

Influence Structure Capital and Risk Credit to Profitability in Banking Companies Listed on the Indonesia Stock Exchange (IDX) Period (2019-2023)

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Abstract– The findings indicate that it is effective management of funding composition and credit quality is crucial for maintaining banking stability and enhancing financial performance. Simultaneously, capital structure (DER) and credit risk (NPL) exert a significant influence on profitability (ROA), accounting for 43.7% of its variations. Partially, capital structure (DER) shows a negative and significant impact on ROA, US higher debt proportions increase interest burdens and financial risk, thereby suppressing profitability. In contrast, credit risk (NPL) demonstrates a positive but insignificant effect on ROA, reflecting that NPL fluctuations remain within manageable levels and can be mitigated through operational efficiency and revenue diversification. This quantitative study employed a causal approach, analyzing data panel using regression techniques with selection-based model on the Chow and Hausman tests. The population comprised 47 banking listed firms on the IDX during 2019–2023, with 20 firms selected through purposive sampling. This study was conducted to examine the influence of capital structure and credit risk on bank profitability.

Keywords: Capital structure (DER); Credit risk (NPL); Profitability (ROA).

I. INTRODUCTION

In today's contemporary era, banking companies have a crucial contribution to stimulating a country's financial dynamics. Evaluating the Performance of a Bank extremely crucial for use estimate bank related on condition Healthy or not, especially activities that are related to the economy of a country, including Indonesia. Banks in their activities can only be carried out what when base operation has fulfilled well banks, through optimal performance, are able to attract all investors and become a parameter [1]. Performance bank related a form bank performance evaluation can be carried out with capability in scope produce profit. On This issue is examined through profitability ratios. Profitability is crucial as a standard for bank performance because it can project a bank's effectiveness and capability in managing its operational assets [2].

The operational existence of a bank in the short and long term is highly dependent on its profitability. If profitability continues to decline, so that increasingly reduced also profit which obtained by the related banking company, in contrast to it, if the higher the profitability, the more capable it is capacity banking companies for the sake of reach

profit [3]. So from that, all over entity business will always try in order to maintain and escalate its profitability. Assessment bank profitability by BI focuses on assets because its funds are dominated by public savings, therefore ROA is used as the primary measuring tool. ROA is used to assess profitability. whereas performance bank describe the situation finance in a certain period. Profitability is the most accurate indicator in assessing bank performance [4].

The performance and sustainability of a bank or company improves when profitability is consistently maintained. Increased profitability directly impacts shareholders. A high ROA indicates greater returns [5]. Banks identified by their impressive working methods will also have implications for public credibility to bank. Through phenomenon this, the public is not hesitant to deposit funds and invest and places total trust in banks, so that they can later provide assistance to accelerate the activities carried out at the banks. Side other through degrees profitability which superior, then the bank will be able to resist and compete with other banks [6].

Several factors need to be analyzed to assess banking profitability, including working capital



structure and credit risk. The first factor influencing profitability is capital structure. Capital structure is also considered a fundamental aspect and influences profitability, meaning the fusion of liabilities and capital for a company's long-term financial structure. Capital structure is a series of liabilities and preferences that operate as the basis for capital accumulation in a corporation [7].

In financial decision-making, capital structure can facilitate the direction in which a company's finances can operate optimally. The formation of a company's capital structure can be realized by financial managers when implementing capital regulation determinations. capital extremely crucial on something found that capital structure has a positive and significant impact on profitability. This finding differs from who argued that capital structure does not affect profitability, although it can directly impact a company's financial situation [8].

Ratios that banks can implement to measure capital structure include DER. DER is a ratio that differentiates the total liabilities from the aggregate equity of a corporation. This obligation exists because not all of an entity's needs can be met. funded through capital internal or through proceeds from the release of equity instruments so that corporations will generally seek capital supplementation through loans.

Factor next that is risk credit is a probability risk Which experienced by bank due to the existence of incompetent debtors or defaulters in fulfilling his obligations in accordance with regulations and agreed agreements. In this study, credit risk is measured through NPL, NPL is a proxy that used use do measurement something non-performing loans at the bank and as far as where are the assets [9]. The company's productive assets can compensate for non-performing loans. The increasing NPL ratio indicates that the risks faced by banks are increasingly significant and will negatively impact bank profitability . The quality of bank financing management can be evaluated by the quantity of non-performing loans. This can trigger credit risk escalation, and if not promptly mitigated, will have consequences for bank performance. Able to be observed from declining bank profitability .

The capital structure in a bank shows how the bank manages current assets and short-term liabilities. A healthy capital structure reflects a bank's ability to maintain daily operations without

financial difficulties. Credit risk is the risk of financial decline resulting from a customer's inability to pay their obligations (default). Credit distribution is the largest source of income for banks as intermediary institutions. Credit risk is high can damage performance finance bank, cause NPL Which large, reducing profitability, and even threatening the sustainability of the bank [10].

Reason why structure capital and risk credit is the two main variables used to assess performance finance in matter This profitability banking, namely because these two variables represent two key pillars of bank management: liquidity and risk management. Without both, banks would not be able to carry out their functions effectively or maintain business sustainability.

The following banking corporations are currently facing a problem triggered by the manifestation pandemic Covid-19 in where phenomenon intervenes in banking entities in Indonesia. Through this presence, it results in a number of company The Indonesian Stock Exchange is experiencing challenges in profitability [11]. The following is the average profitability of banking companies from 2019 to 2023.

Table 1. Level Profitability (ROA) Banking

No	Bank Name	2019	2020	2021	2022	2023
1.	BBCA	3.11%	2.52%	2.56%	3.10%	3.45%
2.	BBMD	1.92%	2.30%	3.25%	3.15%	2.60%
3.	BBNI	1.82%	0.53%	1.13%	1.78%	1.92%
4.	BBRI	2.43%	1.23%	1.85%	2.74%	3.06%
5.	BDMN	2.10%	0.50%	0.82%	1.73%	1.31%
6.	BMRI	2.08%	1.20%	1.62%	2.07%	2.53%
7.	BNBA	0.67%	0.46%	0.51%	0.47%	0.56%
8.	BNGA	1.33%	0.72%	1.32%	1.64%	1.94%
9.	BNI II	1.09%	1.04%	1.34%	1.25%	1.41%
10.	BTPN	1.42%	0.96%	1.39%	1.48%	1.17%
11.	MEGA	1.99%	2.68%	3.02%	2.86%	1.52%
12.	PNBN	1.57%	1.42%	1.01%	1.43%	1.14%
13.	SDRA	1.35%	1.41%	1.44%	1.67%	1.27%
	Mark Highest	3.11%	2.68%	3.25%	3.15%	3.45%
	Mark Lowest	0.67%	0.46%	0.51%	0.47%	0.56%



Source: Data processed, 2025

Referring to table 1, it can be concluded that profitability (ROA) fluctuates, fluctuating annually. The most extreme decline occurred in 2020, when profitability fell to 1.31%, driven by increasingly low interest rates over a longer period. Furthermore, the decline was attributed to the COVID-19 outbreak. The decline culminated in Indonesia in early 2020. In 2022, profitability increased significantly by 1.95% due to economic activity recovering after the pandemic, driving increased demand for credit and banking services. more selective in credit distribution and improving risk management, thereby improving credit risk and increasing profitability. Although on year furthermore experience A little the decline was caused by many banks starting to aggressively distribute loans credit so that margin flower clean can be under pressure due to price competition (credit interest rates) [12].

In addition, the researcher wants to further examine the profitability of banking registered on the IDX by using financial ratio analysis with the ratio (ROA) because based on the statistical data report issued by the IDX in 2020, it was recorded that banking companies that registered in IDX as much as 46 bank And in 2021 until moment This increase become 47 banking companies registered on the IDX. Capital structure management policies, such as equity and debt, have a significant correlation. to profitability company, especially in ROA matters. Capital structure Which Healthy in order for banks to maintain capital stability and efficiency, which ultimately has a positive impact on profitability. guard liquidity And optimize cash cycle, companies can increase profitability and reduce short-term financial risks [13].

Escalating profits or profitability can represent a *positive signal* to investors regarding the corporation's strong financial performance. Furthermore, management that is able to improve profitability show effective financial management, which has a positive impact on overall financial performance.

II. LITERATURE REVIEW

Balance of continuous short-term liabilities, long-term liabilities, preferred stock, and common stock construct structure capital. This structure is crucial for companies, especially banks, because its

quality has a direct impact on the company's finances. In general, capital structure is configured through external and internal capital. This means that the company's value can be maximized through structure capital optimal which produce lowest weighted average capital burden. Business continuity is positively supported when a large capital structure encourages Productivity. Equity structure is the ratio of equity and debt used to meet a company's funding needs [14].

Meanwhile, capital structure theory relates to the mechanism by which capital is distributed in the placement of a company's real assets, through the determination of capital structure within the scope of liability capital and equity capital. Furthermore, explain the impact of capital structure fluctuations on company valuation when investment determination and dividend regulations are controlled statically [15].

Factors influencing capital structure the first factor is tangibility, or asset composition. In industrial entities, a large portion of capital is allocated to fixed assets, so capital is met through internal capital. Liabilities, on the other hand, are merely complementary. Funding needs are met through loans. Growth opportunities defined is Negative correlation integration through leverage , whereby when a corporation's leverage is massive, investment opportunities will be optimal and prospective [16]. This phenomenon also has the potential to influence the composition on capital entity. A company which has significant profitability, will dominate internal funding Which participate more abundant. Corporations that degrees return -nya superior, will realize investment past liabilities Which minimal. Through the scheme, enumeration needs funding is through internal capital.

Therefore, this issue has implications for corporate capital structure. Larger companies are able to implement more varied business diversification , so the probability of dysfunction in operating their businesses or bankruptcy will be increasingly marginal [17]. Massive-scale entities still have the potential to face insolvency, but large corporations are considered competent in mitigating crises. Another aspect that determines corporate capital structure is the variable of business risk, the existence of which will hinder the entity's access to external financing. This issue will undoubtedly have an impact for leverage from company concerned.

According to the Trade Off Theory put forward



by [7], it is a capital structure theory that explains... namely the company will Tracing the optimal level of liability through calculating how debt usage must align with the cost of using debt. According to this theory, loans provide fiscal benefits (tax shield) because the cost of liabilities can reduce revenue burdened by state levies. However, increasing debt also increases financial risks, such as bankruptcy costs and financial distress costs (financial distress cost), and cost agency costs. The increase in debt continues until additional benefits are obtained. its usage is equivalent to additional cost consequence risk, on point here it is structure capital is considered optimal.

The Pecking Order Theory, as stated by [18], states that companies have a hierarchy of preferences in determining funding sources. This order is: internal funding (retained earnings), debt funding, and equity funding. This theory is based on the existence of information asymmetry. in scope manager as well as planter capital. Internal funding is preferred because it does not create a negative signal for the market, while issuing share only considered as a last option because it can reduce the company's perceived value.

According [19] argued theory structure capital Which explains the correlation between debt and firm value. This theory is known for its two main propositions: the Modigliani and Miller (M&M) theory without taxes. In perfect market conditions, capital structure does not affect firm value. Differences in the proportion of debt and equity do not change the firm's level of profitability. The Modigliani and Miller (M&M) theory with taxes. When tax taken into account, utilization liabilities able to elevate company valuation due to the presence of fiscal utility burden (tax shield). The more massive the liabilities, the more massive the fiscal efficiency benefits obtained by the company.

Based on Banking Law No. 7 of 1992 in "Credit is the allocation of funds or receivables that can be identified to him, based on A credit agreements or pacts within the bank to external entities that require external colleagues and debtors must pay interest on the debt after a certain period of time". Failure to pay obligations by customers, either intentionally or unintentionally no, and weakness analysis banking become source credit constraints [20].

The success of a bank depends on efficient credit risk management through measurement. accurate, temporary risk credit is the most crucial

risk facing banks. Credit plays a role Which very important, so that play a role as a channel for bank revenue. Parameters implemented in the banking sector to measure risk credit namely Non Performing Loan (NPL). Loans that require special attention are performing loans with deficiencies that can hinder ability borrower to fulfill its obligations on time [21].

Comparing profits over a certain period of time through the quantity of assets and capital shows profitability, where profitability represents the company's capability to produce profit through utilization asset in a way efficient [22]. Profitability is criteria for measuring a company's revenue and profit margin at a specific time period. If the company generates comparatively escalating net income so manifest that quality profit which depicts the company is also impressive, besides That participate available massive also planter capital that will be affiliated with the related company.

According to [23] ROA often used in order to assess profit, while profitability represents banking capital capabilities in order to gain profits through asset management or profitability because Bank Indonesia places more emphasis on profitability estimates for assets that controlled by a bank. Study empirical in study. This containing summary of study previously which relevant with study problems. The results of previous research are presented in Table 2 below.

The 2019–2023 period and the use of capital structure and credit risk variables differentiate this study from previous studies, while the similarities lie in the examination of factors influencing banking company profitability. want to I am careful because there is some results study previously Which show differences in study results in several variables that influence profitability as listed in table 2 above.

III. RESEARCH METHODS

This research uses a causal approach, where this quantitative study examines the influence of capital structure and credit risk as independent variables on the profitability of banking companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. The study subjects included banking companies listed on the IDX during the 2019–2023 period, with a study duration of two months following the proposal seminar [24].

Based on the tested hypothesis and the main problem, the variables analyzed in this study are



the dependent variable, which is the variable affected or acts as a consequence due to the existence of the independent variable. Within this observation, the dependent variable is profitability. The independent variable is the intervening variable or acts as a stimulant. fluctuations or its manifestation dependent variable. In this analysis, the independent variables are capital structure and credit risk.

The sample is a fragment of the total and characteristics of the population in the observation, the totality of subjects includes every banking company listed on the Indonesian stock exchange for the period 2019–2023 with a total of 47 companies, namely the scope of generalization through quality as well as particular characteristics that are determined by researchers to be analyzed and then conclusions are drawn.

The sampling technique in this study uses the purposive sampling method or through the use of specific parameters determined by researchers such as banking companies. Which active registered in IDX throughout period study (2019-2023), have financial statements Which intact as well as Already audited during study period (2019-2023), and banking companies that experienced profit throughout period study (2019-2023).

The type and source of data used are secondary data from the annual reports of banks in the banking sub-sector at the IDX, sourced from the official IDX website, www.idx.co.id and the websites of each bank, used in this study in quantitative form in the form of numbers. The data collection technique with the official website www.idx.co.id bank financial report data recorded at the IDX was obtained through documentation and recorded as study material.

Data analysis techniques using descriptive statistics are used to simply describe the characteristics of the data without drawing general conclusions. Descriptive analysis is carried out. through exposure data into the scope of the frequency distribution table, calculate the average size, accumulated scores, and degree of respondent achievement (TCR), and interpret it so that served more Good, data collected, processed, and analyzed through statistical analysis descriptive [24]. Method estimate model regression data panel There is 3 perspectives operated in the panel scheme ,

namely Common Polled Effects , Fixed Effects and Random Effects.

Data panel is type data Which status as the output of observations on various subjects or (cross-sectional units) which are carried out over a continuous period of time (time unit). Based on Wanner and Pevalin as cited in Sembodo, stated if panel regression is a series of methodologies to schematize the impression of explanatory variables on response variables in the scope of panel data.

Data regression analysis panel based on data panel in provide observations on the correlation between dependent variables through single and plural variables free. Data Regression Panel is fusion from data cross section and time series data , where cross-section units are calculated at different time intervals. Consequently, panel data is a fact from various subjects. identical Which reviewed on phase period specific.

IV. RESULTS AND DISCUSSION

Results

Financial performance is assessed based on a number of main indicators, among others Non Performing Loan (NPL), DER, and Return on Assets (ROA). These three ratios illustrate the bank's risk management capabilities. Credit, structure capital, as well as efficiency of use assets to generate profit. The following are the results of the analysis of each financial ratio registered on the IDX during 2019-2023.

The Debt to Equity Ratio (DER) compares a corporation's liabilities to its internal equity. A high value of this metric indicates that its own capital is marginal compared to its debt, or it can be defined as the extent to which shareholder equity will cover its obligations to external parties. However, a lower DER indicates more impressive financial performance because the degree of return will be higher. superior. Output calculation or percentage from DER for banking sub-sector entities is attached in table 3, namely:



No	Company Code	Debt To Equity Ratio (DER) (%)				
		2019	2020	2021	2022	2023
1	AGRO	5.04	5.53	5.86	3.1	2.64
2	BBCA	4.25	4.79	5.03	4.92	4.77
3	BBMD	2.71	2.53	2.73	2.64	2.27
4	BBNI	5.51	6.61	6.63	6.35	6.02
5	BBRI	5.67	5.87	4.75	5.15	5.21
6	BBTN	11.3	16.08	15.31	13.56	12.51
7	BDMN	3.26	3.61	3.25	3.16	3.43
8	BMRI	4.91	5.8	5.97	6.12	5.78
9	BNBA	3.99	0.41	2.87	1.67	1.56
10	BNGA	5.34	5.84	6.16	5.78	5.78
11	BNI II	5.34	5.36	4.84	4.45	4.58
12	BRIS	2.33	3.04	2.47	2.22	2.27
13	BSIM	4.34	5.38	5.27	4.6	4.83
14	BTPN	4.53	4.32	4.07	4.06	3.64
15	BTPS	0.45	0.45	0.36	0.35	0.31
16	MCOR	5.76	3.19	3.31	3.04	3.26
17	MEGA	5.49	5.16	5.94	5.87	5.07
18	NISP	5.53	5.92	5.63	5.97	5.69
19	PNBN	3.75	3.59	3.21	2.99	2.97
20	SDRA	4.33	4.23	3.73	4.19	4.34
Average	4.69	4.89	4.87	4.51	4.3465	

Figure 1. Company Debt to Equity Ratio (DER) Value Banking Which Registered in IDX Period 2019-2023

Source: www.idx.co.id (data processed 2025).

Referring to the results in Table 3, the DER value shows year-to-year fluctuations. The average banking DER in 2019 was 4.69%, increasing to 4.89% in 2020, and then experiencing a consecutive decline in 2021, to 4.87%. year 2022 namely 4.51%, And return decreasing in 2023 to 4.35%. Increase in years 2020 marks At the start of the COVID-19 pandemic, Indonesian banks increased their reliance on borrowed funds to maintain liquidity and operations. However, the decline in DER from 2021 to 2023 indicates that banking start strengthening the capital structure by reducing debt and increasing the equity portion.

Individually, the State Savings Bank (BBTN) have DER highest with mark in above 11.30-16.08%, reflect height *leverage* consequence need funding on sector credit housing area. In contrast, Bank BTPN Syariah (BTPS) has the lowest DER with a range of 0.31-0.46 %. *Non Performing Loan* (NPL) is a ratio that compares all over amount receivables stuck to the aggregate allocated financing ceiling. Parameters highest *NPL* banking in Indonesia namely 5%, because the bank is not considered to bin good

condition if it exceeds it limitation the. In harmony with *NPL* ratio stability parameters , through the degree of *NPL ratio* which is minimal (below 5%) the bank is classified as institutions Which competent as well as will also has implications on escalation acquisition profitability bank related. Results calculation or presentation from *non performing loan* on company sample attached on table 3 following:

No	Kode Perusahaan	Non Performing Loan (NPL)				
		2019	2020	2021	2022	2023
1	AGRO	7.66	4.97	3.98	2.90	4.40
2	BBCA	1.38	1.89	2.27	1.78	1.87
3	BBMD	2.26	1.69	1.18	1.26	1.37
4	BBNI	2.33	4.20	3.70	2.81	2.13
5	BBRI	1.37	1.38	1.91	2.12	2.39
6	BBTN	4.50	4.13	3.64	3.38	3.09
7	BDMN	3.32	3.01	2.93	2.85	2.25
8	BMRI	2.35	3.12	2.74	1.93	1.19
9	BNBA	1.53	2.63	3.04	4.56	4.43
10	BNGA	2.78	3.59	3.48	2.82	1.98
11	BNI II	3.44	3.96	3.81	3.54	2.93
12	BRIS	4.43	1.58	3.31	3.19	2.59
13	BSIM	8.00	4.85	4.74	8.16	1.54
14	BTPN	0.81	1.21	1.68	1.42	1.34
15	BTPS	1.37	1.91	2.37	2.66	2.94
16	MCOR	2.62	2.94	4.39	3.40	2.87
17	MEGA	2.46	1.39	1.12	1.22	1.57
18	NISP	1.72	1.93	2.36	2.40	1.62
19	PNBN	3.07	2.99	3.57	3.58	3.06
20	SDRA	1.64	1.11	0.93	1.05	1.25
Rata-Rata		2.95	2.72	2.86	2.85	2.34

Figure 2. Non-Performing Loan (NPL) Company Banking Which Registered in IDX Period 2019-2023

Source: www.idx.co.id (data processed 2025).

Referring to the results in table 4, the NPL value represents a gradual depreciating tendency from period to period. The average banking NPL in 2019 was 2.95%, down to 2.72% in the year of 2020, but it went back up to 2.86% in 2021, and continue to decline to 2.34% in 2023.

This decline signals improvements in asset quality and the effectiveness of credit risk management. Although the COVID-19 pandemic in 2020 increased credit risk, banks managed to keep their NPL ratios below the 5% preventive limit set by Bank Indonesia. After the economy began to recover, banks restructured their loans and strengthened their



credit policies. caution (*Prudential banking*), so that the level of problem loans can be reduced.

Overall, Bank Sinarmas (BSIM) recorded the highest NPL in 2022, at 8.16%, which is considered unhealthy. This means that 8.16% of the bank's loans were unpaid and fell into the non-performing loan category. This impacts the bank's financial stability, as it must maintain reserves to cover potential losses from these non-performing loans.

Meanwhile, the lowest NPL value occurred in 2019 at the National Pension Savings Bank (BTPN) at 0.81%, which is <2% with a healthy category indicating that credit quality BTPN bank is good with management risk Which effective. This means that there is high financial stability to reduce credit loss reserves and attract investors because it has low risk.

Return on Assets (ROA) is a financial ratio useful for estimating a corporation's ability to generate net profit through its utilized assets. A standard ROA value of 1.5% is considered good. Conversely, if the ROA value is below 1.5%, it means that the company is not performing well. mark ROA No Good. Results calculation or ROA percentage in banking sub-sector companies sample attached in table 3 following:

No	Kode Perusahaan	ROA (%)				
		2019	2020	2021	2022	2023
1	AGRO	0,19	0,11	-18,06	0,08	0,20
2	BBKA	3,11	2,52	2,56	3,10	3,46
3	BBMD	1,92	2,30	3,25	3,15	2,60
4	BBNI	1,83	0,37	1,14	1,79	1,94
5	BBRI	2,43	1,23	1,83	2,76	3,08
6	BBTN	0,07	0,44	0,17	0,76	0,80
7	BDMN	2,19	0,54	0,87	1,73	1,65
8	BMRI	0,57	0,61	1,77	2,26	2,76
9	BNBA	0,67	0,46	0,49	0,47	0,56
10	BNGA	1,33	0,72	1,32	1,66	1,96
11	BNII	1,14	0,74	0,01	0,95	1,06
12	BRIS	0,17	0,91	1,14	1,39	1,61
13	BSIM	0,02	0,27	0,24	0,47	0,14
14	BTPN	1,65	1,10	1,62	1,74	1,33
15	BTPS	9,10	5,20	7,90	8,41	5,04
16	MCOR	0,42	0,20	0,30	0,54	0,87
17	MEGA	1,99	2,68	3,02	2,86	2,66
18	NISP	1,63	1,02	1,18	1,39	1,64
19	PNBN	1,66	1,43	0,89	1,54	1,35
20	SDRA	1,35	1,41	1,44	1,67	1,27
	Rata-Rata	1,67	1,21	0,70	1,94	1,80

Figure 3. . Return On Asset (ROA) Company Banking Which Registered in IDX Period 2019-2023

Source: www.idx.co.id (data processed 2025)

Referring to table 5 above, *the Return On Asset value* (ROA) banking show fluctuations However, it has experienced significant improvement in the last two years. The average ROA value in 2019 was 1.67%, decreased to 1.21% on 2020 and 0.70% further in 2021, then showed a sharp increase to 1.94% in 2022 and 1.80% in 2023. The decline in ROA in 2020-2021 was caused by the impact of the pandemic which suppressed interest income and increased burden backup from credit losses. However, the improvement in 2022-2023 indicates that the banking sector has successfully recovered through increased operational effectiveness, increasingly competent risk management, and healthy credit growth.

Individually, Bank Central Asia (BBCA) recorded the highest ROA, ranging from 2.52% to 3.46%, demonstrating its strong ability to utilize assets to generate profits. Conversely, Bank Raya Indonesia (AGRO) recorded a negative return of -18.06% in 2021, indicating loss consequence improvement burden credit and a decrease in operating income, although this then improved in the following years .

With increasing ROA simultaneously with the decline DER and NPL, can concluded that sector banking Indonesia succeed strengthening stability finance And increase management effectiveness his assets in producing profit. This descriptive statistical analysis is applied to understand the universal description or characteristics of the information identified through the results. mark maximum, mark minimum, number mean , and standard deviation. The descriptive statistical results of this study can be seen in figure 4 below :

	ROA	DER	NPL
Mean	1.4648	4.6605	2.7451
Median	1,350,000	4,590,000	2.625
Maximum	9.1	16.08	8.16
Minimum	-18.06	0.31	0.81
Std. Dev.	2.525956	2.638725	1.392609
Skewness	-3.961526	1.962017	1.539588
Kurtosis	38.41032	9.355894	6.681565
Jarque-Bera	5486.106	232.481	95.98015
Probability	0	0	0
Sum	146.48	466.05	274.51
Sum Sq. Dev.	631.6651	689.3239	191.9967
Observations	100	100	100



Figure 4. Results statistics descriptive

Source: Processed with E-reviews 13, Year 2025

Stand on on results estimate descriptive in table 6 through aggregate data 100, obtained representation namely, *Return On Assets* (ROA); from table 5, the results show that the minimum ROA figure is -18.06 and the maximum value is 9.1. This means that if magnitude ROA in sample around -18.06 until 9.1 and the average is 1.4648 and the standard deviation is 2.5259. The average quantity is more minimal than the standard deviation, which is $1.4648 < 2.5259$, which means that ROA produces high data variation. *Debt to Equity Ratio* (DER), namely the test results obtained the lowest DER figure, namely 0.31, and the lowest figure highest 16.08.

Matter This meaningful If mark DER ranges from 0.31 to 16.08 with an average of 4.6605 And number standard deviation 2.6387. Number The average exceeds the standard deviation, which is $4.6605 > 2.6387$, meaning that the DER value produces low data variation. *Non-Performing Loans* (NPL), which are the findings of the descriptive statistical analysis in the table above, are interpreted as having a minimum value of 0.81 and a maximum value of 8.16. This means that the NPL value has a range of 0.81 to 8.16 and an average of 2.7451 with a standard deviation value of 1.3926. The average quantity beyond magnitude standard deviation or $2.7451 > 1.3926$ means if the NPL value has low data variation.

Determination approach model regression is the type of data that arranged on *time data integration series and cross-section data*. Therefore, panel data has synchronized characteristics, namely the data covers a number of objects and time periods. Test This is useful to see how the relationship between the independent variables is measured using mark NPL. Before conducting a regression test on panel data, the primary phase that must be completed is determining the approach model to be utilized.

The Effect of Capital Structure (DER) on Profitability (ROA). Capital structure is a combination of debt and equity that influences the financing of a company's assets (Hampton, 1980). An appropriate capital structure will help increase the efficiency of fund use and maximize profitability. profitability, whereas structure capital that not balanced will cause significant financial risk.

The *trade-off* theory explains that entities explore the degree of liability that synchronizes fiscal benefits through loans. supplementary to the burden of the probability of financial constraints (Myers, 2001). The *pecking order postulate* emphasizes that corporations will utilize internal funding, then liabilities, and finally new equity instruments (Myers and Majluf, 1984). Meanwhile, the theories of Modigliani and Miller (1963); (1958) show that that debt can increase profitability because debt interest reduces the tax burden, although without taxes, capital structure has no impact on company value. Therefore, selecting the optimal capital structure is a company's effort to increase profits. on profit at a time control financial risk.

Based on the *F-test examination output*, the calculated F quantity $> F_{table}$ is obtained, namely $4.663 > 3.09$, through a *probability degree* of 0.000000 which is less than 0.05 ($0.000000 < 0.05$), through magnitude *Adjusted R-Square* 0.437. Matter This indicates that the capital structure (DER) and credit risk (NPL) simultaneously has a positive and significant effect on profitability (ROA). This means that these two variables can simultaneously explain variations in changes in company profitability. 43.7%, while the residual value of 56.3% is influenced by unobserved external determinants, such as operational efficiency (BOPO), NIM, LDR, or macroeconomic conditions.

Referring to the results of the hypothesis test between capital structure (DER) as well as profitability (ROA) show that mark $t_{count} -2,062$ more small than t_{table} is 1.985 ($-2.062 < 1.985$) with significance = 0.0425 where the significance result is below the *alpha level*, namely 0.05 ($0.0425 < 0.05$), so it can be interpreted that DER has a negative influence as well as significant to ROA. Coefficient regression -0.588511 signify If influence the is negative, meaning that if the proportion of debt in the capital structure is high, company profitability tends to decline.

Discussion

This indicates that excessive debt will increase interest expenses and the risk of bankruptcy, thereby reducing the company's ability to generate profits in [25]. Besides load factor flowers and financial risk, the influence of capital structure on profitability in the banking industry is also influenced by banking characteristics as a financial intermediary institution.



Banks carry out fund storage, especially from third party funds (DPK) which have obligation return And cost interest, so that the bank's funding structure is very sensitive to the level of leverage. An increase in DER reflects high dependency banks to liability-based funding sources, which has the potential to increase burden cost funds and pressing margin.

Profits will be affected if not balanced with productive credit distribution. The results revealed that DER has a significant and negative impact on profitability (ROA), which indicates that in the banking industry, the level of leverage is relatively high. tall And arranged in a way strict, use Excessive debt will suppress the bank's capability to earn profits from managed assets.

A number of study previously show the results that varies. Study [26] also showed that DER has a significant and negative impact on ROA. Furthermore found that the more debt-financed a company's operations, the higher *the probability* of financial distress. Conversely [27] stated that if financial leverage is high and returns on investment exceed the cost of debt capital, the impact on profits will be favorable. A study by [28] showed that in service companies, the effect of capital structure on profitability is insignificant because operational factors are more dominant than interest expenses.

The Impact of Credit Risk (NPL) on Profitability (ROA). Credit risk is considered the main risk faced by financial institutions, especially banks, because the main activity of banks is distribute credit to the public. Credit risk arises when the debtor fails to fulfill his obligations payment main And flower adjust the start agreement, Which result in potential loss for bank. Indicator Which general useful provide measurements on level risk credit namely NPL This ratio compares aggregate non-performing receivables to accumulated allocated credit. Meanwhile, ROA represents a bank's ability to generate profit through total assets under its control, as well as a reflection of the bank's efficiency and profitability.

According to [29] if mark ratio NPL If this is high, the quality of banking financing will also decline, resulting in a surge in non-performing loans. Consequently, banks will experience operational losses. The increase in credit risk is proportional to the increase in non-performing loans. upside down with profitability, because non-performing loans

reduce interest income and add burden cost operational. Support draft that when NPL increases, profitability will tend to decrease because opinion flower reduce and cost increase.

The risk and return trade-off theory also explains that If risk Which taken by Company The higher the risk, the higher the potential return, but if the risk is not managed well, profitability will actually decrease.

Based on *The output of* the hypothesis examination between credit risk (NPL) and profitability (ROA) explains that the calculated t value of 0.107 is smaller than the t_{table} , which is 1.985 ($0.107 < 1.985$) with a significance of ($0.9146 > 0.05$), so it can be interpreted that credit risk (NPL) has an influence positive but insignificant to ROA. Coefficient regression 0.024178 signify If The influence is positive. The positive direction of the coefficient indicates that the increase in NPL is followed by an increase small on ROA, but correlation the not significant. This is meaningful if during the study period, fluctuations NPL No have influence which is substantial to the banking competence in generating profits from its assets.

The insignificant influence of NPL on ROA indicates that the fluctuations in the level of problem loans that occurred during the study period were not sufficient. strong For influence capability bank to provide profits from the assets it owns. In other words, changes in NPL are not directly reflected in change level Bank profitability. This means that during the study period, credit risk was not a major determining factor in bank profit formation. A bank's ability to generate profits is not only determined by level credit problematic, but also get influence from various external determinants other than credit risk that are not explored in this research.

Both of them explain that even though NPL increase, bank Still capable manage credit problematic with Good through restructuring credit And reserves loss, so that it doesn't lower profit in a way significant. Level NPL which Still in lower limitation tolerance 5% Which confirmed from Authority Service Finance (OJK) also become reason Why its influence No significant. However, results study This contradictory with findings [23] which represent that *NPL* implications negative in a way meaningful to ROA.



A decline in the quality of productive assets and an increase in the burden of loss provisions, thus reducing bank profitability. The difference in the study results may be caused by differences in economic conditions, periods observation, as well as policy management risks applied by each bank. Influence Structure Capital (DER), Risk Credit (NPL) Against Profitability (ROA). Profitability is size main performance financial company, which reflects the company's capability to earn profits from assets. Profitability itself is determined by many factors, both internal and external [30]. Two of them among them are capital structure and risks credit. Structure capital describe The proportion of debt and equity used in company financing, while credit risk indicates the extent to which a company faces potential debtor default. The combination of these two factors can influence the rate of return *and* the financial risk involved.

The results show that the combination of capital structure and credit risk management significantly determines a bank's profitability. A high DER can increase profitability by providing additional working capital and greater profit potential, but only if managed wisely and accompanied by sound credit risk management. Conversely, a high NPL without effective management can lead to higher non-performing loans (NPLs). Can pressing profit because increasing credit loss provision burden. Thus, this simultaneous correlation indicates that the capital structure and quality asset productive is two main components that are interrelated in determining the level of bank profitability.

Results This supported by [31] and [12] who found that DER and NPL in a way collective trigger implications Which meaningful to ROA on conventional commercial banking in Indonesia. They explained that the proportion of debt and the level of credit risk simultaneously contribute to the competence of banking institutions in formulating profitability.

V. CONCLUSIONS AND SUGGESTIONS

Based on the results of the panel data regression analysis, it was shown that capital structure, as measured by DER, has a negative and significant impact on profitability. This means that the higher the debt proportion, the lower the profitability of a

banking company. Which No optimal increase interest expense and financial risk.

Based on findings test analysis regression data The panel shows that *the credit risk* is quantified with ratio NPL have The implications are unidirectional but not significant for profitability. This means that the increase in NPLs does not significantly reduce profits, as banks are still able to maintain profitability through efficiency and revenue diversification. NPLs remain below the OJK's safe limit (5%), so the impact is not significant. Based on the results of the panel data regression analysis test, it reflects that the capital structure and Credit risk collectively has positive and significant implications for profitability. These two variables explain 43.7% of the variation in profitability, with the remainder influenced by other factors such as BOPO, NIM, LDR, and And condition macroeconomics other. Combination of management structure capital And risk credit which good is the key to increasing profitability.

Based on the results of the study, the following are a number of suggestions formulated, namely; for Banking Companies , banking companies are recommended to manage their capital structure carefully so that the debt proportion remains optimal, increase operational efficiency, and strengthen credit risk management to maintain profitability and financial stability. Investors should consider capital structure (DER) and credit risk (NPL) as important indicators for assessing a bank's performance and risk level before investing. Investors should choose a bank with a stable ROA. DER which under control, And NPL low, because reflects good management performance and lower risk levels.

For further researchers, it is hoped that they will be able to provide look variables other like BOPO, NIM, LDR, and macroeconomic factors so that the study results are more comprehensive and expand the period and amount sample so that results more representative. Further studies can also expand the object of study, right? just bank conventional but also Islamic banks separately to make the results more specific.



VI. REFERENCE

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