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Impact of Related Lending on Bank Health: Case Study in Indonesia Banking Industry

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ABSTRACT: Related lending is a critical driver of banks' health, particularly on its profitability and risks profile. As banks engage in related lending activities, they face challenges in managing profitability and assessing various risks, including systemic and credit risks. Nevertheless, the banking literature presents divided views on this: the information view and the looting view. The information view posits that related lending could enhance bank profitability and reduce risks through improved information symmetry between banks and borrowers. Conversely, the looting view theorizes that related lending may deteriorate banks' performance, reducing profitability and increasing risks, primarily due to the misallocation of resources and the prioritization of personal interests by banks' insiders.

The challenges of related lending have been intensified by the global crisis of the COVID-19 pandemic. Empirical research indicate that banks tend to increase lending to related parties by up to 20% during economic difficulties, with more significant effects in emerging economy such as Indonesia. This trend is reflected in increasing related lending ratio and deteriorating financial indicators of publicly listed Indonesian banks, such as declining profitability ratios of return on assets (ROA) and net interest margin (NIM), as well as increasing risk ratios of higher non-performing loans (NPL) during the pandemic's onset.

Therefore, this study will investigate the impact of related lending on bank health of publicly listed Indonesian banks across two critical periods, before crisis (2013-2019) and during the crisis due to the pandemic (2020-2022). By employing a quantitative approach through regression analysis, this study will be able to assess the relationship between bank profitability and risk ratios with their corresponding variables. The aim is to provide empirical evidence on whether related lending enhance or impair bank performance in terms of profitability and risk, particularly under the economic strains brought by the pandemic.

KEYWORDS: Bank Profitability, Bank Risk, Publicly Listed Indonesian Banks, Related Lending.

INTRODUCTION

In emerging economies, the role of banks is particularly crucial, as these economies typically rely heavily on bank-centric financial systems. This indicates that bank lending is a primary source of funding for both businesses and consumers, as highlighted by the International Monetary Fund (2003). In Indonesia, this key role of banks is further highlighted by the country's legal framework, particularly Law Number 7 of 1992 concerning Banking, as amended by Law Number 10 of 1998. This legislation underscores the vital roles of banks in accumulating savings, extending credit across various sectors, and facilitating national economic growth. Supporting data reflects the dominance of bank lending in Indonesia. According to the Indonesian Financial Service Authority (2022), the lending activities of Indonesian banks have shown a robust increase over the past decade. Specifically, lending surges from Rp3,319,842 billion in 2013 to Rp6,497,620 billion in 2022, marking a 95.72% rise. Additionally, throughout this period, total loans have consistently accounted for an average of 66.69% of the total assets of Indonesian banks.

However, the banking sector, despite its significant contributions to financial and economic development, often exhibits a high concentration of lending to related parties, such as bank shareholders, their families, acquaintances, and controlled firms. This trend, identified in studies by La Porta et al. (2003) and others, can lead to issues related to information asymmetry, often as a response to the high costs associated with information gathering and contract enforcement. The problem of "looting" exacerbates this issue, where bank insiders improperly use bank resources by extending loans to related parties without adequately considering the associated risks and returns. La Porta et al. (2003) particularly notes this issue during times of financial stress, as banks tend to significantly increase related lending, by as much as 20%, with these loans having a 33% higher likelihood of default compared to

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loans to unrelated parties. Such shifts in related lending over different periods can have a substantial impact on the banks' ability to support financial growth and economic development. This concern is further emphasized by Cull et al. (2011), who noted that the negative impacts of related lending are more pronounced in emerging economies, a situation that could be reflective of the banking industry in Indonesia.

BUSINESS ISSUE

Contemporary studies in banking underscore the critical role of related lending, particularly in times of crisis and within emerging economies like Indonesia. La Porta et al. (2002) define related lending as the practice where banks extend loans to individuals or entities, often banks' insiders, with whom they have existing relationships. This includes family connections, business partnerships, or significant ownership stakes. Their research highlights the significant, often detrimental, impact that related lending can have on a bank's financial health and key performance indicators.

The central issue of related lending revolves around the concept of looting, as suggested by La Porta et al. (2003). This viewpoint posits that related lending is misused by insiders to siphon off resources for personal gain, adversely affecting the bank's profitability and risk profile. Economic theories like 'looting' (Akerlof & Romer, 1993) and 'tunnelling' (Johnson et al., 2000) support this view. They suggest that related lending allows insiders to conduct self-serving transactions, offering loans under non-standard conditions to entities they control or have interests in, often disregarding the associated risks or returns. Cull et al. (2011) echo these concerns, emphasizing the potential for misallocation of resources in emerging economies, such as Indonesia, which could diminish bank profitability and escalate risks.

In Indonesia, this problem is particularly evident. The decline in key banking ratios among publicly listed banks during the COVID-19 pandemic's onset appears to be linked to an increase in related lending. Analysis of Indonesian banks' financial reports from 2013-2022 reveals that the average related lending ratio rise from 3.09% in 2019 to 4.21% in 2020. This increased reliance on related lending during the pandemic's economic turmoil suggests banks are trying to navigate profitability and risk challenges by lending to familiar parties. This trend is mirrored in the decline of important profitability ratios such as return on assets (ROA) and net interest margin (NIM), which dropped from 2.47% to 1.59%, and from 4.91% to 4.45% respectively, from 2019 to 2020. Concurrently, bank risk surges, with non-performing loans (NPL) increasing from 2.53% to 3.06% at the pandemic's start, reflecting an immediate impact on credit risk.

This scenario raises significant concerns for the banking industry's stakeholders, including banks, borrowers, as well as policymakers and regulators. Indonesian banking authorities, such as Bank Indonesia and the Financial Service Authority, face the challenge of balancing the need to sustain lending activities with managing the increased risks and diminishing profitability linked to borrower defaults and liquidity issues. They must act comprehensively to mitigate the risks of a potential banking collapse, similar to what happened with Lehman Brothers and Washington Mutual Bank during the 2008 global financial crisis, underlined by heightened systemic risks and increased credit risks.

LITERATURE REVIEW

La Porta et al. (2002) define related lending as the practice where banks extend loans to individuals or entities closely associated with the bank, termed as "banks' insiders." These relationships may involve familial connections, business partnerships, or substantial ownership stakes. Their findings highlight the significant effects of such lending on a bank's financial health and key financial metrics. Banking studies offer diverse views on the impact of related lending on profitability and risk. There are two main perspectives: the looting view and the information view, as outlined by La Porta et al. (2003). The information view posits that related lending can be beneficial due to improved information symmetry between banks and their familiar borrowers. This heightened understanding allows banks to make more informed risk assessments and lending decisions, potentially leading to reduced loan defaults and enhanced bank profitability and risk mitigation.

Conversely, the looting view suggests that related lending is often manipulated by bank insiders for personal gain, detrimentally affecting the bank's stability. This notion is backed by the economic theories of 'looting' (Akerlof & Romer, 1993) and 'tunnelling' (Johnson et al., 2000). According to this view, related lending allows insiders to engage in self-beneficial transactions, issuing loans

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under conditions that are not market-driven to entities they control or have interests in, often neglecting the risks or returns involved. This perspective gains particular relevance during financial crises in developing countries, where related lending is seen as a critical factor in banking system failures or systemic risks.

Cull et al. (2011) emphasize the significance of related lending, especially in emerging economies like Indonesia. The study suggests that the impact of related lending varies depending on the strength of a country's rule of law. In contexts where the rule of law is strong, related lending can bolster a bank's health. Conversely, in environments with weaker rule of law, it can be detrimental. Indonesia's banking sector, governed under the robust legal framework and supervised by both Bank Indonesia (macro-prudential) and the Indonesian Financial Service Authority (micro-prudential), reflects a strong adherence to international and national banking standards. This includes compliance with the International Accounting Standard (IAS) 24 on Related Party Disclosures and various banking regulations, showcasing a commitment to uphold high standards in banking practices.

DATA AND METHODOLOGY

DATA

This study primarily relies on the collection and analysis of secondary data, including financial statements from banks, data on banking performance, and macroeconomic indicators. This quantitative data is enriched with qualitative insights from existing academic research, as well as an examination of banking regulations and laws pertinent to the Indonesian context. Due to limitations in data availability, the research concentrates on a panel dataset over a ten-year period, encompassing 32 publicly listed Indonesian banks into two periods: 2013 – 2019 (Period I: before crisis), and 2020 – 2022 (Period II: during crisis of the pandemic).

METHODOLOGY

The methodology and analytical framework of this study are informed by the research of Hamada and Konishi (2010) and Setiyono and Munawaroh (2023), who have previously investigated related lending in the context of Indonesian banks. The particular equations and variables used in this research are:

Table 1. Variable Description

Variable	Measurement	Sources
Return on assets (ROA)	$\frac{\text{Net Income}}{\text{Total Assets}}$	Financial report
Net interest margin (NIM)	$\frac{\text{Net Interest Income} - \text{Net Interest Expense}}{\text{Earning Assets}}$	Financial report
Z-Score	$Z = \frac{\sum \text{ROA} + \sum \frac{\text{Equity}}{\text{Asset}}}{\sigma \text{ ROA}}$	Author's calculation
Non-performing loan (NPL)	$\frac{\text{Gross NonPerforming Loan}}{\text{Total Loan}}$	Financial report
Related lending (RTD)	$\frac{\text{Total Related Lending}}{\text{Total Lending}}$	Author's calculation
Equity ratio	$\frac{\text{Total Equity}}{\text{Total Assets}}$	Author's calculation
Operating expense to operating income (OEOI)	$\frac{\text{Operating Expense}}{\text{Operating Income}}$	Author's calculation
Natural logarithm of total assets (LNASSET)	Measurement of bank size	Author's calculation
Loan ratio	$\frac{\text{Total Loan}}{\text{Total Assets}}$	Author's calculation
GDP	Indonesia's real GDP growth	World Bank
EXC	Changes in the exchange rate of Rupiah	Bank Indonesia

Source: Author's Assessment

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In this study, regression analysis is utilized to examine the relationship between bank profitability and risk, employing specific equations and variables tailored for this objective. Following the methodology of Baltagi et al. (2003), an initial Hausman Test is conducted to assess the appropriateness of using either a fixed effect or random effect model in the subsequent regression analysis. Additionally, a Lagrange Multiplier (LM) test is carried out to confirm the model's suitability, specifically to ascertain the need for a common effect in the analysis.

The equations used in this research are aligned with those employed by Hamada and Konishi (2010) in their investigation of related lending in Indonesian banks during the 1994-2007 period, which includes the Asian and global housing crises.

a. Bank Profitability

The study particularly focuses on two critical metrics of bank profitability: return on assets (ROA) and net interest margin (NIM). These are considered as dependent variables and are detailed in equation (1) for ROA and equation (2) for NIM.

Equation (1)

$$ROA_{it} = \beta 0 + \beta 1 Related + \beta 2 Equity + \beta 3 OEOI + \beta 4 LNASSET + \beta 5 LOAN$$

Equation (2)

$$NIM_{it} = \beta 0 + \beta 1 Related + \beta 2 Equity + \beta 3 OEOI + \beta 4 LNASSET + \beta 5 LOAN$$

ROAis a measure that assesses a bank's operational efficiency and productivity, as highlighted by Trujillo-Ponce (2012). It gauges a bank's proficiency in transforming its assets, which include loans, securities, cash and reserves, and investments, into profits. Conversely, net interest margin (NIM) represents the spread between the interest income earned through lending and the interest expenses on earning assets. Banks achieve this by paying depositors a lower interest rate while lending these funds to borrowers at a higher rate (San & Heng, 2012).

b. Bank Risk

To evaluate bank risk in this study, two key measures are employed as dependent variables: the Z-score and the non-performing loan (NPL) ratio, outlined in equation (3) for the Z-score and equation (4) for NPL.

Equation (3)

$$Z\text{-}Score_{it} = \beta 0 + \beta 1 Related + \beta 2 Equity + \beta 3 OEOI + \beta 4 NIM + \beta 5 LOAN + \beta 6 EXC + \beta 7 GDP$$

Equation (4)

$$NPL_{it} = \beta 0 + \beta 1 Related + \beta 2 Equity + \beta 3 LNASSET + \beta 4 LOAN + \beta 5 EXC + \beta 6 GDP$$

Bank risk encompasses the various challenges faced by banks, including credit risk, as evidenced by the non-performing loan (NPL), and systemic risk, as indicated by the Z-score. This concept pertains to the potential dangers that can threaten a bank's stability or even precipitate its failure, as noted by Kasman and Kasman (2015). The Z-score, originally developed by Altman (1968), is a crucial metric for assessing a bank's systemic risk (Boyd & Runkle, 1993). It calculates the number of standard deviations by which a bank's returns would have to fall from their mean to exhaust the bank's equity capital. Essentially, the Z-score is a measure of the distance, in standard deviations, between a bank's return on assets and the point of insolvency.

RESULTS AND DISCUSSION

Table 2. presents the data gathered on a range of banking-related variables across two distinct timeframes: Period I (before crisis: 2013-2019) and Period II (crisis period: 2020-2022). The dataset comprises 320 observations and includes 11 different variables. These variables are: return on assets (ROA), net interest margin (NIM), Z-score, non-performing loan (NPL), related lending (RTD), equity ratio (EQUITY), the ratio of operating expenses to operating income (OEOI), the natural logarithm of total assets (LNASSET) as a measure of bank size, loan ratio (LOAN), growth in Indonesia's GDP (GDP), and fluctuations in the exchange rate of the Indonesian Rupiah (EXC).

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Table 2. Descriptive Statistics

Period I	ROA	NIM	Z-SCORE	NPL	RTD	EQUITY	OEOI	LNASSET	LOAN	GDP	EXC
Mean	0.016	0.052	2.542	0.016	0.027	0.151	0.881	17.303	0.629	0.051	0.061
Maximum	0.681	0.127	11.807	0.099	0.209	0.516	2.581	21.072	0.984	0.056	0.134
Minimum	-0.159	0.002	-2.620	0.000	0.000	0.074	0.087	13.395	0.007	0.049	-0.006
SD	0.051	0.020	2.818	0.013	0.046	0.057	0.249	1.888	0.108	0.002	0.059
Observations	224	224	224	224	224	224	224	224	224	224	224
Period II	**ROA**	**NIM**	**Z-SCORE**	**NPL**	**RTD**	**EQUITY**	**OEOI**	**LNASSET**	**LOAN**	**GDP**	**EXC**
Mean	0.007	0.044	5.452	0.013	0.037	0.184	0.897	17.870	0.514	0.023	0.016
Maximum	0.047	0.138	36.373	0.049	0.467	0.670	2.879	21.413	0.789	0.053	0.038
Minimum	-0.148	-0.035	-1.942	0.000	0.000	0.055	0.055	14.595	0.015	-0.021	-0.019
SD	0.029	0.022	8.048	0.011	0.066	0.114	0.366	1.748	0.145	0.031	0.025
Observations	96	96	96	96	96	96	96	96	96	96	96

Source: Author's Calculations

Bank Profitability

Return on Asset (ROA)

Table 3. displays the results of the regression analysis for equation (1). During the first period, related lending shows a positive yet statistically insignificant impact on profitability (coefficient = 0.0256). The equity ratio, on the other hand, exerts a positive and significant influence on profitability (coefficient = 0.1693), significant at the 1% level. This reflects the conclusions of Abreu and Mendes (2001), who argue that banks with a higher equity ratio, indicative of strong capitalization, often enjoy lower funding costs, leading to enhanced profitability. This is corroborated by Hamada and Konishi (2010), who find a positive and significant relationship between an increased equity ratio and improved ROA.In contrast, the ratio of operating expenses to operating income (OEOI) demonstrates a negative impact on ROA (coefficient = -0.0769), with statistical significance at the 1% level. This is in line with the findings of Hossain and Uddin (2020), who observe that higher operational expenses typically reduce profitability.

In the subsequent period, the effect of related lending on profitability remains positive (coefficient = 0.0226) but continues to be statistically insignificant. The positive influence of the equity ratio (coefficient = 0.0120) also becomes insignificant. Meanwhile, the negative impact of OEOI on profitability persists (coefficient = -0.0762), maintaining its significance at the 1% level, which reaffirms Hossain and Uddin (2020)'s findings regarding the negative correlation between operating expenses and profitability. Additionally, the work of Mehzabin et al. (2022) highlights the critical role of operational efficiency in driving profitability, suggesting that banks with more effective resource management tend to realize better profitability outcomes.

Table 3. Determinant of Bank Profitability – ROA

Period I: 2013-2019	Common Effect	
ROA	**Coefficient**	***p*-value**
RELATED	0.0256	0.732
EQUITY	0.1693	0.005***
OEOI	-0.0769	0.000***
LNASSET	-0.0001	0.960
LOAN	0.0154	0.615
Period II: 2020-2022	**Random Effect**	
ROA	**Coefficient**	***p*-value**
RELATED	0.0226	0.255
EQUITY	0.0120	0.311
OEOI	-0.0762	0.000***
LNASSET	-0.0003	0.736
LOAN	0.0159	0.065*

***, **, and *, represent statistical significance at the 1%, 5%, and 10% level, respectively.

Source: Author's Calculations

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Net Interest Margin (NIM)

Table 4. presents the regression results for equation (2). In the first phase, related lending negatively impacts Net Interest Margin (NIM) with a coefficient of -0.1524, a finding that is statistically significant at the 1% level. This aligns with the research of Hamada and Konishi (2010) and supports Saksonova (2014)'s observation of NIM declines preceding banking sector challenges or crises. The ratio of operating expense to operating income (OEOI) also negatively correlates with NIM (coefficient = -0.0066), showing significance at the 5% level, which is consistent with Hossain and Uddin (2020)'s findings that higher operating expenses typically erode profitability. Adelopo et al. (2018) also notethat banks which effectively control their operating expenses tend to be more profitable.

In this period, the size of the bank, measured by the natural logarithm of total assets (LNASSET), has a slight negative effect on NIM (coefficient = -0.0054), significant at the 1% level. This could be attributed to increased agency costs, the complexity of larger organizational structures, and the additional expenses incurred in managing bigger banks, as suggested by Dietrich & Wanzenried (2011). Additionally, as banks grow, they might encounter reduced returns due to escalating costs related to a larger workforce and resource base (Dietrich & Wanzenried, 2014). Activities such as market expansion or branch openings can drive up operational costs, thus affecting profitability.

In the second phase, the effect of related lending on NIM changes, becoming positive (coefficient = 0.0196) but remains statistically insignificant, resounding the findings of Hamada and Konishi (2010). The OEOI's impact is negative but not significant (coefficient = -0.0006). Meanwhile, LNASSET positively influences NIM (coefficient = 0.0277), a result that is significant at the 1% level. This positive correlation is in line with the research of Dietrich and Wanzenried (2011) and Stiroh and Rumble (2006), who argue that larger banks benefit from a broader diversification in products and loans, leading to cost efficiencies and, consequently, higher profits.

Table 4. Determinant of Bank Profitability – NIM

Period I: 2013-2019	**Fixed Effect**	
NIM	**Coefficient**	***p*-value**
RELATED	-0.1524	0.000***
EQUITY	-0.0055	0.713
OEOI	-0.0066	0.036**
LNASSET	-0.0054	0.004***
LOAN	0.0139	0.073*
Period II: 2020-2022	**Fixed Effect**	
NIM	**Coefficient**	***p*-value**
RELATED	0.0196	0.756
EQUITY	0.0048	0.881
OEOI	-0.0006	0.900
LNASSET	0.0277	0.000***
LOAN	0.0128	0.631

***, **, and *, represent statistical significance at the 1%, 5%, and 10% level, respectively.
Source: Author's Calculations

Impact on Bank Profitability

Throughout the crisis, related lending peaks at an average of 4.21%. Although this figure slopes to 3.71% in 2022, it still exceeds the averages observed in the pre-crisis years, which fluctuate between 2.42% and 3.09%. This increase in related lending potentially exacerbates the decline in profitability, as evidenced by the falling ratios of ROA and NIM previously discussed. Chiu and Joh (2004) reinforce this notion, suggesting that banks tend to increase related lending during crises, often to affiliated entities facing challenges. Such practices can lead to a diversion of profits from banks to related parties, indicative of tunneling activities.

The regression analysis, while highlighting these trends, stops short of definitively linking an improvement in profitability directly to related lending, as the results are statistically insignificant. Menicucci and Paolucci (2016) propose that a bank's overall lending

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growth might have a more pronounced positive impact on ROA than the specific proportion of related lending. This notion is reflected in the broader trends of total lending in the Indonesian banking sector, which experiences an average increase of 9.40% in the pre-crisis period but sees a significant reduction of -2.40% following the onset of the COVID-19 pandemic in 2020.

In the subsequent period, while the positive impact of related lending on ROA remains statistically insignificant, NIM displays a contrasting trend compared to the first period, turning positive but still not significant. This divergent behavior in the relationship between these variables is noted in earlier studies, such as by Hamada and Konishi (2010), who observe inverse correlations between ROA and NIM across different periods. Saksonova (2014) points out that NIM tends to be more volatile leading up to banking sector challenges, whereas ROA is generally more stable in fluctuating conditions. These observations suggest that NIM might be a more relevant indicator for gauging overall bank profitability, particularly due to its direct connection with a bank's core operations and interest-earning assets.

Bank Risk

Z-Score

The Z-score serves as an indicator to banks' systemic risk, where a lower score indicates higher risk. Regression results shown in Table 5. for equation (3) reveal that in the initial phase, an increase in a bank's related lending negatively impacts its Z-score (coefficient = -12.201), a significant observation at the 1% level. This implies a direct link between the growth in related lending and a rise in banking risk, aligning with Cull et al. (2011)'s observations about the effects of a country's institutional framework. In environments where law enforcement is lax, bank insiders may exploit resources without facing consequences, leading to a decrease in the banking sector's size and an elevation in risk.

In the later period, the negative impact of related lending continues (coefficient = -2.717) but its statistical significance diminishes. This change mirrors the findings of Hamada and Konishi (2010), who identified a lack of statistical significance during periods of crisis. Similarly, the equity ratio shows a reversed trend compared to the first period, becoming negative (coefficient = -2.116) but not statistically significant. Consistent with its earlier influence, the ratio of operating expense to operating income (OEOI) negatively affects the Z-score (coefficient = -1.379), significantly at the 1% level. This suggests that an uptick in operational expenses correlates with a lower Z-score, indicating greater risk. This negative association corroborates the findings of Hamada and Konishi (2010) and Dias (2021), who observed that banks with lower operational efficiency often experience reduced stability and heightened risks.

Table 5. Determinant of Bank Risk – Z-Score

Period I: 2013-2019	**Fixed Effect**	
Z-score	**Coefficient**	***p*-value**
RELATED	-12.201	0.007***
EQUITY	6.548	0.000***
OEOI	-2.110	0.000***
NIM	-0.933	0.908
LOAN	-0.828	0.341
GDP	112.409	0.000***
Period II: 2020-2022	**Random Effect**	
Z-score	**Coefficient**	***p*-value**
RELATED	-2.717	0.539
EQUITY	-2.116	0.386
OEOI	-1.379	0.000***
NIM	-4.600	0.587
LOAN	0.062	0.973
GDP	13.283	0.000***

***, **, and *, represent statistical significance at the 1%, 5%, and 10% level, respectively.

Source: Author's Calculations

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Non-Performing Loan (NPL)

Table 6. outlines the regression findings for equation (4). Initially, the analysis shows a positive, albeit statistically insignificant, coefficient for related lending (0.0133). This outcome, positive yet lacking statistical significance, echoes the studies of Hamada and Konishi (2010) and Lee et al. (2020). The notable amount of related lending requires a detailed analysis of its features and motivations. If not properly managed, such lending trends could point to broader issues in the financial management of banks, particularly in relation to the soundness and integrity of their loan practices. This issue is particularly relevant in light of the increase in non-performing loan (NPL) that begins in 2020, coinciding with the start of the COVID-19 pandemic, a significant global event.

During the later phase, the trend in related lending remains positive (coefficient = 0.0086) but continues to be statistically insignificant. This consistent but modest positive trend, similar to what Hamada and Konishi (2010) observed during periods of financial upheaval, suggests recurring patterns across different times. Despite its lack of statistical significance, this trend, noted by Lee et al. (2020), should be a warning for banks, highlighting the necessity for thorough examination of the reasons and nature behind such extensive related lending, to help manage and lower credit risk.

Table 6. Determinants of Bank Risk – NPL

Period I: 2013-2019	**Random Effect**	
NPL	**Coefficient**	***p*-value**
RELATED	0.0133	0.639
EQUITY	-0.0386	0.031**
LNASSET	-0.0022	0.004***
LOAN	0.0089	0.335
GDP	-0.8383	0.016**
Period II: 2020-2022	**Random Effect**	
NPL	**Coefficient**	***p*-value**
RELATED	0.0086	0.683
EQUITY	-0.0020	0.874
LNASSET	-0.0017	0.085*
LOAN	0.0102	0.260
GDP	-0.0395	0.085*

***, **, and *, represent statistical significance at the 1%, 5%, and 10% level, respectively.

Source: Author's Calculations

Impact on Bank Risk

This exploration of the effects of related lending on banking risks, measured through the Z-score and non-performing loan (NPL), provides extensive insights. A lower Z-score signals heightened overall banking risks. The study reveals a nuanced but crucial link between related lending and the Z-score. Notably, in the initial phase, an upsurge in related lending adversely impacts the Z-score, indicating a relationship with increased banking risks and a greater likelihood of risk occurrence. This complex connection mirrors the observations of Cull et al. (2011), who assert that the impact of related lending is contingent on the regulatory framework. In contexts where the legal system is weakened and law enforcement is skewed, bank insiders might exploit these weaknesses to divert funds, leading to the shrinkage of the banking sector and increased risks.

Additionally, in line with Hafeez et al. (2022), while related lending plays a key role in shaping bank risks in the conventional Z-score, contemplating the implications of a forward-looking Z-score is valuable. This approach could shift the relevance of related lending across different periods, illustrating its intricate relationship with banking risks over time. This perspective underlines the critique of the Z-score as a metric focused on past data. Empirical evidence indicates that this forward-looking Z-score can predict shifts in the traditional Z-score one period ahead, thus offering a more effective tool for anticipating potential systemic risks.

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CONCLUSION

This study concludes into the multifaceted impact related lending on bank health, focusing on its impact on profitability and risk within the Indonesian banking sector. The period analyzed spans from 2013 to 2022, encompassing both the time before crisis and during the COVID-19 pandemic. The analysis offers a detailed perspective on Indonesia's evolving financial environments. Regression results indicate that prior to the crisis, related lending has a significant and negative influence on both the net interest margin (NIM) and the Z-score. This outcome suggests a prevalent 'looting view', implying that bank insiders might be exploiting bank resources for their own benefits, thereby negatively impacting the bank's profitability and elevating risk levels.

Despite these challenges, Indonesia's comprehensive legal and regulatory framework in banking provides an opportunity to transform the complexities associated with related lending into a strategic asset. The country's rigorous banking regulations play a critical role in effectively managing and supervising related lending practices. Indonesia's strict legal system could pivot related lending towards a positive contribution. Enhancing financial literacy and accessibility among stakeholders is also crucial in leveraging the benefits of related lending. This transformation demands concerted efforts from regulatory authorities and key players in the banking sector, including banks and their clientele. These endeavors are key to navigating related lending towards reinforcing financial stability and continuous economic growth. Additionally, fusing the information view with improved lending assessments and extending related lending to robust, sustainable sectors can further propel the advancement of the banking industry.

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