood the bank will go bankrupt.</li>
- 2. Operational costs on running profits (BOPO) have a superb and sizeable effect on monetary misery at PT bank Rakyat Indonesia (Persero) Tbk in 2013-2020. this is evidenced through a importance cost of zero.003 <0.05 and a regression coefficient of 0.077. because of this the decrease the operational cost to operating earnings (BOPO), the much less in all likelihood the bank will experience monetary misery.
- 3. Non-appearing loans (NPL) have a fantastic and vast effect on financial distress at PT bank Rakyat Indonesia (Persero) Tbk in 2013-2020, that is evidenced by a significance value of zero.002 <0.05 with a regression coefficient of 0.120. This means that the higher the Non-Performing Loan (NPL) ratio, the worse the quality of bank credit, so that the number of non-performing loans will be even greater, because the reserves that must be formed are greater and the opportunity cost borne by the Bank also increases.
- 4. Loan to deposit ratio (LDR) has a negative and insignificant effect on Financial Distress at PT Bank Rakyat Indonesia (Persero) Tbk in 2013-2020. This is evidenced by a significance value of 0.491 > 0.05 with a regression coefficient of -0.014. which means that the higher the LDR ratio, the decrease the liquidity capability of the financial institution.
- 5. return on belongings (ROA) has a tremendous effect on monetary distress at PT bank Rakyat Indonesia (Persero) Tbk in 2013-2020. this is evidenced by way of a importance price of 0.003 <0.05 and a regression coefficient of 0.810. which means that if the profitability price will increase, it'll boom the fee of the economic misery variable.
- 6. Capital Adequacy Ratio (automobile), Operational cost on running profits (BOPO), Non appearing loan (NPL), loan to Deposit Ratio (LDR), and go back On property (ROA) simultaneously affect monetary distress. this is evidenced by means of the fee of sig zero.004, the cost is smaller than the significance stage of 0.05. This suggests that the contribution of the effect of Capital Adequacy Ratio (vehicle), Operational charges on working earnings (BOPO), Non appearing Loans (NPL), mortgage to Deposit Ratio (LDR), and return On assets (ROA) to monetary distress is fifty seven.2%, while the last forty two.eight% is motivated by means of different variables that are not blanketed on this studies model.

Based on these conclusions, there are several things that would be suggested, as follows:

## 1. For Companies

This research is expected to help the company in minimizing financial distress by paying attention to its Loan to Deposit Ratio (LDR) financial ratio. By paying attention to these aspects, it is expected that the company can improve its financial performance in order to avoid financial distress.

#### 2. For Investors

It is recommended that investors who want to invest their shares to look at the company's financial condition, especially in terms of company profits and debt.

#### 3. For Further Researchers

It is recommended that further researchers add independent variables outside of financial ratios, such as good corporate governance, company size, and others, and use different sector companies and a longer observation period so that it will provide a larger number of samples in order to provide different conditions

#### References

- Aminah, S., Noviansyah, R., & Taufiq, M. (2019). The Effect of Camel Ratio on Financial Distress in the Banking Sector. *Counting: Journal of Accounting*, 2(1), 86-94.
- Andari, N., & Wiksuana, I. (2017). Rgec as a Determination in Overcoming Financial Distress in Banking Companies on the Indonesia Stock Exchange. *E-Journal of Management*, 6(1), 116-145.
- Choirina, P. M., Ekonomika, F., Bisnis, D. A. N., & Diponegoro, U. (2015). Affecting Indonesian Banking Financial Distress Probability.
- Febriana, S. I. (2019). Factors Influencing Banking In Predicting Banking Distress Using Cd Index Method. *Management Science Faculty of Economics*, 7(2019), 1129-1136.
- Haq, H. I., & Harto, P. (2019). ANALYSIS OF THE INFLUENCE OF RGEC-BASED BANK HEALTH ON FINANCIAL DISTRESS (Study on banking companies listed on the IDX in 2015-2017). *Diponegoro Journal of Accounting*, 8(3), 1-12.
- Hutasoit, M. R. F., & Haryanto, M. (2016). Effect of LDR, NPL, BOPO, Firm Size and CAR Against Bank Bankruptcy Risk (Study on Conventional Commercial Banks Period 2012-2014). *Diponegoro Journal of Management*, 5(3), 1-13.
- Mawardi, W. (2020). THE EFFECT OF FEE BASED INCOME, COST INEFFICIENCY, CAR, LDR, AND FIRM SIZE ON BANKRUPTCY RISK.
- Nuranto, A. A., & Ardiansari, A. (2017). The Influence of Financial Ratios, Firm Size, and Market Effects on the Bankruptcy Rate. *Management Analysis Journal*, 6(2), 185-194. Retrieved from http://maj.unnes.ac.id
- Patunrui, K. I. A., & Yati, S. (2017). Analysis of Financial Distress Assessment Using the Altman Model (Z-Score) in Pharmaceutical Companies Listed on the Indonesia Stock Exchange for the 2013-2015 Period. *Journal of Accounting, Economics And Business Management*, 5(1), 55-71.
- Synta, N. (2018). *Internal and External Factors Affecting the Bankruptcy Potential of Islamic Commercial Banks in Indonesia* (Modified Altman Z-Score Method) [Thesis]. In UIN Syariah Jakarta.
- Theodorus, S., & Artini, L. G. S. (2018). Study of Financial Distress in Banking Companies in Bei. *E-Journal of Management at Udayana University*, 7(5), 2710. https://doi.org/10.24843/EJMUNUD.2018.v07.i05.p16

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