

THE INFLUENCE OF NET INTEREST MARGIN, BANK SIZE, BANK AGE, NON-PERFORMING LOAN, LDR, AND GCG ON THE RISK OF MISCONDUCT WITH REAL GDP AS A MODERATION (CASE STUDY OF CONVENTIONAL COMMERCIAL BANKS 2014 - 2021)

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Abstract

Bank and financial institution misconduct is a critical problem because it can be the main cause of losses due to management negligence and carelessness and has the potential to cause losses to investors and disrupt the stability of banks or financial institutions as a whole. The trend of financial misconduct continues to increase, this problem has not yet become the focus of attention by researchers and policy makers, especially in developing countries. This research study aims to analyze the influence of net interest margin, bank size, bank age, non-performing loan, LDR, and GCG on the risk of misconduct with real GDP as a moderator (case study of conventional commercial banks in 2014 - 2021). The research population used all conventional commercial banks under OJK supervision in 2014-2021, totaling 94 banks. The sampling technique is purposive sampling method. From a population of 94 commercial banks that met the sample criteria, there were 60 commercial banks. Overall, $60 \times 7 = 420$ research data were obtained during 7 years of observation (2014-2021). The research results show net interest margin has a significant positive effect on risk of misconduct with sig value. $0.000 < 0.05$ (H1 accepted). Bank Size has a significant positive effect on the risk of misconduct with the sig value. equal to $0.000 < 0.05$ (H2 accepted). bank age has a significant positive effect on the risk of misconduct with the sig value. equal to $0.000 < 0.05$ (H3 is rejected). NPL has a significant positive effect on the risk of misconduct with the sig value. equal to $0.000 < 0.05$ (H4 accepted). LDR has a significant negative effect on the risk of misconduct with the sig value. equal to $0.000 < 0.05$ (H5 accepted). GCG has a significant positive effect on the risk of misconduct with the sig value. equal to $0.000 < 0.05$ (H6 is accepted.). And finally, real GDP can moderate the relationship between LDR and the risk of misconduct and the sig value. amounting to $0.029 < 0.05$ (H7 accepted).

Keywords: Net Interest Margin, Bank Size, Bank Age, Non-Performing Loans, LDR, GCG, Real GDP and Misconduct Risk.

INTRODUCTION

Global financial crisis 2007-2009 has demonstrated the importance of consumer protection in the financial sector in order to achieve financial stability (The World Bank, 2014). The global financial crisis has increased financial regulators' attention to the behavior of financial service institutions, both macroprudentially, microprudentially and consumer and investor protection. (BIS, 2018). As an industry based on trust between market players, integrity is a fundamental factor in supporting the sustainability of the financial services sector itself.

After the crisis emerged a number of large cases of financial violations (financial misconduct) and is always the main topic in every financial and academic debate (Ghosh, 2020). Misconduct banks and other financial institutions are a critical problem because they can be the main cause of losses due to management negligence and carelessness and have

the potential to cause losses to investors and disrupt the stability of banks or financial institutions as a whole (Dalla Pellegrina & Saraceno, 2011).

Total cost misconduct for global banks is estimated to reach US\$320 billion in the last decade (Carletti, 2017). Financial institutions have become one of the most distrusted industries over the past decade in several countries (Carroll, 2016). Regardless of trends misconduct As finances continue to increase, this problem has not yet become the focus of attention by researchers and policy makers, especially in developing countries.

According to (European Banking Authority, 2014), risk misconduct defined as the risk of present or future losses to financial institutions arising from the inappropriate provision of financial products or services, including intentional or negligent misconduct.

Indonesia, as a member of the G20, also strives to protect consumers and the public in order to support industrial development in the financial services sector. Law (UU) Number 21 of 2011 concerning the Financial Services Authority (OJK) has given the OJK a mandate to provide protection to consumers and the public as regulated in Article 4 of the Law. In its implementation, OJK has the authority as stated in Articles 28-30, namely to take action to prevent losses, provide consumer complaint services, and carry out legal defense. Consumer protection can also prevent business actors from being trapped gridlock business competition that relies on risky product, misleading signals, or fraud that can be detrimental in the long term.

When consumers feel protected, the number of consumers will increase so that demand for financial products or services will increase so that Financial Services Business Actors (PUJK) from the financial industry can benefit from the increased demand. (Ibrahim, 2014).

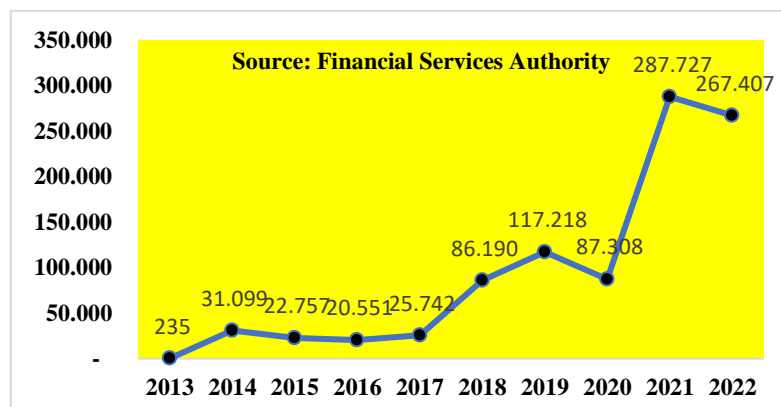


Figure 1. OJK Consumer Service Statistics

One of the indicators that indicates risk misconduct is a consumer complaint to a bank or financial institution regarding the amount and magnitude of losses at stake (European Banking Authority, 2014). Based on data obtained from the OJK Integrated Consumer Service System (SLKT) which is presented in Figure 1, from January 1 2013 – September 30 2022 it is known that the number of reports from consumers and the public reached 811,166 with The trend tends to increase every year. The report consisted of 725,458 questions, 60,478 information, and 25,230 complaints. The banking and fintech sectors were

the sectors most frequently reported by consumers and the public with 197,418 and 170,738 reports respectively. Of the 25,230 complaint reports, the banking sector is still the financial sector that received the most complaints, namely 11,359, followed by the Non-Bank Financial Industry (IKNB) sector, namely financing and insurance institutions with 4,933 and 3,323 respectively, and finally the Capital Markets sector with 4,933 and 3,323 complaints. 903. Meanwhile, data on the number of complaints sourced from Internal Dispute Resolution (IDR) for all commercial banks up to the third quarter of 2022 reached 3,781,036 complaints with the topics most frequently complained about by consumers, including those related to administration, provisions and transaction costs; transaction failures, delays or inconsistencies; bill amount or account balance; fraud and system disruption.

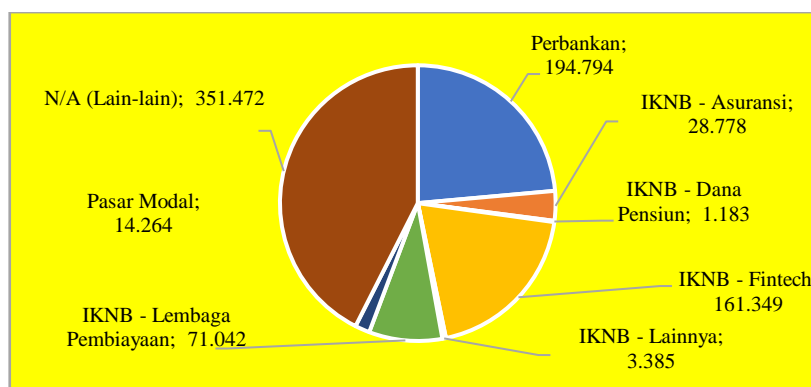


Figure 2. OJK Consumer Service Statistics Per Sector

The products or services that are most frequently complained about to banks are credit cards, consumer credit, home ownership credit and savings. The causes, among others, are related to credit restructuring/relaxation problems, collateral/guarantee problems, credit collectibility problems that do not match actual conditions, imposition of fines/interest on loan repayment early/before maturity, problems with access and fraud by external sources such as fraud, account hacking, skimming, cyber crime. The problems reported show that consumer complaints in the banking sector tend to be influenced by the existence of misconduct. (European Banking Authority, 2014) states that consumer complaints against a financial institution in terms of the amount and losses at stake can be an indicator of possible risk misconduct by banks or other financial institutions.

Research gaps This research is a research object and research variables that are different from previous studies. Research about misconduct which is linked to the performance or condition of banks has been done in Italy and India, but has never been done in Indonesia. Research in Italy was carried out by Del Gaudio et al., (2022) discusses the relationship between misconduct both potential and actual with the bank's performance and health level. Then other research was conducted in India by Saibal Ghosh, (2020). The research results found that: (i) banks with larger sizes are more likely to be involved in financial violations when real GDP is low; (ii) banks with small capital are more likely to

engage in financial misconduct when real GDP is low; (iii) banks with low liquidity tend to be involved in violations during periods of high real GDP growth where banks seek to increase short-term liquidity in order to support their high levels of activity. Apart from these two studies, no further specific research has been found regarding misconduct bank which is linked to the bank's economic conditions and results.

The problem formulation in this research is trend misconduct in European and American countries has increased since the global financial crisis occurred in 2008. The phenomenon of misconduct What happened in other countries also happened in Indonesia. This is demonstrated by the increasing number of consumer complaints in the financial services sector. Most of these consumer complaints are caused by several things, including bank products or services that do not match the offer, difficulties in the claims process, the claim disbursement process and the actions of bank employees. This shows that the number of consumer complaints that occur in the financial services sector is influenced by behavior misconduct Banks that have the potential to harm consumers. Based on the formula described, this research analyzes the influence of bank performance and conditions on consumer complaints, which are risk indicators misconduct. So research questions as follows:

1. How does NIM influence? against risk misconduct?
2. How to influence Bank size against risk misconduct?
3. How to influence Bank age against risk misconduct?
4. How does NPL affect risk misconduct?
5. How does LDR affect risk? misconduct?
6. How does GCG influence? against risk misconduct?
7. Does real GDP moderate the influence of LDR on risk? misconduct?

LITERATURE REVIEW

Agency Theory

This theory expresses the agency relationship that arises from principal consisting of one or more people who provide work to other people, namely agent. This agent is given authority by delegation by principal (Jensen & Meckling, 1976). In theory it is explained that principal is the owner of shares in the company and agent is the management that manages the company. This agency has a relationship that can be explained by the existence of a contractual agreement principal give work to agents. The emergence of a conflict of interest between principal and agent can occur when decision making by the agent is not in line with interests principal.

Risk Misconduct

Risk definition misconduct according to (European Banking Authority, 2014) is the risk of present or future loss to an institution arising from the inappropriate provision of financial products or services, including intentional or negligent misconduct. Possible indicators to signal the presence of risk misconduct are: (i) sanctions applied by the relevant authorities to financial institutions for violating practices; (ii) sanctions applied to several

similar institutions for violating practices; and (iii) complaints against financial institutions regarding the amount and magnitude of losses at stake.

Net Interest Margin (NIM)

Profitability is a link between operational efficiency and bank profitability. One measure used to determine how effectively banks place their productive assets in the form of credit is Net Interest Margin (NIM). According to Salvatore (2005), one of the main tasks of banks is to maintain their level of profitability, because high profitability is a goal and indicator of output what customers want.

According to Iswi Haryati, 2010, NIM is used to measure a bank's ability to manage its productive assets to generate net interest income. Net interest income is obtained from loan interest income minus interest expenses arising from managed fund sources.

Bank Size

The size of a bank or company shows that the larger the company with assets that have minimal volatility, thus providing better performance (King and Santor, 2008). Relatively large companies tend to be fully involved in various economic conditions and will have better capabilities in using increasingly advanced technology (Yazdanfar and Ohman, 2015). Large companies also tend to carry out better strategies in large markets. (Majundar, 1999).

Bank Age

Ageshows the number of years since the company was incorporated in each year in the market where it implements its credibility and experience in the market(Muritala, 2018). Older companies have experience and avoid problems that adversely affect the condition of the bank (Stinchcombe, 1965). Majundar & Chibber (1999) in their research revealed that when a company is older it will gain economic benefits through business learning, experience and access to many resources so as to build reputation and improve company performance.

Loan to Deposit Ratio (LDR)

Loan to Deposit Ratio (LDR) is widely used to measure the level of bank liquidity, the higher the level of this ratio, the smaller the level of liquidity, because the amount of funds needed to finance credit increases (Muljono, 1995). This ratio describes the number of third parties disbursed in the form of credit or in other words, this ratio shows the bank's liquidity ability to use its credit as a source of liquidity. This ratio also signals whether a loan can still undergo expansion or must be limited.

Good Corporate Governance (GCG)

GCG consists of wordscorporateis an adjective (adjective) which means "anything related to a company or corporation" and the word governance which is a noun (noun) which means "management". So that corporate governance can be interpreted as governance with the direction and process of controlling the company (Hamdani, 2016).

Implementing good GCG can reduce risks that may be carried out by the Board of Directors and Commissioners by making decisions that benefit themselves and can increase investor confidence. The purpose of implementing GCG is to guarantee and monitor the operation of the system governance in an organization (Newell & Wilson, 2002).

Definition of Consumer Protection

Based on Law Number 21 of 2011 concerning OJK, the definition of consumers is parties who place their funds and/or utilize the services available at financial service institutions (customers in banking, investors in the capital market, policy holders in insurance, and participants in pension funds). Apart from that, the definition of consumer according to Law Number 8 of 1999 concerning Consumer Protection is every person who uses goods and/or services available in society, whether for their own benefit, family, other people, or other living creatures and not for trading. In Article 1 paragraph (1) of the Law it is said that consumer protection is all efforts to ensure legal certainty to provide protection to consumers.

Influence Net Interest Margin to Misconduct Risk

Research result (Del Gaudio et al., 2022) reveals that interest income and non-interest bank net is negatively and positively related to the frequency of complaints or dispute between banks and their consumers. This research states that an increase in interest income and non-interest Rp. 1 million results in an increase (decrease) in the number of complaints of around 0.12. This research also confirms that misconduct Banks are positively influenced by complex diversification of products or services and activities cross-selling bank.

H1: Net Interest Margin positive influence on risk of misconduct.

Influence Bank Size Against Misconduct Risk

The size of the company or bank shows that the larger the company, with assets that tend to have minimal volatility, can produce better performance (King & Santor, 2008). Research result (Nguyen et al., 2016) revealed that the performance and strength of bank balance sheets tend to influence the potential for this to occur misconduct. This is confirmed by the research results (Ghosh, 2020) carried out against commercial banks in India, that financial misconduct involves more large banks and tends to occur in government-owned banks with adequate capital levels.

Bank size is a key driving factor financial misconduct, although the level of importance varies across bank characteristics, for example size is important for larger, well-capitalized and profitable banks with low levels of liquidity and NPLs. (Ghosh, 2020). Size for banks with low NPLs indicates a bank's tendency to expand market share amidst increased competition, often with adverse consequences.

H2: Bank Size positive effect on risk misconduct.

Influence Bank Age To Misconduct Risk

Bank Age can have the same meaning and explanation as Firm Age where the effect of age on the company is also the same, namely that it will improve bank performance because the older the bank, the more bankable it is sustainable. Bank Age is a measure to calculate bank age which can be used as a proxy for bank reputation (Del Gaudio et al., 2022). In a long-term context, banks that have been around for a long time will easily see and assess their reputation in the past. This shows that banks with a good reputation and performance tend to avoid disputes with their consumers, which is reflected in the relatively low number of consumer complaints.

H3: Bank Age has a negative effect on risk misconduct.

Effect of NPL on Misconduct Risk

According to Saunders (2008), lending that does not pay attention to the principle of prudence, including the selection of debtors, will create credit risk. To find out the level of credit risk of a bank is to look at the NPL ratio. This ratio is a key factor that drives overall bank performance.

Research result (Ghosh, 2020), revealed that bank credit quality tends to have no effect on financial misconduct. However, a high NPL ratio if associated with increased sales of credit products in order to recover losses arising from previously disbursed credit tends to encourage misconduct.

H4: NPL has a positive effect on risk misconduct.

The Effect of LDR on Misconduct Risk

Liquidity is generally defined as a company's ability to meet its short-term obligations. For banks, liquidity is the ability to meet funding needs when deposits are withdrawn and other obligations occur, including meeting community needs in the form of lending and placing funds.

According to research (Ghosh, 2020), banks with low liquidity tend to be involved in financial violations during periods of high real GDP growth where banks will seek to increase short-term liquidity needs to support their high levels of activity. Meanwhile, banks with large market shares and high liquidity are less vulnerable to misconduct. This condition shows that a better liquidity position will prevent banks from engaging in risky behavior, because the negative impact of this risky behavior is on the bank's own liquidity position.

H5: LDR has a negative effect on risk misconduct.

The Influence of GCG on Misconduct Risk

Implementation of GCG is to guarantee and monitor the operation of the system governance in an organization (Walsh & Seward, 1990). Corporate governance also defined as governance with the direction and process of controlling the company (Hamdani, 2016).

According to (Nguyen et al., 2016), good governance prevents this from happening misconduct. Misconduct usually associated with a disregard for law, ethics and governance and internal controls. This may occur where internal processes and governance

are inadequate and can occur at the individual employee or company level (European Systemic Risk Board, 2015). Researcher (Bhagat et al., 1998) which examines the consequences of illegal corporate behavior by analyzing market reactions to violations showing a negative impact on the financial performance and reputation of companies that commit violations.

H6: GCG has a negative effect on risk misconduct.

The Moderating Effect of Real GDP on the Effect of Liquidity on Misconduct Risk

Liquidity conditions are influenced by a country's economic activity as reflected in GDP (gross domestic product) including the inflation rate. The inflation rate can determine how the monetary policy reaction will be carried out by a country's Central Bank in order to control liquidity and control the rate of inflation. This monetary policy certainly influences macroeconomic conditions such as movements in interest rates and exchange rates and ultimately has an impact on a country's economic growth.

GDP growth will affect the amount of demand and supply for savings and loans made by the public to banks. GDP growth has a positive effect on bank profits so that it can improve performance, meaning that the higher GDP growth is expected to be, the higher the level of demand and supply of savings and loans from the public. (Kosmidou, 2008).

Research result (Ghosh, 2020) states that banks with low liquidity are more likely to engage in financial misconduct during periods of high real GDP growth. This research explains that banks will try to increase short-term liquidity needs to support their high operational activities. Based on the explanation above, the following hypothesis can be formulated:

H7: Real GDP moderates the effect of liquidity level on risk misconduct.

Theoretical Framework

The research framework in this study was created by describing the researcher's thinking model in conducting research regarding the analysis of the influence of NIM, Bank size, Bankage, NPL, LDR and GCG against risk misconduct with real GDP as a moderator. The following is a picture of the theoretical framework in this research:

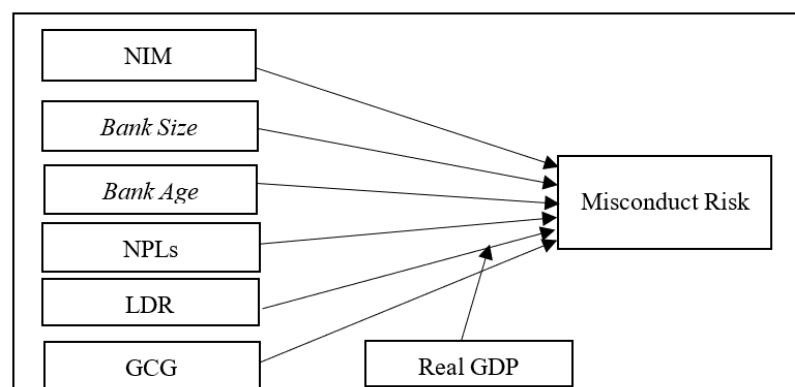


Figure 3. Framework of Thought

METHOD

Data Types and Sources

This study uses a quantitative approach. This type of data uses secondary data in the form of the number of consumer complaints in the banking sector and annual financial reports of conventional commercial banks.

The data source in this research uses secondary data sources. Secondary data is a type of data that refers to primary data that has been processed and presented by another party. (Basilius, 2015). The data in this research were obtained from books, data from the Central Bureau of Statistics (www.bps.go.id), data from the Financial Services Authority (OJK) (www.ojk.go.id), data from reports conventional commercial bank publications for 2014-2021, as well as from related journals that use panel data.

Population and Sample

The research population used all conventional commercial banks under OJK supervision in 2014-2021, totaling 94 banks. The sampling technique is via non-probability sampling with method purposive sampling where data collection is based on certain criteria (judgment sampling), as follows:

Table 1. Determination of Sample

No	Criteria	Bank
1.	Conventional Commercial Banks	94
2.	regional development banks	(23)
3.	Foreign Bank Branch Offices	(7)
4.	The bank report is incomplete	(3)
5.	Banks that will close operations in 2022	(1)
Number of samples		60

Source: Secondary data processed (2022)

From a population of 94 commercial banks that met the sample criteria, there were 60 commercial banks. Overall, $60 \times 7 = 420$ research data were obtained during 7 years of observation (2014-2021).

Analysis Techniques

Data collection in this research uses documentation techniques, namely by studying documents related to data regarding Total Assets, Total Credit, Third Party Funds, Number of Problem Loans, year of bank establishment, GCG ranking in conventional commercial bank reports, as well as data related to growth. Indonesian economy.

The data processing technique used in this research uses Eviews version 10 software. Eviews version 10. It is used to process statistical data and econometric data, in the form of time series, cross sections and panel data. Eviews software is often used to analyze financial

data, simulations, cost analysis on business activities, and macroeconomic forecasting. (Ghozali, 2017).

RESULTS AND DISCUSSION

Descriptive statistics

Descriptive statistics are used as initial observations to identify the characteristics of the data before proceeding to Inference Statistics. Below is a descriptive analysis of each dependent variable, independent variable and moderating variable.

Table 2. Descriptive Analysis

	POTENTIAL MISCONDUCT_Y	C	NIM_X1	BANK_SIZE_X2	BANK_AGE_X3	NPL_X4	LDR_X5	RATINGS GCG_X6	GDP
Mean	310.8871	1,000000	4.366897	16.43528	44.93333	3.133078	93.50133	2.053125	13897381
Median	20.39481	1,000000	4.166500	16.46879	32,00000	2.882500	88.35100	2,000000	14214291
Maximum	8328,000	1,000000	21.02900	16.64735	125,0000	27.53700	971.6470	4,000000	16976691
Minimum	1,000000	1,000000	-2.946000	16.17350	14,00000	0.000000	0.000000	1,000000	10569705
Std. Dev.	862.7526	0.000000	1.981781	0.156023	21.46491	2.272182	38.99698	0.365594	2107626.
Observations	5760	5760	5760	5760	5760	5760	5760	5760	5760

Based on table 2 above, it is known that the number of observations studied was 5760 observations. The NIM variable which shows profitability has a minimum value of 2.94%, namely at PT Bank Capital Indonesia, Tbk in August 2021 and a maximum value of 21.02% at PT Bank Amar Indonesia in January 2020 with a standard deviation showing 1.98% . The mean of 4.16% shows that the level of profitability of conventional commercial banks in Indonesia is very high. This is in line with the results of the Bankscope, Theglobaleconom survey in 2021, where the NIM of banks in Indonesia was above the average NIM of banks in ASEAN countries at 2.72% and Indonesia was ranked second after Cambodia with an average NIM of 5.35%. The higher banking NIM compared to other ASEAN countries can be caused by less efficient and less competitive market conditions in Indonesia.

Variable Bank Size is a variable that states the size of a bank which is measured by Ln Total Assets so it has no meaning, but if you look at the attachment you can see that bank size has a minimum value of Rp. 174,553,000,000.00 owned by PT Bank Amar Indonesia, while the maximum value is Rp. Rp. 1,575,049,662,000.00 owned by PT Bank Rakyat Indonesia, Tbk.

The Bank Age variable is a variable that shows the age of the bank expressed in years. Bank Age has a minimum value of 14 and a maximum value of 125. The minimum value held by PT Bank ICBC Indonesia is the youngest bank, while the maximum value is owned by PT Bank Rakyat Indonesia, Tbk which indicates the oldest bank. The average age of commercial banks in Indonesia is 44 years. Age is considered an important determinant of firm innovation due to the learning effect, which allows mature firms to innovate more effectively because they build on previous routines and capabilities. (Fan & Wang, 2019)

The NPL variable has a minimum value of 0.00% at PT Bank Nationalnobi in 2015, which means the bank can manage the credit given to customers very well. The maximum value of 27.54%, far above the maximum limit of 5%, was owned by PT PT Bank of India Indonesia, Tbk in July 2016. This NPL value is very high and indicates that the Bank's condition is not healthy. The NPL standard deviation is known to be 2.27%, which means that the data is distributed evenly because the value is smaller than the mean.

The LDR variable is a variable that states the bank's liquidity level. The LDR ratio which is considered healthy is generally around 70%-90%. LDR shows how far a bank's liquidity level is. The greater the LDR, the more illiquid a bank is, meaning that the bank will have difficulty meeting maturing obligations from cash flow funding sources and/or high quality liquid assets without disrupting the Bank's financial activities and condition, for example if there is a sudden withdrawal of large funds. by depositors. The maximum value is 971.65% and the minimum value is 0% owned by PT Bank Digital BCA in 2020. The bank's LDR ratio is 0% because PT Bank Digital BCA does not have assets in the form of Credit Granted (KYD) and also does not have liabilities in the form of Funds. Third Parties (DPK) in 2020. This is one of the Bank's strategies in developing the business model from a conventional commercial bank to a digital bank.

GCG has mean of 2.05. According to the Financial Services Authority Circular Number 13 /Seojk.03/2017 concerning the Implementation of Governance for Commercial Banks, it is known that from the results of the self-assessment the implementation of Governance for conventional commercial banks is ranked 2. Rank 2 reflects that bank management has implemented Governance generally. good as reflected in adequate compliance with bank governance principles. This shows that the average result of self-assessment of the implementation of Governance for conventional commercial banks in Indonesia is rank 2. The minimum score of 4 is owned by PT Bank Centra Asia, Tbk in 2021 while the maximum score of 4 is owned by PT Bank Jtrust Indonesia in 2021. 2014.

Potential variable misconduct is a variable that states the number of consumer complaints against commercial banks that are the research sample. The potential misconduct variable has a maximum value of 8,328, namely at PT Bank BRI, Tbk, indicating the high level of consumer complaints against commercial banks in Indonesia. The potential misconduct variable has a mean of 310.88 with a standard deviation of 862.75. Based on POJK 18, what is meant by complaint is an expression of consumer dissatisfaction, either verbally or in writing, which is caused by material, natural and direct losses and/or potential losses to consumers due to non-fulfillment of agreed financial transaction agreements and/or documents. This can also be interpreted that the emergence of consumer complaints is caused by violations or negligence by PUJK in providing financial products or services to its consumers.

Inferential or Inductive Analysis

Chow Likelihood Ratio Test

H0: The Common Effects model is better than Fixed Effects

H1: Fixed Effects Model is better than Common Effects

Significance level: α

$$\text{Test Statistics: } F_{\text{obs}} = \frac{(R_{UR}^2 - R_R^2)/(N-1)}{(1-R_{UR}^2)/(NT-k)}$$

Criteria for decision making reject H_0 if or if $F_{\text{obs}} > F_{\alpha;(N-1),(NT-k)}$ P-value $\leq \alpha$

Table 3. Chow Likelihood Ratio Test Results

Effects Test	Statistics	df	Prob.
		(59.56	0.000
Cross-section F	8.892885	93)	0
	507.7988		0.000
Chi-square cross-section	79	59	0

From Table 3, the decision to reject H_0 is obtained so that the conclusion is that Fixed Effects mode is better than Common Effects because $\text{prob.} = 0.00 < \alpha (0.05)$.

Classic assumption test

Normality test

The normality test is a test carried out as a prerequisite for carrying out data analysis. The normality test is carried out to check whether the research data comes from a normally distributed population or not. This test measures the difference between skewness and kurtosis of data. The hypothesis used is as follows:

$H_0: \varepsilon_i \sim N(0; \sigma^2)$ atau ε_i normally distributed

H_1 : or not normally distributed $\varepsilon_i \not\sim N(0; \sigma^2)$

with decision making criteria to reject H_0 if P-value $\leq \alpha (0.05)$

Following are the results of normality testing:

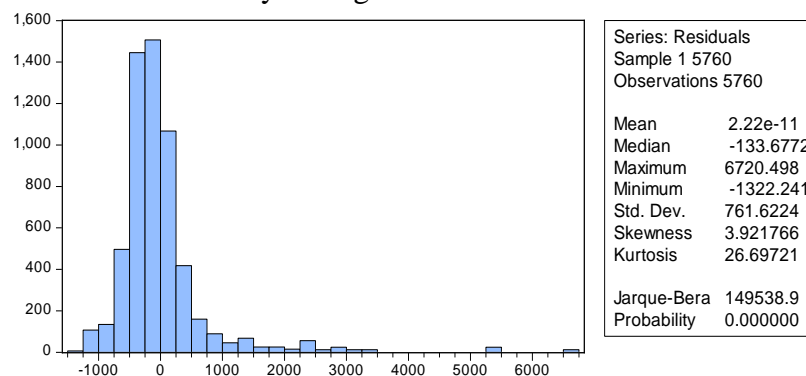


Figure 4. Normality Test Results

From Figure 4 it can be seen that the probability value $JB = 0.00 < \alpha (0.05)$ so it can be concluded that H_0 and the data are not normally distributed. However, with Gaussian central limit theory and large number theory, if $n > 30$ it can be assumed that the data is normally distributed.

From the results of classical assumption testing consisting of normality tests, autocorrelation tests, multicollinearity tests and heteroscedasticity tests, it is clear that only violations of the heteroscedastic and autocorrelation assumptions occur so that the selected FEM model is transformed with GLS and PCSE as follows:

Table 4. Panel Least Squares (PLS) and Cross-section SUR (PCSE) Methods

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	-47959.46	10736.75	-4.466851	0.0000
NIM_X1	52.77021	6.782438	7.780419	0.0000
BANK_SIZE_X2	2959.906	653.9322	4.526319	0.0000
BANK_AGE_X3	13.19924	0.787060	16.77031	0.0000
NPL_X4	27.57066	5.446551	5.062039	0.0000
LDR_X5	-1.398865	0.295691	-4.730825	0.0000
RATING_GCG_X6	-563.5164	37.78224	-14.91485	0.0000
LDR_GDP	-23.88744	10.93940	-2.183615	0.0290
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.286458	Mean dependent var		310.8871
Adjusted R-squared	0.278185	SD dependent var		862.7526
SE of regression	732.9917	Akaike info criterion		16.04371
Sum squared resid	3.06E+09	Schwarz criterion		16.12116
Log likelihood	-46138.88	Hannan-Quinn Criter.		16.07066
F-statistic	34.62885	Durbin-Watson stat		2.202413
Prob(F-statistic)	0.000000			

Test Godness of Fit Model (F Test) and Determination Coefficient Test (Adj R2)

The test uses the coefficient of determination or adjusted R square test to see the percentage of contribution from the independent variable to the dependent variable. The results of the adjusted R square test via the E-Views program are as follows:

Table 5. Coefficient of Determination Test Results

R-squared	0.286458
Adjusted R-squared	0.278185

From table 5, the results can be seen, namely the coefficient of determination, the Adjusted R Square value is 0.2781, so this shows that the independent variables are totally able to explain variations and contribute to the dependent variable, namely 27.81 percent and the remaining 1 percent by other variables outside model. An adjusted R squared value above 25% can be considered to mean that the model is good enough.

Test Godness Of Fit Model (F Test)

The results of hypothesis testing using the F test via the e-views program are as follows:

Table 6 Godness of Fit Model Test Results

F-statistic	34.62885
Prob (F-statistic)	0.000000

From table 6, the F statistics results are obtained and the probability value = 0.000 or smaller than $\alpha = 0.05$ so that the decision is to reject H0 and a conclusion is drawn with an error rate of 5%. The model is fit or it can be said that together the independent variables influence linearly. significant to the dependent variable.

Hypothesis test

Partial test results (T test). The assumptions used are:

$$H_0 : (\text{jth variable has no effect on dividends}) \beta_j = 0$$

$$H_1 : (\text{variable j influences dividends}) \beta_j \neq 0$$

With the decision-making criteria, reject H0 if $\text{stat} > t \text{ table} (1.64)$ or if $\text{P-value} / 2$. The results of the partial significance of the hypothesis are shown in the table as follows: $\leq \alpha$.

Table 7. Partial Hypothesis Significance Results (T Test)

Variables	Coefficient	t-Statistics	Prob.	Conclusion.
NIM_X1	52.77021	7.780419	0.0000	Significant influence
BANK_SIZE_X2	2959.906	4.526319	0.0000	Significant influence
BANK_AGE_X3	13.19924	16.77031	0.0000	Significant influence
NPL_X4	27.57066	5.062039	0.0000	Significant influence
LDR_X5	-1.398865	-4.730825	0.0000	Significant influence
RATING_GCG_X6	-563.5164	-14.91485	0.0000	Significant influence
LDR_GDP	-23.88744	-2.183615	0.0290	Significant influence

From table 7 above, the linear regression equation is followed in the following model:

$$\text{Potential Misconduct } Y = -47959.464 + 52.77 * \text{NIM_X1} + 2959.905 * \text{BANK SIZE_X2} + 13.1992 * \text{BANK_AGE X3} + 27.57 * \text{NPL X4} - 1.39886454293 * \text{LDR LDR GDP.}$$

Effect of NIM on Risk Misconduct

The test results state that NIM has a positive effect on risk Misconduct. The results show that the NPL regression coefficient is 52.77021 with a significance value of 0.0000, where this value is smaller than 0.05, so hypothesis 1 is accepted. NIM has a significant positive effect on risk Misconduct means that every increase that occurs in NIM affects the amount potential misconduct by the Bank. The higher the profits obtained by banks, the more violations occur by banks which can be seen in the increase potential misconduct. From the resulting analysis comparison of the NIM value and potential misconduct of sample banks, it can be seen that in 2014-2016 the NIM value increased continuously from 3.98% in 2014 to 4.91% in 2016. The same condition occurred in the value of potential bank misconduct. also continued to increase in 2014-2016. This condition was repeated in 2018-2020, the NIM value decreased from 4.94% in 2018 down to 3.93% in 2020. The decline in the NIM value in 2020 was more due to the impact of the Covid-19 pandemic which triggered credit or financing growth in The banking sector slows down or experiences a decline which ultimately results in a decline in the profitability of the banking sector. It can be seen that NIM tends to move in the same direction as potential misconduct movements. The opposite condition occurred in 2016-2017, the NIM value decreased from 4.91% to 4.83%, while the potential misconduct value actually increased from 83.04% to 104.78%. This can be concluded that there is a significant positive relationship between NIM and potential misconduct. The results of bank profitability research are a strong determining factor in the potential for misconduct by banks. Banks with higher profit levels will be more susceptible to engaging in illegal behavior.

Influence Bank Size to Risk Misconduct

The test results stated that Bank Size positive effect on risk Misconduct. The results show the regression coefficient Bank Size has a value of 2959.906 with a significance value of 0.0000, where this value is smaller than 0.05, so hypothesis 2 is accepted. Bank Size has a significant positive effect on risk Misconduct means that every increase that occurs in Bank Size thus influencing the potential for misconduct by the Bank. The older the bank, the greater the potential for bank misconduct, which can be seen in the increase in potential misconduct. The results of the analysis show a comparison of the value of Bank Size and potential misconduct of sample banks, in 2014-2015 the value of Bank Size increased from 68.7 trillion in 2014 to 76.8 T in 2015. The same condition occurred in the potential value of bank misconduct. also increased in 2016-2017. This condition was repeated in 2017-2018, the value of Bank Size increased from 79.8 trillion in 2017 to 103.1 trillion in 2018. In 2019-2020, when the value of Bank Size fell from IDR 109.4 trillion to IDR 108.4 trillion, the value of potential misconduct also decreased from 426 to 358. This shows that the Bank Size

value has a positive effect on potential misconduct and appears to tend to move in the same direction as the movement of potential misconduct. The opposite condition occurred in 2018-2019 where the Bank Size value increased from IDR 103.2 trillion to IDR 109.23 trillion, while the value of potential misconduct actually decreased slightly from 517 to 426.

Influence Bank Age to Risk Misconduct

The test results stated that Bank Age has a positive effect on risk Misconduct. The results show the regression coefficient Bank Age worth 13.19924 with a significance value of 0.0000 where the value is smaller than 0.05 then hypothesis 3 is rejected. Bank Age has a significant positive effect on risk Misconduct means that every increase that occurs in Bank Age then it affects the size of potential misconduct by the Bank. This test is not in line with previous research by Del Gaudio (2020) which stated that age banks have a negative effect on potential misconduct. The results of this test found that the age of the bank did not have a negative effect on the number of financial violations by the bank, which means that the older the bank, the less likely it is to reduce the potential for financial violations by the bank. This indicates that age, which shows the bank's level of experience in running its business, does not necessarily have the level of implementation of good corporate governance.

The Effect of NPL on Risk Misconduct

The test results state that NPL has a positive effect on risk Misconduct. The results show that the NPL regression coefficient is 27.57066 with a significance value of 0.0000, where this value is smaller than 0.05, so hypothesis 4 is accepted. NPL has a significant positive effect on risk Misconduct means that every increase that occurs in NPL affects the potential size of misconduct by the Bank. The higher the level of non-performing loans of a bank, the higher it will be at risk of misconduct by the bank. This shows that banks must be careful in channeling customer funds in the form of credit. Providing credit that does not pay attention to the principle of prudence, including in terms of debtor selection, will give rise to credit risk and moral hazard which could potentially increase risk misconduct. The results of this test are in line with the results of research conducted by Del Gaudio (2022) which states that the level of bank credit risk exacerbates the bank's tendency to carry out unhealthy and abusive business practices. Meanwhile, research results (Ghosh, 2020), revealed that bank credit quality tends to have no effect on financial misconduct. However, if a high NPL ratio is associated with an increase in sales of credit products in order to recover losses arising from previously disbursed credit, it tends to encourage misconduct by the bank. The results of this test are associated with the bank's aggressive credit distribution strategy in order to increase profitability with low capital and are potentially involved in misconduct.

The Effect of Liquidity on Risk Misconduct

The test results state that liquidity has a negative effect on the risk of misconduct. The results show that the LDR regression coefficient is -1.398865 with a significance value of 0.0000 where the value is smaller than 0.05, then hypothesis 5 is accepted. LDR has a significant negative effect on Misconduct Risk, meaning that increasing Liquidity further

reduces the risk of misconduct. The results of this test are in line with the research results of Ghosh (2020), banks with low liquidity tend to be involved in financial violations during periods of high real GDP growth where banks will try to increase short-term liquidity needs to support their high levels of activity. Meanwhile, banks with large market shares and high liquidity are less susceptible to misconduct. This condition shows that a better liquidity position will prevent banks from engaging in risky behavior, because the negative impact of this risky behavior is on the bank's own liquidity position.

The Influence of GCG on Risk Misconduct

The test results state that GCG has a negative effect on the risk of misconduct. The results show that the GCG regression coefficient is -563.5164 with a significance value of 0.0000 where the value is smaller than 0.05 then hypothesis 6 is accepted. GCG has a significant negative effect on risk Misconduct This means that every increase in the bank's GCG value will further reduce the risk misconduct. The results of this test are in line with research conducted by Nguyen (2016) whose test results show that good governance prevents this from happening misconduct. Misconduct usually associated with a disregard for law, ethics and governance and internal controls. This may occur where internal processes and governance are inadequate and can occur at the individual employee or company level (European Systemic Risk Board, 2015). Banks are obliged to carry out business activities guided by good governance. Governance is implemented in an effort to improve performance and protect interests stakeholders, and also increase compliance with applicable laws and regulations and the application of ethical values (code of conduct).

The Moderating Effect of Real GDP on the Influence of Liquidity on Misconduct Risk

The test results of the moderating effect of real GDP moderate the effect The LDR for Misconduct Risk obtained a significance value of -23.88744 smaller than 0.05. Based on the regression results, the t value is 2.183615 > t table = 1.96 with a negative coefficient, so it can be concluded that real GDP as a moderator can strengthen the relationship between LDR and the risk of misconduct. The results of this test are in line with research results which state that banks with low liquidity tend to be involved in financial violations during periods of high real GDP growth. This research explains that banks will try to increase short-term liquidity needs to support their high operational activities.

CLOSING

Conclusion

This research aims to analyze the influence of NIM, Bank Size, Bank Age, NPL, LDR, GCG against Risk Misconduct, with real GDP as a moderator of LDR in Conventional Commercial Banks for the 2014-2017 period. Based on the description of the previous chapters, the following conclusions can be drawn:

1. Testing the first hypothesis (H1) gives positive NIM coefficient results, namely 52.77021 with a significance value of 0.0000 below the significance level of 0.05.

In conclusion, NPL has a significant positive effect on the risk of misconduct or H1 is accepted.

2. Testing the second hypothesis (H2) produces a positive Bank Size coefficient of 2959.906 with a significance value of 0.0000 below the significance level of 0.05. In conclusion, Bank Size has a significant positive effect on the risk of misconduct or H2 is accepted.
3. Testing the third hypothesis (H3) produces a positive Bank Age coefficient of 13.19924 with a significance value of 0.0000 below the significance level of 0.05. In conclusion, Bank Age has a significant positive effect on the risk of misconduct or H3 is rejected.
4. Testing the fourth hypothesis (H4) gives positive NPL coefficient results, namely 27.57066 with a significance value of 0.0000 below the significance level of 0.05. In conclusion, NPL has a significant positive effect on the risk of misconduct or H4 is accepted.
5. Testing the fifth hypothesis (H5) gives negative LDR coefficient results, namely -1.398865 with a significance value of 0.0000 below the significance level of 0.05. In conclusion, LDR has a significant negative effect on the risk of misconduct or H5 is accepted.
6. Testing the sixth hypothesis (H6) gives negative GCG coefficient results, namely -563.5164 with a significance value of 0.0000 below the significance level of 0.05. In conclusion, GCG has a significant negative effect on the risk of misconduct or H6 is accepted.
7. Testing the seventh hypothesis (H7) gives the results of the LDR Real PBD moderation coefficient to LDR being negative, namely -23.88744 with a significance value of 0.0000 below the significance level of 0.05. In conclusion, GDP moderates the influence of LDR on the risk of misconduct or H7 is accepted.

Practical Implications (Managerial)

This research explores what aspects can influence risk misconduct in the banking sector, because this issue is often discussed but rarely researched. Based on the results of this research, there are things that can be done by regulators and banks in managing the risk of misconduct, including:

1. The Financial Services Authority as a regulator should focus more attention on bank financial characteristics and economic conditions in predicting risk misconduct. Apart from that, the scale and complexity of a bank is also a factor that influences risk exposure misconduct a Bank.
2. Banks as business actors in the financial services sector must always prioritize the implementation of consumer protection aspects in all their business activities so that they can avoid and anticipate risks misconduct which also has an impact on increasing operational risk and reputation risk and causing losses to consumers and society in the financial services sector.

Future Research Plans

Based on the results of the discussion and research as well as explanations of the conclusions, several suggestions can be given by the author, namely as follows:

1. It is hoped that future research will not only focus on the financial industry in the banking sector, so that this research can be applied generally to other sectors in the financial services industry.
2. It is hoped that further research can add other relevant variables so that the results obtained are even better, including the level of consumer literacy, the cause of the complaint problem and when the problem occurred which caused the consumer to submit their complaint to the bank including the amount of sanctions imposed on the Bank for violations related to the problem complained of. by Consumers.

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