CREDIT RISK AS MODERATING EFFECT OF MINIMUM CAPITAL ADEQUACY REQUIREMENT, CREDIT DISTRIBUTION AND EFFICIENCY OPERATIONAL TO PROFITABILITY

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Abstrak

Penelitian ini bertujuan untuk mengetahui: (1) untuk mengetahui pengaruh kewajiban penyediaan modal minimum terhadap profitabilitas, (2) untuk mengetahui pengaruh penyaluran kredit terhadap profitabilitas, (3) untuk mengetahui pengaruh efisiensi operasional terhadap profitabilitas, (4) untuk mengetahui pengaruh kewajiban penyediaan modal minimum terhadap profitabilitas yang dimoderasi oleh risiko kredit, (5) untuk mengetahui pengaruh penyaluran kredit terhadap profitabilitas yang dimoderasi oleh risiko kredit, dan (6) untuk mengetahui pengaruh efisiensi operasional terhadap profitabilitas yang dimoderasi oleh risiko kredit. Untuk mencapai tujuan penelitian tersebut, maka desain penelitian yang digunakan adalah kuantitatif korelasional dengan menggunakan data sekunder yang diperoleh dari laporan publikasi bank. Populasi penelitian ini adalah seluruh BPD Se-Indonesia yang berjumlah 31 bank. Teknik pengambilan sampel dalam penelitian ini menggunakan *purposive sampling dengan jumlah sampel sebanyak 25 perusahaan*. Teknik analisis data yang digunakan adalah analisis regresi moderasi. Hasil penelitian menunjukan bahwa (1) kewajiban penyediaan modal minimum berpengaruh positif terhadap profitabilitas, (2) penyaluran kredit berpengaruh positif terhadap profitabilitas, (3) efisiensi operasional berpengaruh negatif terhadap profitabilitas, (4) risiko kredit memperlemah pengaruh kewajiban penyediaan modal minimum terhadap profitabilitas, (5) risiko kredit memperlemah pengaruh penyaluran kredit terhadap profitabilitas, dan (6) risiko kredit memperkuat pengaruh efisiensi operasional terhadap profitabilitas.

Kata Kunci : kewajiban penyediaan modal minimum, penyaluran kredit, efisiensi operasional, risiko kredit, profitabilitas

Abstract

This study aims to determine: (1) to determine the effect of minimum capital adequacy on profitability, (2) to determine the effect of lending on profitability, (3) to determine the effect of operational efficiency on profitability, (4) to determine the effect of capital adequacy obligations minimum on profitability moderated by credit risk, (5) to determine the effect of lending on profitability moderated by credit risk, and (6) to determine the effect of operational efficiency on profitability moderated by credit risk. To achieve the research objectives, the research design used is correlational quantitative using secondary data obtained frompublication reportbank. The population of this study were all BPDs throughout Indonesia, amounting to 31 banks. The sampling technique in this study used purposive sampling with a total sample of 25 companies. The data analysis technique used is moderated regression analysis. The results showed that (1) the minimum capital requirement has a positive effect on profitability, (2) credit distribution has a positive effect on profitability, (3) operational efficiency has a negative effect on profitability, (4) credit risk weakens the effect of the minimum capital requirement on profitability, (5) credit risk weakens the effect of lending on profitability, and (6) credit risk strengthens the effect of operational efficiency on profitability.

Keywords: minimum capital requirement, lending, operational efficiency, credit risk, profitability

1. PRELIMINARY

The current condition of banking performance is increasingly experiencing difficult conditions. During the Covid-19 pandemic, the ability of banks to print profitability was slightly disrupted. OJK data noted that up to July 2020 the trend in bank lending was indeed sloping. Referring to OJK data, as of July 2020 the realization of bank credit only grew by 1.53%, practically not moving much from the position in the previous month. In fact, at the end of March 2020, industrial banking credit could still grow by 7.95% on an annual basis, so that the ability of banks to print profits or profitability tends to decline.(Goddess, 2020). It is tThis is a reflection of the Return on Assets (ROA) ratio which as of July 2020 has touched the figure of 1.90%, which is much lower than the last July 2019 period which was still at the level of 2.50% in Indonesian banking statistics by the OJK (www.ojk.go.id).

The Covid-19 pandemic has also hit the regional economy, as well as business at the Regional Development Bank (BPD).(Nisaputra, 2020).The BPD needs a follow-up strategy to maintain the level of performance as money flows into the regional treasury. This is because at the same time local government money stored in the BPD is withdrawn to finance social spending, routine spending or other needs to deal with the Covid-19 pandemic.(Wiratmini, 2020).BPD is a group of financial institutions that play a role in driving the regional economy by supporting development financing in the region. In order to support regional development financing and strengthen its function as an intermediary institution, BPD must be able to increase efficiency in carrying out its operations(Sutanto, 2015).Therefore, it is necessary to analyze the level of performance of the BPD to further take corrective action so that the BPD can carry out its function as an intermediary institution properly.

Bank performance can be known by using ratio analysis. According toCashmere (2012), ratio analysis is an analysis used to determine the relationship between the balance sheet financial statements and the income statement. So, one of the ratios used to determine bank performance is profit or profitability. According toSartono (2010), profit or profitability is the company's ability to earn a profit in relation to sales, total assets and own capital. Thus, long-term investors will be very interested in this profitability analysis, for example, shareholders will see the profits that will actually be received in the form of dividends. In line with that,Harahap (2009)stated that profitability describes the company's ability to earn profits through all its capabilities, and existing sources such as sales activities, cash, equity, number of employees, and number of branches.

Profitability ratio is often used to determine the ability of banks to generate profits is the ratio of Return on Assets (ROA). This is confirmed by opinionDendawijaya (2014)that the ROA ratio is used to measure the ability of bank management in obtaining overall profits. The greater the ROA of a bank, the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use.

The achievement of ROA is influenced by several factors. First, the achievement of ROA can be influenced by the Minimum Capital Adequacy Requirement (CAR). There are previous research results related to the effect of CAR on profitability. Research conducted byDalimunthe & Nofryanti (2017)shows that CAR has a significant and positive effect on ROA. Meanwhile, the results of research byPaleni (2016) shows that CAR has a negative and significant effect on ROA. Different results are shown by the results of research bySari (2018)thatCAR has no significant effect on ROA. With the research gap from researchDalimunthe & Nofryanti (2017)with researchPaleni (2016)andSari (2018), it is necessary to conduct further research on the effect of CAR on profitability.

Second, the achievement of ROA can be influenced by lending. There are previous research results related to the effect of lending on profitability. Research conducted byUdayani& Wirajaya (2019) shows that lending has a positive and significant effect on profitability. The same results are also shown by researchAriana et al. (2020), which shows thatthe level of lending has a positive and significant effect on profitability. However, different results are shown by the results of research byRakhmawati et al. (2021), which indicates that lending has no effect on profitability. Likewise with researchWicaksana & Ramantha (2019), which indicates that the loan has no effect on profitability. With the research gap from researchUdayani& Wirajaya (2019)andAriana et al. (2020)with researchRakhmawati et al. (2021)andWicaksana & Ramantha (2019), it is necessary to conduct further research on the effect of lending on profitability.

Third, the achievement of ROA can be affected by operational efficiency. There are previous research results related to the effect of operational efficiency on profitability. Research conducted byWicaksana & Ramantha (2019) shows that operational efficiency has a negative and significant effect on profitability. The same results are also shown by researchSudarsana and Suarjaya (2019), which shows thatoperational efficiency partially has a significant negative effect on profitability. In line with that, the research resultsAriana et al. (2020)alsoshows that BOPO has a significant negative effect on profitability. However, different results are shown by the results of research byCholifah (2016), which shows that operational efficiency (BOPO) has no effect on profitability (ROA). With the research gap from researchWicaksana & Ramantha (2019),Sudarsana and Suarjaya (2019),Ariana et al. (2020)with researchCholifah (2016), it is necessary to conduct further research on the effect of lending on profitability.

The effect of CAR on profitability can be moderated by the credit risk variable. There are previous research results related to the effect of CAR on profitability with moderate credit risk. Research conducted byUdayani& Wirajaya (2019)showthat credit risk is able to moderate the effect of capital adequacy on profitability. This explains that a bank that has a high level of capital adequacy but if it has a high level of credit risk will reduce the level of bank profitability. Meanwhile, different research results are shown bySavitri (2016)thatcredit risk cannot moderate the effect of capital adequacy level on profitability. Different results are also shown byRakhmawati et al. (2021)that credit risk is unable to moderate the effect of capital adequacy on profitability. With the research gap from researchUdayani& Wirajaya (2019)with researchSavitri (2016)andRakhmawati et al. (2021), it is necessary to conduct further research on the effect of CAR on profitability with moderated credit risk.

The effect of lending on profitability can be moderated by the credit risk variable. There are previous research results related to the effect of lending on profitability with moderate credit risk. Research conducted byWicaksana & Ramantha (2019)showthat credit risk weakens the effect of loans on profitability. The same results are shown by researchUdayani& Wirajaya (2019)showthat credit risk is able to moderate the effect of lending on profitability. This explains that a bank that has a high level of lending but if it has a high level of credit risk will reduce the level of bank profitability. Meanwhile, different research results are shown byRakhmawati et al. (2021)that credit risk is unable to moderate the effect of lending on profitability. With the research gap from researchWicaksana & Ramantha (2019)as well asUdayani& Wirajaya (2019) with researchRakhmawati et al. (2021), it is necessary to conduct further research on the effect of lending on profitability with moderate credit risk.

The effect of operational efficiency on profitability can be moderated by the credit risk variable. There are previous research results related to the effect of operational efficiency on profitability with moderating credit risk. Research conducted byCholifah (2016)shows that the non-performing loan risk variable (NPL) as a moderating variable strengthens the effect of operational efficiency (BOPO) on profitability (ROA). The same results are shown by researchWicaksana & Ramantha (2019), which indicates that credit risk strengthens the effect of BOPO on profitability. Meanwhile, different research results are shown byAriana et al. (2020)that credit quality is not able to moderate BOPO on profitability. Different results are also shown byAgustina (2021)that BOPO on ROA moderated by NPF has a positive and not significant effect. With the research gap from researchCholifah (2016)as well asWicaksana & Ramantha (2019) with researchAriana et al. (2020)andAgustina (2021), it is necessary to conduct further research on the effect of operational efficiency on profitability with moderated credit risk.

This research was motivated based on the phenomenon of decreasing profitability achievement that occurred in several BPDs in 2019-2020 as shown in Table 1.

Table 1. Decrease in ROA at Several BPDs in Indonesia in 2019-2020

No.	BPD name	Quarter	Year		Achievement
			2019	2020	
1	PT BPD Riau and Riau Islands	I	2.05	1.62	There is a decrease
		II	2.12	1.56	There is a decrease
		III	2.03	1.73	There is a decrease
		IV	1.97	1.74	There is a decrease
2	PT BPD Bali	I	0.03	0.03	Constant
		II	3.62	3.11	There is a decrease
		III	3.46	3.35	There is a decrease
		IV	3.17	3.08	There is a decrease
3	PT BPD West Java and Banten	I	2.08	1.91	There is a decrease
		II	2.06	1.80	There is a decrease
		III	2.08	1.68	There is a decrease
		IV	2.00	1.68	There is a decrease
4	PT BPD East Kalimantan and North Kalimantan	I	1.40	1.13	There is a decrease
		II	1.40	1.13	There is a decrease
		III	1.70	1.32	There is a decrease
		IV	2.39	1.20	There is a decrease

Source: Conventional Commercial Bank Publication Report onwww.ojk.go.id

In Table 1 it can be shown that the ROA of several BPDs in Indonesia has decreased every quarter in 2019 compared to 2020. The ROA standard set by Bank Indonesia is (1.5%), while based on this data, there are BPDs whose ROA achievement is below standards, namely PT BPD Bali in the first quarter of 2019 and 2020,PT BPD Kalimantan Timur and Kalimantan Utara in the first and second quarters of 2019 and the first, second, third and fourth quarters of 2020.Based on this data, it can be said that profitabilitySome BPDs in Indonesia can be said to be not optimal because they have decreased every year. This problem is the basis for the focus of this research to take the profitability variable as a proxy for ROA.

Seeing these facts, this study was conducted to analyze the factors that affect profitability based on the existence of a research gap between the inconsistent results of previous studies related to credit risk as a moderator of the effect of minimum capital adequacy requirements, lending and operational efficiency on profitability. Therefore, the researchers are interested in conducting research again with the title "Credit Risk as Moderating Effect of Minimum Capital Adequacy Requirement, Credit Distribution and Operational Efficiency on Profitability of Regional Development Banks (BPD) in Indonesia".

2. METHOD

This type of research is correlational quantitative research, namely research using statistical methods that measure the influence between two or more variables. The variables of this study consist of independent variables, namely the minimum capital requirement, credit distribution and operational efficiency, while the dependent variable is profitability and the moderator variable is credit risk.

The population in this study were all BPDs throughout Indonesia, amounting to 31 banks. The reason for choosing BPD in this study is because the profitability problems of several BPDs in Indonesia can be said to be not optimal because they have decreased every year. The sampling technique used was purposive sampling, namely the selection of samples obtained with certain considerations or criteria. Based on the specified criteria, the sample selected based on this that is relevant to support this research is shown in table 2.

Table 2. Sample Selection Process Based on Criteria

No.	Sample Criteria	Number of Companies
1	BPD in Indonesia registered withwww.ojk.go.id	31
2	BPD in Indonesia in a row during 2019-2020 there are no banking publication reports available onwww.ojk.go.id	(6)
3	Number of selected samples	25
4	Observation year	2 years
5	Total research data (25 × 2)	50

The data collection technique used in this study is a documentation technique by collecting documents that support the research data, namelyPublication ReportRegional Development Banks in Indonesiaon the websitewww.ojk.go.id. In addition, research is also carried out through scientific journals, websites related to the title of this research. The data analysis technique used moderated regression analysis. By testing the classical assumptions in the form of normality, multicollinearity, heteroscedasticity, and autocorrelation tests.

3. RESULTS AND DISCUSSION

Results

Before testing the hypothesis using moderated regression analysis, the classical assumption test was first tested. The normality test in this study used the One-Sample Kolgomorov-Smirnov Test. The results of the data normality test are presented in table 3.

Table 3. Normality Test Results

One-Sample Kolgomorov-Smirnov Test	
	Unstandardized Residual
N	50
Test statistics	0.116
asymp. Sig.(2-tailed)	0.090

Based on table 3, it is shown that the value of Sig. of 0.090. Value of Sig. is greater than 0.05 so that the data distribution is normally distributed. Multicollinearity test using Variance Inflation Factor (VIF)/Tolerance. A summary of the results of the multicollinearity test is presented in table 4.

Table 4. Summary of Multicollinearity Test Results

Model	*Collinearity Statistics*		Information
	Tolerance	VIF	
Minimum capital requirement	0.915	1.092	Free of multicollinearity
Credit disbursement	0.637	1,571	Free of multicollinearity
Operational efficiency	0.266	3,753	Free of multicollinearity
Credit risk	0.368	2,714	Free of multicollinearity

Based on the data in table 4, it can be seen that all independent variables have a VIF value less than 10 and a tolerance value greater than 0.10, so it can be concluded that the regression model is free from multicollinearity. The heteroscedasticity test uses a scatterplot graph. The results of the heteroscedasticity test can be seen in Figure 1.

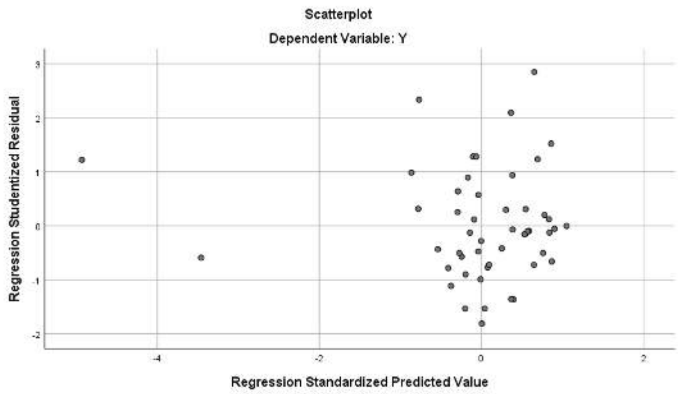

Figure 1. Heteroscedasticity Test Results with Scatterplot

Figure 1 shows that the distribution of the points generated is randomly generated, and the direction of the distribution is above or below the number 0 on the Y axis. Thus, there is no symptom of heteroscedasticity. Autocorrelation test using Durbin Waston (DW). The results of the autocorrelation test are presented in table 5.

Table 5. Test ResultsAutocorrelation

Model	R	R Square	*Adjusted R Square*	*Durbin Watson*
1	0.988	0.975	0.973	1,610

Based on table 5, it is known that the Durbin Watson score of 1.610 is between -2 and +2 (-2 < 1.610 < +2). Thus, it can be concluded that in linear regression there is no autocorrelation. After all classical assumption testing is met, it is continued with hypothesis testing using*Moderated Regression Analysis*(MRA) as shown in table 6.

Table 6. Results Hypothesis Test

Path of Influence	Regression Coefficient	*t*	*Sig.*
Minimum capital requirement→Profitability	0.029	3,559	0.001
Credit disbursement→Profitability	0.012	4,778	0.000
Operational efficiency→Profitability	-0.082	-33,084	0.000
Minimum capital requirement*Credit risk→Profitability	-0.032	-2,063	0.045
Credit disbursement*Credit risk→Profitability	-0.019	-5,163	0.000
Operational efficiency*Credit risk→Profitability	0.007	3,736	0.001

The results of testing the first hypothesis indicate that the minimum capital adequacy requirement has a t-test significance value of 0.001, where the value is smaller than 0.05 so that H1 is accepted. So it can be concluded that the minimum capital requirement has a positive effect on profitability.

The results of testing the second hypothesis indicate that lending has a t-test significance value of 0.000, where the value is smaller than 0.05 so that H2 is accepted. So it can be concluded that lending has a positive effect on profitability.

The results of testing the third hypothesis indicate that operational efficiency has a t-test significance value of 0.000, where the value is smaller than 0.05 so that H3 is accepted. So it can be concluded that operational efficiency has a negative effect on profitability.

The results of testing the fourth hypothesis indicate that the interaction between the minimum capital requirement and credit risk (X1*Z) has a t-test significance of 0.045, where the value is <0.05 so H4 is accepted. So, it can be concluded that credit risk weakens the effect of the minimum capital requirement on profitability.

The results of testing the fifth hypothesis indicate that the interaction between lending and credit risk (X2*Z) has a t-test significance of 0.000, where the value is <0.05 so H5 is accepted. So, it can be concluded that credit risk weakens the effect of lending on profitability.

The results of testing the sixth hypothesis indicate that the interaction between operational efficiency and credit risk (X3*Z) has a t-test significance of 0.001, where the value is <0.05 so H6 is accepted. So, it can be concluded that credit risk strengthens the effect of operational efficiency on profitability.

Discussion

The results show that the minimum capital adequacy requirement has a t-test significance value of 0.001, where the value is smaller than 0.05 so that H1 is accepted. So it can be concluded that the minimum capital requirement has a positive effect on profitability. The results of this study are in accordance with the theory of Resource-Based Theory, which states that companies gain competitive advantage and good financial performance by owning, controlling and utilizing important strategic assets by utilizing capital.(Hartati, 2014). The minimum capital requirement is a very important factor for the development and progress of bank performance as well as efforts to maintain public trust(Arini& Sukesti, 2013). Bank Indonesia has a minimum capital adequacy requirement that must be maintained by every bank. The provisions for meeting the minimum bank capital according to Bank Indonesia (BI) regulations are 8%(Pasaribu & Sari, 2011). This figure is an adjustment to the provisions that apply internationally based on the standards of the Bank for International Settlement (BIS), so that Indonesian banking performance can develop in a healthy manner. Sufficient capital can be channeled to the community through credit. Credit can encourage income so that it can generate interest, from that interest the bank earns a profit. With this level of profit, the bank can improve a strong capital structure so as to form a healthy financial condition. This shows that the CAR has a positive effect on profitability.

Empirical studies that support the findings of this study are the results of research conducted byDalimunthe & Nofryanti (2017), which shows that CAR has a significant and positive effect on ROA. The same results are also shown by researchUdayani& Wirajaya (2019)that capital adequacy has a positive and significant effect on profitability.

The results showed that credit distribution had a t-test significance value of 0.000, where the value was smaller than 0.05 so that H2 was accepted. So it can be concluded that lending has a positive effect on profitability. The results of this study are in accordance with the theory of Resource-Based Theory, which states that companies gain competitive advantage and good financial performance by owning, controlling and utilizing important strategic assets through quality credit distribution will bring benefits in the form of loan interest that will cause an increase in profit which will automatically increase the company's profitability(Saputra, 2019). Credit distribution will increase profitability, so that the bank's financial performance will be better with the assumption that the bank is able to channel credit effectively so that the number of bad loans will be small.(Lubis, 2017).According toDendawijaya (2014), lending as proxied by the Loan to Deposit Ratio (LDR) or the ratio of credit to third party funds is the total amount of credit extended by the bank to the funds received by the bank.Latumaerissa (2014)suggested that the LDR ratio is the financial ratio of banking companies related to the liquidity aspect. This ratio describes the extent to which savings are used for lending. The higher the LDR ratio, the lower the bank's liquidity level and will lead to profits for the bank. The higher the LDR, the bank's profit will increase. This shows that LDR has a positive effect on profitability.

Empirical studies that support the findings of this study are the results of research conducted byUdayani& Wirajaya (2019), whichshows that lending has a positive and significant effect on profitability. The same results are also shown by researchAriana et al. (2020), which shows thatthe level of lending has a positive and significant effect on profitability.

The results show that operational efficiency has a t-test significance value of 0.000, where the value is smaller than 0.05 so that H_3received. So it can be concluded that operational efficiency has a negative effect on profitability. The results of this study are in accordance with the theory of Resource-Based Theory, which states that the resources in the company that can be used as advantages and are able to direct the company to have good long-term financial performance.(Yateno, 2019). Based on this theory, banks must be able to utilize existing resources within the company to reduce operational costs as efficiently as possible by utilizing company resources to the fullest. The more efficient the operational costs issued by the bank, with the cost efficiency, the profits obtained by the bank will be even greater(Dendawijaya, 2014).

Operational efficiency ratio is measured by the ratio of Operating Costs to Operating Income (BOPO) is used to measure the ability of bank management in controlling operating costs to operating income(Festiani, 2016). Operational costs are costs incurred by banks to carry out their business activities, such as marketing costs, labor costs and other operational costs. While operating income is the bank's main income, namely income derived from placement of funds such as in the form of financing. According toAriana et al. (2020),the smaller the BOPO ratio, the higher the operational efficiency, because the bank concerned can cover operating expenses with operating income. Vice versa, the higher the BOPO ratio means the lower the efficiency of operational costs carried out by the bank concerned. The higher the BOPO ratio, the lower the bank's profitability. This shows that BOPO has a negative effect on profitability.

Empirical studies that support the findings of this study are the results of research conducted byWicaksana & Ramantha (2019), which indicates that lending has a negative and significant effect on profitability. The same results are also shown by researchSudarsana & Suarjaya (2019), which shows thatoperational efficiency partially has a significant negative effect on profitability.

The results show that the interaction between the minimum capital requirement and credit risk (X1*Z) has a t-test significance of 0.045, where the value is <0.05 so H4 is accepted. So, it can be concluded that credit risk weakens the effect of the minimum capital requirement on profitability. The results of this study are in accordance with the theory of Pecking Order Theory which states that the company will prioritize capital from within the company first from sources of capital from outside the company.(Dewi & Budiasih, 2016). The costs incurred to bear credit risk come from bank capital and in this case can reduce the level of capital adequacy. This is confirmed by opinionRakhmawati et al. (2021)that one of the internal factors that can affect capital adequacy is credit risk. Credit risk is the risk associated with a large number of assets that can generate income and credit risk is also a determinant of the good or bad performance of a bank(Hariemufti, 2019).

A high level of credit risk will result in a decrease in funds or capital raised so that it can reduce the ability of banks to channel credit. This can lead to a decrease in customer confidence which can reduce profitability. This explains that a bank that has a high CAR level, but if it has a high level of credit risk will reduce the level of ROA achievement. Thus, credit risk can weaken the effect of CAR on profitability. Empirical studies that support the findings of this study are the results of research conducted byUdayani& Wirajaya (2019)showthat credit risk is able to moderate the effect of capital adequacy on profitability.

The results showed that the interaction between lending and credit risk (X2*Z) had a t-test significance of 0.000, where the value was <0.05 so H5 was accepted. So, it can be concluded that credit risk weakens the effect of lending on profitability. The results of this study are in accordance with the Pecking Order Theory, which states that the company will prioritize funding from within the company first from funding sources from outside the company.(Dewi & Budiasih, 2016). A high level of credit risk will result in a decrease in the amount of funds collected so that it can reduce the ability of banks to channel credit. If the bank does not optimally distribute funds in the form of credit, the interest income that should be received will decrease(Trisna, 2017). This is supported by the opinionRakhmawati et al. (2021)that one of the internal factors that can affect lending is credit risk. Credit risk is a risk associated with a large number of assets that can generate income and credit risk is also a determinant of the good or bad performance of a bank(Hariemufti, 2019). A bank that has a high level of lending, but if it has a high level of credit risk, it will reduce the level of bank profitability(Dewi & Ratnadi, 2018). So, a bank that has a high LDR ratio, but if it has a high level of credit risk will reduce the level of ROA achievement. Thus, credit risk can weaken the effect of LDR on profitability.

Empirical studies that support the findings of this study are the results of research conducted byWicaksana & Ramantha (2019), that statethat credit risk weakens the effect of loans on profitability. The same results are shown by researchUdayani& Wirajaya (2019)showthat credit risk is able to moderate the effect of lending on profitability.

The results showed that the interaction between operational efficiency and credit risk (X3*Z) had a t-test significance of 0.001, where the value was <0.05 so H6 was accepted. So, it can be concluded that credit risk strengthens the effect of operational efficiency on profitability. The results of this study are in accordance with the theory of Resource-Based Theory, which states that companies gain competitive advantage and good financial performance by owning, controlling and utilizing important strategic assets through quality credit distribution will bring benefits in the form of loan interest that will cause an increase in profit which will automatically increase the company's profitability(Saputra, 2019). This theory provides the basis that banks must have quality lending, so that the risk of credit or bad credit can be minimized. If this is not able to be done, it will increase the bank's operational costs, so that it will cause a decrease in bank income. This is supported by the opinionFestiani (2016)that the increased risk of non-performing loans can increase the operating costs incurred, so that funds that can initially be used to obtain profits are reduced, which has an impact on decreasing profitability. High credit risk will increase the operational costs used to cover losses caused by credit financing, so that it has the potential to reduce the profitability generated by the bank. Conversely, lower credit risk will reduce operational costs used to cover losses caused by credit financing, so that it can affect the increase in profitability.(Joseph, 2018). So, a bank that has a high level of BOPO ratio and is supported by a high level of credit risk will reduce the level of bank profitability. Thus, credit risk can strengthen the effect of BOPO on profitability.

Empirical studies that support the findings of this study are the results of research conducted byCholifah (2016)that the non-performing loan risk variable as a moderating variable strengthens the effect of operational efficiency on profitability. The same results are shown by researchWicaksana & Ramantha (2019), which indicates that credit risk strengthens the effect of BOPO on profitability.

4. CONCLUSIONS AND SUGGESTIONS

Based on the results of research and discussion, the following describes some conclusions referring to the research objectives. First,The minimum capital requirement has a positive effect on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the positive regression coefficient value of 0.029 and the t-test significance value of 0.001 which is smaller than 0.05. Second, credit distribution has a positive effect on profitability at BPDs throughout Indonesia in 2019-2020, which is indicated by a positive regression coefficient value of 0.029 and a t-test significance value of 0.000 which is smaller than 0.05. Third, operational efficiency has a negative effect on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the negative regression coefficient value of -0.082 and the t-test significance value of 0.000 which is smaller than 0.05. Fourth, credit risk weakens the effect of the minimum capital requirement on profitability at BPDs throughout Indonesia in 2019-2020, which is shown from the negative regression coefficient -0.032 and the t-test significance value of 0.045 is smaller than 0.05. Fifth, credit risk weakens the effect of lending on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the negative regression coefficient value of -0.019 and the t-test significance value of 0.000 which is smaller than 0.05. Sixth, credit risk strengthens the effect of operational efficiency on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the positive regression coefficient value of 0.007 and the t-test significance value of 0.001 less than 0.05. credit risk weakens the effect of lending on profitability at BPDs throughout Indonesia in

2019-2020, as indicated by the negative regression coefficient value -0.019 and the t-test significance value of 0.000 which is smaller than 0.05. Sixth, credit risk strengthens the effect of operational efficiency on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the positive regression coefficient value of 0.007 and the t-test significance value of 0.001 less than 0.05. credit risk weakens the effect of lending on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the negative regression coefficient value -0.019 and the t-test significance value of 0.000 which is smaller than 0.05. Sixth, credit risk strengthens the effect of operational efficiency on profitability at BPDs throughout Indonesia in 2019-2020, as indicated by the positive regression coefficient value of 0.007 and the t-test significance value of 0.001 less than 0.05.

The suggestion of the results of this study areThis can be used as a basis for providing additions to Resource-Based Theory, namely that companies should focus on competitive advantage and good financial performance by owning, controlling and utilizing important strategic assets through quality credit distribution which will bring benefits in the form of high loan interest rates. will cause an increase in profits which will automatically increase the company's profitability. The results of this study can also be used as a basis for providing recommendations or additions to the Pecking Order Theory, namely that companies should prioritize capital from within the company first from sources of capital from outside the company. This is important to realize a strong capital structure, so that the company has a low level of risk.

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