

Scrutinizing Financial Accounting of Bank Ratio and Macroeconomics Influence on Economic Volatility in Indonesia

Eogenie Lakilaki*
Perpustakaan Nasional RI, Indonesia
E-mail: eogenie09@gmail.com

Muhamad Zaky Ramadhan
Universitas Sriwijaya, Indonesia
E-mail: zakyydua@gmail.com

Mafazah
Universitas Sriwijaya, Indonesia
E-mail: purimafazah@gmail.com

Panca Wijaya
Universitas Sriwijaya, Indonesia
E-mail: pancawijaya09@gmail.com

Abstract

This study delves into the complex dynamics between interest rates, capital adequacy (CAR), liquidity (LDR), inflation, and GDP on working capital lending in Indonesia from 2017 to 2024. Amid growing macroeconomic uncertainties, the research addresses critical gaps in the understanding of how banking institutions adjust to both inherent structural resilience and external economic shocks. By incorporating Positive Accounting Theory (PAT), this paper provides a nuanced perspective on the managerial decision-making process, focusing on how regulatory frameworks and incentive structures influence credit allocation. Utilizing panel data from 102 commercial banks and employing a multiple linear regression model, the study reveals that interest rates significantly impede lending activities, whereas CAR, LDR, and GDP growth exert a robust and positive impact on credit disbursement. Conversely, inflation demonstrates a negative yet statistically insignificant effect. These findings underscore the dual role of financial stability and macroeconomic growth in facilitating efficient credit intermediation. The study calls for the development of policy frameworks that align monetary governance with institutional behaviors, advancing the broader constitutional objectives of public welfare and social justice, as enshrined in Indonesia's constitution.

Keywords: *Banking Factors; Financial Accounting; Macroeconomy; Volatility; Working Capital Lending.*

Introduction

In an increasingly volatile global economic environment, the banking sector plays a pivotal role in safeguarding liquidity and ensuring the sustainability of economic growth (Roreng et al., 2025; Hadiyanto et al., 2024; Barth et al., 2015; Murrar et al., 2024; Okofo-Dartey, 2025). Since the onset of the COVID-19 pandemic in 2020, countries worldwide, including Indonesia, have been grappling with complex fiscal and monetary challenges (Sumarni, 2020; Maharani & Marhaeni, 2022; Hutagaol et al., 2022). The Organisation for Economic Co-operation and Development (OECD) reported a deceleration in global economic activity in 2025, projecting global growth at merely 3.3%, and even lower at 1.9% for OECD member states, both figures falling below the average of the preceding decade (OCDE 2024). Within this context, credit disbursement by banks, especially working capital loans has become a vital lever for reviving and accelerating real sector economic activity (Harris et al., 2019; EL-Ansary & Al-Gazzar, 2021; Dias, 2020)

In Indonesia, working capital loans from conventional commercial banks have demonstrated dynamic trends throughout the 2017–2024 period (Sunaryono, 2024; Teruna & Ardiansyah, 2024). As of 2023, the banking sector's intermediation performance posted a positive trajectory, with total bank credit reaching IDR 7,090 trillion, reflecting a year-on-year (YoY) growth of 10.38%. Notably, working capital loans and investment loans recorded the highest growth rates, at 10.05% and 12.26% YoY respectively (Bank Indonesia, 2024).

These developments occurred amid significant fluctuations driven by interest rate dynamics, inflationary pressures, and rupiah to dollar exchange rate volatility (Rahman, 2021; Ismal, 2022; Warjiyo & Juhro, 2019; Masujima, 2020). However, the growth in credit volume has not been uniformly distributed across all business sectors, suggesting the presence of asymmetries in credit allocation, an issue that remains

underexplored in the current literature (Zegarra, 2019; Li et al., 2025; Asongu et al., 2019; Tsindeliani & Mikheeva, 2022).

Interest rates remain a primary determinant influencing both banks' willingness to extend loans and borrowers' decisions to seek financing (Stokes & Cox, 2023; Ngaruiya et al., 2025; Khan et al., 2023). From 2017 to 2024, lending rates in Indonesia have fluctuated in tandem with shifts in the policy rate set by (Bank Indonesia, 2024). For instance, the increase in the BI Rate from 3.5% in early 2022 to 6.0% by the end of 2023 (Kapriadi and Wijaya 2023) exerted upward pressure on borrowing costs, potentially constraining credit expansion, particularly for short-term, cost-sensitive working capital loans (Ozili & Oladipo, 2025; Khair et al., 2024; Warjiyo & Juhro, 2019).

Beyond interest rates, internal bank characteristics, such as capital adequacy ratio, liquidity ratio, and operational efficiency, are equally critical in shaping a bank's lending capacity and risk taking behaviour (Bhegawati, 2018; Suryanto, 2019; Susilowati et al., 2019). Sound financial health enhances market confidence and expands a bank's capacity to absorb credit risk (Chindo et al., 2022; Amalia et al., 2024; Hapsari, 2022). Nevertheless, empirical studies have reported heterogeneous impacts of these internal indicators on lending volume, often depending on institutional scale, ownership structure, and market segmentation (Qomariah, 2016; Charviandi et al., 2023).

At the macroeconomic level, variables such as inflation, exchange rates, GDP growth, and consumer confidence indices also exert considerable influence on credit demand and supply (Wakatabe, 2017; Hakiki et al., 2024; Canale & Mirdala, 2019; Warjiyo & Juhro, 2019). For example, the global energy crisis-induced inflation surge in 2022 escalated the cost of capital, thereby weakening demand for working capital loans (Novianto and Paramita 2023). Simultaneously, the depreciation of the rupiah against the US dollar in mid-2023

(Ramadhani, Sofian, and Anggraini, 2022) exacerbated financing burdens for import-reliant sectors, further affecting the credit portfolio performance of banks.

Between 2017 and 2024, Indonesia's economy underwent significant volatility, driven by both domestic and external factors (Bank Indonesia, 2024). National GDP growth stood at 5.03% in 2024, slightly down from 5.05% the year before (Wa 2024), signalling a mild deceleration over the past three years. Key growth stimuli included political campaign-related spending, increased capital investment, and the completion of infrastructure projects (Maulana, 2019; Mardiyani & Izharudin, 2024; Amara et al., 2023; Eynde et al., 2023). Nonetheless, external headwinds, such as prospective tariff impositions by "*Trump*" from US and subdued global demand, have constrained the country's ambition for more robust economic expansion (Contractor, 2025; Nwoke, 2020; Karmakar & Jana, 2021; Chow, 2020; Bhattacharya, 2021).

Empirical investigations into the relationship between interest rates and bank lending have produced heterogeneous results, largely contingent upon credit type and macroeconomic context. Studies by Suseno & Aguslim (2024); Mamujaja et al. (2024) and Ximenes et al., (2025) affirm a positive linkage between interest rates and investment as well as consumption credit, suggesting that rate fluctuations influence economic agents' perceptions regarding the cost-benefit dynamics of borrowing. Conversely, Schelling & Towbin (2022) report an insignificant association, implying that structural rigidities or the moderating role of monetary policy may attenuate such responsiveness. In the Indonesian context, elevated interest rates are often construed as higher capital costs, which, in turn, suppress credit demand, most notably among MSMEs (Oktaviani et al., 2022; Loissa & Krisnanda, 2023; Nakashima & Takahashi, 2021)

Internal bank-specific variables, particularly the Capital Adequacy Ratio (CAR) and Loan-to-Deposit Ratio (LDR), also emerge as pivotal in shaping credit policy

decisions. While a significant body of literature e.g. Cahyawati & Nurhayati (2024), Klein & Turk-Ariss (2022), Ghroubi (2023), Zumarnis & Irsad (2023), and Lisaholet (2023) demonstrates a positive correlation between capital strength and credit expansion, countervailing findings Rahmatullah (2025) with Wahab & Mahdiya (2023) indicate a contractionary lending response to increased capitalization, possibly reflecting regulatory tightening or heightened risk aversion (Akmal & Kusumastuti, 2024; Devi et al., 2024). This underlines the contextual sensitivity of CAR's impact, shaped by bank-specific risk profiles and prudential oversight. Similarly, while higher LDRs typically correlate with more aggressive lending (Abdat et al. 2024), such a relationship may not hold uniformly across banking systems; in Islamic finance, for instance, the Financing-to-Deposit Ratio does not always exert a significant influence (Wahyu et al. 2023), reflecting inherent differences in institutional structure and risk-sharing frameworks.

At the macro level, inflation and GDP growth yield similarly inconclusive effects on working capital lending. Certain studies Hasan et al., (2022); Rehman, (2024); Tinoco-Zermeño et al. (2022); Ria et al. (2023) posit that inflation can spur credit demand as firms seek to preserve purchasing power and operational liquidity, particularly among SMEs. However, others, Aziz et al. (2024) and Tanjung et al. (2022) contend that inflationary pressures erode household and corporate repayment capacity, thereby dampening credit absorption. While GDP, as a proxy for real economic growth, is conventionally expected to promote lending (Bukowski and Kosztowniak, 2022), its effect remains conditional upon banking sector efficiency and institutional capacity to intermediate funds productively (Rusydia and Ikhwan, 2024). Empirical support for the significance of GDP on credit extension has been substantiated in recent Indonesian studies (Loissa & Krisnanda, 2023; Kachula et al., 2022; Yulyanti et al., 2023).

This study addresses the limited integration of structural banking variables and macroeconomic conditions, particularly within the evolving behavior of lenders and borrowers amid interest rate volatility. In Indonesia's dual-structured economy (modern and traditional), where banks play a pivotal role in productive financing, understanding the interplay between capital strength, liquidity, inflation, and output growth is critical. By examining working capital lending, this research offers insights into how banks respond to both internal resilience and external shocks. More broadly, enhanced access to short-term credit contributes to inclusive economic activity and, indirectly, supports the constitutional goals of advancing public welfare and promoting social justice, as mandated in the 1945 Constitution.

The theoretical foundation of this research is based on the financial intermediation theory, which posits that banks play a critical role as intermediaries in channeling funds from surplus sectors to those in need, thereby enabling efficient capital allocation and fostering economic productivity (Suhendra & Ronaldo, 2017; Ketaren & Haryanto, 2020; Hapsari, 2022; Beatson et al., 2019). As a pioneer of the theory, Gurley & Shaw (1956) demonstrated how a bank's ability to mobilize and allocate credit, particularly working capital loans, plays a pivotal role in supporting business operations, especially in sectors reliant on short-term financing (Kohardinata et al., 2022; Mahrani, 2023; Wahyuningsih et al., 2024). However, this intermediation process is highly influenced by both internal banking factors (such as capital adequacy and

liquidity ratios) and external macroeconomic variables (such as interest rates, inflation, and GDP growth) (Ozili, 2018; Lubis et al., 2022; Khotimah & Atiningsih, 2018). A stable and resilient banking system, with adequate capital reserves and liquidity, is better equipped to absorb shocks and maintain the flow of credit, even in unstable economic conditions, thus contributing to macroeconomic stability (Agustantira et al., 2024; Yadav, 2025; Kashif et al., 2025; Abaidoo et al., 2023).

In addition to the theoretical underpinnings rooted in financial intermediation and monetary policy frameworks, this study can be further enriched by incorporating the lens of Positive Accounting Theory (PAT), originally advanced by Watts and Zimmerman (1990). PAT posits that financial practices and managerial decisions, including credit disbursement policies and capital structure management, are shaped by rational choices aimed at maximizing individual utility within the constraints of contractual arrangements and incentive structures (Watts and Zimmerman 1990). Within this framework, variations in working capital lending practices may be interpreted as strategic responses to regulatory pressures, executive compensation schemes, and market expectations (Eremin & Lopushenko, 2025; Kong et al., 2025). By adopting a behavioural-economic perspective, PAT complements conventional macro-financial models and offers a more nuanced understanding of the heterogeneity observed in banking responses to interest rate volatility and macroeconomic fluctuations.

Research Method

Hypothesis Development

H₁: An upward trajectory in interest rates imposes constraints on the expansion of working capital lending.

Elevated interest rates raise the cost of external financing, thereby disincentivising firms, particularly those with constrained

liquidity, from seeking short-term credit (Nakashima & Takahashi, 2021). This contractionary effect is most pronounced in working capital lending, where borrowing is closely tied to immediate operational needs (Polizzi, Scannella, and Suárez, 2020). The inverse relationship reflects monetary tightening's dampening influence on credit

activity in the real sector (Akinlo and Oni 2015).

H₂: Improved capital adequacy is positively associated with increased disbursement of working capital credit.

A robust capital adequacy ratio enhances a bank's risk-bearing capacity and reflects institutional financial soundness (Stefanus, Irena Lawita, and Eka Putri, 2023). Well-capitalised banks are more inclined to extend credit, including in the form of working capital loans, due to greater confidence in their ability to manage portfolio risks and maintain regulatory compliance (Purwati and Mareta, 2024).

H₃: Variations in the loan-to-deposit ratio demonstrate a linear association with the allocation of working capital financing.

The loan-to-deposit ratio (LDR) serves as a key metric for assessing a bank's intermediation efficiency (Susilowati et al. 2019). A higher LDR indicates a greater proportion of deposits being channelled into productive credit, including short-term lending for operational needs (Agung and Santi, 2017). While a rising LDR signals credit growth, it must be balanced against systemic risk considerations to ensure sustainability (Pratama, Mubaroh, and Afiransyah, 2021).

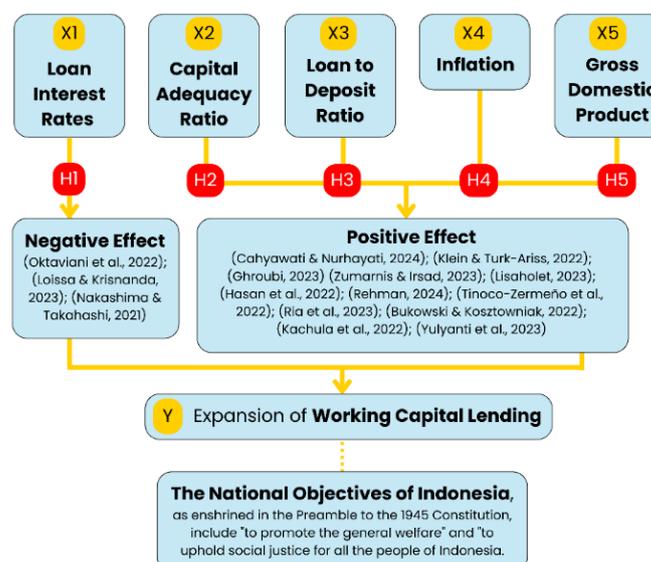
H₄: High inflationary pressure has the potential to elevate the demand for short-term credit facilities.

Inflation exerts upward pressure on input prices and operational expenses, prompting businesses to seek additional liquidity to bridge cash flow gaps (Tinoco-Zermeño, Torres-Preciado, and Venegas-Martínez, 2022). In such environments, demand for short-term credit instruments, particularly working capital loans, tends to rise as firms navigate heightened cost structures and seek to maintain continuity in production and distribution (Jessica and Chalid, 2021).

H₅: Sustained GDP growth functions as a key driver in accelerating the distribution of working capital loans

Economic expansion stimulates business activity across sectors, thereby increasing demand for short-term financing to support operational scaling (Kachula et al. 2022). As firms ramp up inventory acquisition, production cycles, and logistics, the banking sector typically responds by amplifying the provision of working capital credit to accommodate this upward trajectory in demand (Brasliņš et al. 2021)

Figure 1. Theoretical Framework



Source: Research Data, 2025

The conceptual framework above illustrates the relationship between five macroeconomic variables, interest rates (X_1), capital adequacy (X_2), loan-to-deposit ratio (X_3), inflation (X_4), and gross domestic product (X_5), and the expansion of working capital lending (Y). Interest rates exert a negative influence, as rising borrowing costs tend to suppress credit demand. In contrast, capital adequacy, loan-to-deposit ratio, inflation, and GDP growth exert a positive impact by enhancing both the capacity and incentive of banks and enterprises to engage in short-term financing. The expansion of working capital credit is not only vital for financial sector resilience and growth, but also contributes indirectly to the fulfillment of Indonesia's constitutional mandate as articulated in the Preamble to the 1945 Constitution, namely, to protect the entire nation, promote general welfare, cultivate intellectual advancement, and uphold social justice.

This research employs a quantitative methodology to uphold the fundamental tenets of scientific inquiry, namely objectivity, measurability, rational coherence, and methodological rigor, as articulated by Vialtsev & Komarov (2024), Moura e Sá (2024), and Sekaran & Bougie (2017). The study utilizes secondary data extracted from the annual report of Conventional Commercial Banks in Indonesia, forming the empirical foundation of the analysis.

The framework incorporates a single dependent variable, Working Capital Credit (Y) is short-term bank financing for business operations, measured by the total annual value of working capital loans disbursed by commercial banks (in IDR), alongside five independent variables: Loan Interest rate (X_1) refers to the lending rate applied by banks and is measured annually in percentage terms, reflecting the cost of borrowing. Capital Adequacy Ratio (X_2) indicates a bank's ability to absorb risk, calculated as the ratio of capital to risk-

weighted assets, expressed in percent. Loan-to-Deposit Ratio (X_3) measures a bank's credit distribution efficiency by comparing total loans to total third-party funds, also in percentage. Inflation (X_4) captures the general rise in prices, calculated using the annual percentage change in the Consumer Price Index (CPI). Gross Domestic Product (GDP) (X_5) represents the economic growth rate, measured as the annual percentage change in real GDP, indicating overall economic performance.

A purposive sampling strategy, judgment sampling, was employed to refine the research population, resulting in a final dataset comprising 102 Conventional Commercial Banks observed across an eight-year horizon (2017-2024). In addition to annual bank-specific reports, the study integrates data from authoritative sources, namely the Financial Services Authority (OJK) for banking statistics, also Statistics Centre (BPS) and Bank Indonesia (BI) for macroeconomic indicators. The dataset is subjected to multivariate analysis through multiple linear regression (Ghozali, 2018), operationalized using statistical software and expressed through a robust econometric model designed to capture the interdependencies among the examined variables.

$$WCL = \alpha + \beta_1 LIR + \beta_2 CAR + \beta_3 LDR + \beta_4 INFL + \beta_5 GDP + \varepsilon$$

Where: α = Constant term, β_1 to β_5 = Coefficients independent variables, and ε = error

The dataset will undergo a series of diagnostic evaluations to ensure statistical validity, beginning with classical assumption tests, including normality test, heteroskedasticity test, multicollinearity, and autocorrelation, (Ghozali, 2018). Upon verification of these assumptions, the data will be subjected to hypothesis testing through a combination of coefficient of

determination (R^2), *Pearson* correlation analysis, partial *t*-tests, and multiple linear regression modeling.

Results and Discussion

Classical Assumption Testing

To ensure the robustness and validity of the dataset for inferential analysis, a series of classical assumption tests were conducted. As indicated in Table 1, the data exhibit a normal distribution, with a significance value of 0.083, well above the 0.05 threshold, confirming the absence of non-normality. The *Durbin-Watson* statistic of 1.203 falls within the acceptable range of

-2 to +2, indicating no evidence of autocorrelation among residuals. Furthermore, the results of the heteroskedasticity test, based on the *Park* method, demonstrate that all significance values exceed 0.05, thereby confirming homoscedastic variance across observations. Lastly, multicollinearity diagnostics reveal that all tolerance values are above 0.10 and all Variance Inflation Factor (VIF) scores are below the critical value of 10, suggesting the absence of multicollinearity among the explanatory variables. These results collectively affirm the appropriateness of the dataset for subsequent regression modeling.

Table 1. Classical Assumption Test Results

Normality Test	Autocorrelation Test		Heteroskedastisity Test	Multicollinearity Test	
Asymp. Sig (Kolmogoro v Smirnov)	<i>Durbin Watson</i>	Variable	Sig. (<i>Park</i>)	Tolerance	VIF
0.083	1,203	WCL	0,938	0,640	1,372
		LIR	0,852	0,788	1,560
		CAR	0,551	0,626	1,219
		LDR	0,455	0,727	1,942
		INFL	0,983	0,838	1,556
		GDP	0,813	0,950	1,044

Source: SPSS Output, 2025

Coefficient of Determination (R^2) Test

This test is employed to assess the extent to which variations in the dependent variable can be explained by the independent variables included in the model, while also accounting for the potential influence of external, unobserved factors (Ghozali 2018). As

presented in Table 2, the Adjusted R Square value for Equation 1 is 0.753. This indicates that 75.3% of the variance in the dependent variable is explained by the model's independent variables, whereas the remaining 24.7% is attributable to other variables not captured within the scope of this study.

Table 2. Coefficient of Determination (R^2) Test Results

R	R Square	Adjusted R Square	Std. Error of the Estimate
0,898	0,802	0,753	0,89754

Source: SPSS Output, 2025

Parametric Test: *Pearson* Correlation Test

The significance values (*2-tailed*) presented in the table confirm statistically meaningful correlations between the

independent variables and working capital lending. The interest rate exhibits a strong and significant correlation with working

capital credit ($p = 0.034 < 0.05$), as does capital adequacy ($p = 0.041 < 0.05$),

suggesting that changes in these indicators substantially affect credit distribution. Similarly, the loan-to-deposit ratio ($p = 0.042 < 0.05$) and GDP ($p = 0.027 < 0.05$) also demonstrate strong, statistically significant relationships with working capital loans. Meanwhile, inflation ($p = 0.050$) shows a marginally significant

correlation, indicating the existence of a relationship, albeit without a clearly defined strength. These findings reinforce the conclusion that macroeconomic variables play a critical role in shaping the dynamics of short-term credit allocation within the banking sector.

Table 3. *Pearson Correlation Test Results*

		Correlations					
		WCL	LIR	CAR	LDR	INFL	GDP
<i>Sig 2 tailed</i>	WCL	0,000	0,034	0,041	0,042	0,050	0,027
	LIR	0,034	0,000	0,035	0,018	0,023	0,016
	CAR	0,041	0,035	0,000	0,049	0,029	0,038
	LDR	0,042	0,018	0,049	0,000	0,001	0,044
	INFL	0,050	0,023	0,029	0,001	0,000	0,006
	GDP	0,027	0,016	0,038	0,044	0,006	0,000

Source: SPSS Output, 2025

Partial *t*-Test and Multiple Linear Regression Analysis

The mathematical model derived from Table 4 is expressed as follows:

$$WCL = 4.694 - 0.525LIR + 2.565CAR + 6.690LDR - 1.023INFL + 16.734GDP + \varepsilon$$

In this regression equation, the constant value of 4.694 implies that, *ceteris paribus*, the baseline level of Working Capital Lending (WCL) stands at 4.694 when all independent variables are held at zero. A one-unit increase in CAR, LDR, and GDP is associated with respective increases in WCL of 2.565, 6.690, and 16.734. Conversely, a one-unit

rise in LIR and INFL leads to a decline in WCL by 0.525 and 1.023, respectively. Additional interpretation from the table is as follows: (1) LIR exhibits a negative coefficient and is statistically significant at the 5% level ($p = 0.035$), indicating a negative effect on WCL, thereby supporting H_1 ; (2) CAR has a positive and highly significant relationship ($p = 0.000$), confirming H_2 ; (3) LDR also demonstrates a strong positive effect ($p = 0.000$), validating H_3 ; (4) INFL, although negative, is statistically insignificant ($p = 0.134 > 0.05$), leading to the rejection of H_4 ; (5) GDP shows a positive and significant impact on WCL ($p = 0.009$), thus supporting H_5 .

Table 4. *Partial t-Test and Multiple Linear Regression Results*

	B	Standard error	t	Sig.
Constant	4,694	11,698	0,362	0,895
LIR	-0,525	0,298	0,838	0,035
CAR	2,565	0,275	4,658	0,000
LDR	6,690	1,935	5,808	0,000
INFL	-1,023	0,863	-1,627	0,134
GDP	16,734	13,116	8,475	0,009

Source: SPSS Output, 2025

Loan Interest Rates and Working Capital Lending

Aligned with the Finance Intermediation Theory, interest rates function as a balancing mechanism between credit supply and demand, where rising rates, particularly under contractionary monetary policy, elevate borrowing costs and suppress firms' access to working capital, as observed in Indonesia during the 2022–2023 BI Rate hikes (from 3.5% to 6.0%). Elevated interest rates also diminish banks' lending appetite due to heightened credit risk, especially amid economic uncertainty. Similar global trends were noted during the Fed's post-pandemic rate increases, reflecting a broader shift of liquidity toward safer assets. Conversely, expansionary monetary policy (easy money policy) through rate cuts lowers borrowing costs, encourages accommodative credit behavior, and improves access to short-term financing.

From the lens of Positive Accounting Theory (PAT), these interest rate fluctuations are not merely macroeconomic signals but also catalysts that shape managerial decision-making within banks. PAT contends that economic agents, including bank executives, respond strategically to changes in the regulatory and economic environment in ways that maximize their utility. In this context, a rise in interest rates may trigger conservative lending practices not only as a response to increased credit risk but also to align with internal incentive structures, such as risk-adjusted performance targets or capital buffer requirements linked to compensation. Thus, PAT provides a behavioural-economic foundation that complements financial intermediation theory by illuminating how internal motivations and contracting dynamics influence credit supply decisions, particularly in volatile interest rate regimes. Such insights offer a deeper explanation for the heterogeneity of bank lending responses and reinforce the policy relevance of understanding both institutional behaviour and macro-financial trends in tandem.

Moreover, the transmission of interest rate policy is closely intertwined with banks'

financial accounting structures. Financial statements, shaped by accounting standards, reflect how banks respond to rate shifts through key ratios like NIM, ROA, and LDR. Changes in borrowing costs affect interest income, provisioning, and reported performance, which in turn influence strategic decisions on working capital lending. Financial accounting thus functions not only as a record of monetary effects but also as a driver of managerial and stakeholder responses.

Such dynamics illustrate how interest rate policy directly influences the flow of working capital credit, with significant implications for productive sector growth, financial inclusion, and the realization of Indonesia's constitutional goals of promoting general welfare and achieving social justice.

Capital Adequacy Ratio and Working Capital Lending

The Capital Adequacy Ratio (CAR) serves as a pivotal indicator of a bank's resilience to financial shocks and plays a fundamental role in safeguarding systemic stability, as mandated under the Basel regulatory framework. Within the framework of financial intermediation theory, a strong CAR enhances a bank's credibility, mitigates liquidity and credit risks, and facilitates increased lending, particularly for working capital purposes. However, this seemingly linear relationship between capitalization and credit expansion is often moderated by macroeconomic context and institutional behavior. Under contractionary monetary regimes, an elevated CAR may paradoxically constrain lending, signaling risk aversion or prudential tightening, and thereby inducing a cautious credit stance that limits liquidity in the broader economy.

Incorporating insights from Positive Accounting Theory (PAT) deepens this understanding by examining how managerial decisions surrounding capital buffers are shaped by internal incentive structures, regulatory expectations, and

market-based performance metrics. PAT posits that executives do not passively comply with regulatory thresholds but strategically manage capital positions to align with organizational goals, contractual obligations, and reputational considerations. For instance, a bank may maintain a conservatively high CAR not solely for prudential compliance but as a rational strategy to secure favorable credit ratings, mitigate agency conflicts, or maximize executive compensation tied to risk-adjusted performance indicators. These micro-level behaviours reflect calculated responses to economic and institutional stimuli, offering a behavioural rationale for observed deviations from classical intermediation theory.

The role of financial accounting in this process becomes evident as it translates regulatory compliance, like CAR, into meaningful financial metrics that guide lending behavior. Financial statements, particularly those reflecting capital ratios, serve as a transparent record of a bank's capital strength and operational health. These accounting figures not only inform stakeholders about regulatory adherence but also shape decisions related to working capital lending. For example, a bank's approach to maintaining a high CAR may be motivated by both regulatory requirements and internal incentives linked to financial performance metrics. By connecting capital adequacy with financial accounting practices, we gain a clearer understanding of how macroprudential rules are operationalized at the institutional level, directly impacting lending strategies and economic liquidity.

Striking a policy balance that frames capital adequacy as a foundation for sustainable and inclusive lending is crucial to maintaining both financial stability and the broader constitutional goals of promoting general welfare and social justice in Indonesia.

Loan to Deposit Ratio and Working Capital Lending

The Loan-to-Deposit Ratio (LDR) reflects a bank's effectiveness in converting collected deposits into productive credit and serves as a core proxy for financial intermediation efficiency. A higher LDR, particularly under expansionary monetary conditions, signifies an assertive credit policy aimed at stimulating real sector activity, especially within manufacturing, trade, and MSME sectors that rely heavily on continuous working capital access. In Indonesia, measured increases in LDR have correlated with expanded lending to small and medium enterprises, contributing to employment and output growth. Conversely, during contractionary policy phases designed to manage inflationary pressures, LDR control becomes critical to curbing excessive credit growth and maintaining liquidity buffers. An unduly aggressive lending strategy, especially amid economic uncertainty and weak deposit mobilization, may amplify systemic vulnerabilities and credit risk exposure.

Integrating insights from Positive Accounting Theory (PAT) offers a behavioural dimension to the understanding of LDR dynamics. PAT suggests that bank executives, as rational economic agents, do not merely adhere to optimal LDR levels for regulatory compliance but actively manage this ratio to serve strategic interests, including performance benchmarking, compensation outcomes, and reputational positioning in financial markets. For instance, a high LDR may be pursued to signal aggressive market share acquisition or superior intermediation capacity, even at the cost of rising liquidity risk, particularly if short-term performance metrics or investor expectations prioritize lending volume over sustainability. Conversely, a conservative LDR posture may reflect internal risk aversion, alignment with capital preservation mandates, or anticipation of macro-financial instability. These choices are not value-neutral but embedded within a nexus of contracts, incentives, and agency considerations as emphasized by PAT.

The Loan-to-Deposit Ratio (LDR) reflects a bank's efficiency in converting deposits into productive credit, influencing lending policies, especially during expansionary or contractionary monetary conditions. A higher LDR can signal aggressive credit policies aimed at stimulating sectors like MSMEs but also poses liquidity risks if not managed carefully. Financial accounting plays a crucial role in interpreting LDR dynamics, as it provides transparency on key metrics like asset quality, loan loss provisions, and capital adequacy. These accounting disclosures not only reflect a bank's lending practices but also shape future strategies by informing stakeholders about risk exposure and financial health. In this way, financial accounting connects managerial decisions with regulatory expectations and market perceptions, influencing both credit expansion and stability.

Thus, LDR operates as a flexible policy lever within both monetary regimes and, when managed prudently, enhances not only financial system stability but also contributes to national objectives of inclusive growth, general welfare, and social justice, as enshrined in Indonesia's 1945 Constitution.

Inflation and Working Capital Lending

Inflation exerts a dual and often contradictory effect on working capital lending. On one hand, rising input costs may compel firms to seek additional liquidity to sustain operations, thus increasing demand for short-term credit, as observed in Indonesia during the global commodity price surge of 2022. On the other hand, persistent inflation erodes consumer purchasing power and deteriorates firms' repayment capacities, thereby elevating default risks and prompting banks to adopt more conservative lending policies. Central banks typically address inflation through interest rate hikes, which further suppress credit demand and tighten liquidity in the market. This macroeconomic balancing act presents a clear trade-off: safeguarding price stability

versus maintaining adequate credit flows to support real sector vitality.

However, these studies indicate that inflation does not always have a significant impact on working capital credit provision. In some circumstances, even though inflation may affect input costs and firms' repayment capacities, banks continue to extend credit by considering other factors such as the financial health of firms, internal bank policies, and broader market expectations. In this regard, although inflation has the potential to increase credit risk, its impact on bank lending policies may be more significantly influenced by broader macroeconomic stability and strategic decisions based on more concrete performance indicators.

From the standpoint of Positive Accounting Theory (PAT), inflationary conditions not only alter economic fundamentals but also trigger behavioural responses among financial managers. PAT suggests that decisions regarding credit disbursement in inflationary periods are shaped by internal contract structures, risk management strategies, and performance-based incentives. For example, in high-inflation environments, bank managers may intentionally restrict lending not purely due to macroprudential concerns but as a rational strategy to protect key performance indicators, such as non-performing loan ratios, return on assets, or capital adequacy levels, that influence compensation, investor confidence, and regulatory evaluations. Similarly, inflation volatility may prompt asset reallocation strategies or portfolio shifts that reflect managerial attempts to align with internal performance thresholds and external stakeholder expectations.

As inflation rises, banks may modify their provisions for loan losses and impairments, affecting reported profitability and capital adequacy. However, despite these adjustments, inflation does not always significantly impact the provision of working capital credit. In many cases, banks continue lending based on firms' financial health and internal policies, rather than

solely on inflationary pressures. This highlights that, while inflation can increase credit risk, its direct effect on lending decisions is often mitigated by financial accounting practices that focus on broader economic stability and firm-specific factors.

Ultimately, unchecked inflation undermines financial intermediation and hampers real sector performance, disrupting the broader objective of fostering inclusive economic development and obstructing Indonesia's constitutional mandate to promote public welfare and social justice.

Gross Domestic Product and Working Capital Lending

GDP growth functions as a pivotal determinant of working capital lending, as it reflects real sector expansion and elevates firms' demand for operational financing. From the lens of financial intermediation theory, sustained economic growth improves borrower creditworthiness, reduces perceived risk, and encourages banks to expand credit allocation, especially in short-term forms that support inventory buildup, production scaling, and logistics. In Indonesia, where GDP growth consistently exceeded 5% between 2022 and 2024, this momentum has been particularly impactful in driving credit flows toward infrastructure development, export-led industries, and MSMEs. From a macro-policy perspective, strong GDP performance creates room for more accommodative interest rate regimes, thus lowering borrowing costs and reinforcing credit intermediation.

However, integrating insights from Positive Accounting Theory (PAT) reveals that the translation of GDP growth into credit expansion is not automatic, but mediated by institutional behaviour and managerial incentive systems. PAT argues that financial decision-makers, including bank executives, respond to macroeconomic signals, such as GDP growth, based on how these align with internal performance benchmarks, risk appetite, and contractual obligations. For instance, an optimistic GDP outlook may lead bank managers to aggressively expand

lending portfolios in pursuit of growth-based incentives, market positioning, or reputational gains. Conversely, if regulatory or investor expectations emphasize prudence over growth, even in a buoyant economy, managers may adopt a cautious stance to safeguard key metrics such as capital buffers or default ratios. This highlights the behavioural asymmetry in how macro-level growth translates into micro-level lending decisions.

Through the lens of financial accounting, the impact of GDP growth on credit decisions is not purely automatic. Banks' financial statements, which reflect metrics such as the Loan-to-Deposit Ratio (LDR) and Capital Adequacy Ratio (CAR), shape lending behavior. According to Positive Accounting Theory (PAT), bank executives are driven not only by macroeconomic signals like GDP growth but also by internal incentives linked to performance indicators, which are reflected in financial accounting reports. For example, even in a growing economy, banks may restrict lending to protect key financial ratios, such as return on assets (ROA) or non-performing loan (NPL) ratios, which ultimately influence strategic lending decisions. Thus, financial accounting both reflects and shapes how banks respond to macroeconomic growth.

After all, this virtuous cycle contributes not only to macroeconomic stability but also to Indonesia's constitutional mandate of promoting public welfare and realizing social justice.

Conclusion

This study concludes that working capital lending in Indonesia is shaped by both macroeconomic forces and internal banking factors, where high interest rates suppress lending while robust CAR, LDR, and GDP growth stimulate it. The findings sharpen existing theories by reinforcing the Financial

Intermediation and Loanable Funds theories while extending them through the lens of Positive Accounting Theory, which highlights the behavioural and institutional dimensions of managerial decision making. In periods of macroeconomic volatility, banks should strengthen risk management, maintain optimal capital and liquidity buffers, and diversify lending portfolios to remain resilient. Meanwhile, policymakers need to pursue regulatory reforms, such as countercyclical capital requirements, coordinated monetary and fiscal policies, and inclusive credit programs, to better align banking stability with sustainable economic growth and Indonesia's constitutional vision of social welfare and justice.

The study's reliance on secondary data and quantitative methods, while offering valuable insights, limits its ability to fully capture the intricate decision-making processes of bank management and sector-specific credit demand dynamics. Additionally, by excluding external shocks such as political instability or international capital flows, the study's applicability may be constrained. However, despite these limitations, the findings have profound implications for both policy and practice. Regulators can use these insights to develop interest rate policies that not only maintain macroeconomic stability but also promote inclusive economic growth, aligning with the broader constitutional goals of social welfare and justice. For banks, particularly in emerging economies like Indonesia, optimizing capital and liquidity strategies is essential to sustaining working capital financing, particularly for MSMEs, thus fostering a more equitable distribution of economic opportunity in line with national objectives for social justice and prosperity.

References

Abaidoo, Rexford, Elvis Kwame Agyapong, and Kwame Fosu Boateng. 2023. "Stability in the Banking Industry and Commodity Price Volatility: Perspective from Developing Economies." *Journal of Economic and*

Administrative Sciences 39 (4): 988–1012. <https://doi.org/10.1108/JEAS-05-2021-0089>.

Abdat, Fariz Alfiknacio, Rika Maryani, Jerry Ananta Ginting, Henny Setyo Lestari, and Farah Margaretha. 2024. "Analisis Faktor Pertumbuhan Kredit Bank Komersil Di Indonesia." *Jurnal Ekonomi* 29 (2): 336–62. <https://doi.org/10.24912/je.v29i2.2351>.

Agung, I Gusti, and Ni Putu Santi. 2017. "Determinasi Loan To Deposit Ratio Pada Bank Campuran Di Indonesia." *E-Jurnal Manajemen Unud* 6 (1): 204–34.

Agustantira, Vinna, Imam Asngari, and Sri Andaiyani. 2024. "Long-Term Stability of Money Demand and Monetary Policy in Indonesia." *Optimum: Jurnal Ekonomi Dan Pembangunan* 14 (1): 116–23. <https://doi.org/10.12928/optimum.v14i1.9146>.

Akinlo, A. Enisan, and I. Oluwafemi Oni. 2015. "Determinants of Bank Credit Growth in Nigeria 1980-2010." *European Journal of Sustainable Development* 4 (1): 23–30. <https://doi.org/10.14207/ejsd.2015.v4n1p23>.

Akmal, Makarimal, and Sri Yani Kusumastuti. 2024. "Pengaruh Faktor Internal Dan Faktor Eksternal Terhadap Non Performing Loan Pada Industri Perbankan Tahun 2021-2023." *Oktober* 4 (2): 1265–80. <https://doi.org/10.25105/jet.v4i2.20884>

Amara, Ines, Imen Khelil, Anis El Ammari, and Hichem Khlif. 2023. "Money Laundering and Infrastructure Quality: The Moderating Effect of the Strength of Auditing and Reporting Standards." *Pacific Accounting Review* 35 (2): 249–64. <https://doi.org/10.1108/PAR-02-2022-0029>.

Asongu, Simplice, Sara le Roux, Jacinta Nwachukwu, and Chris Pyke. 2019. "Reducing Information Asymmetry with ICT." *International Journal of Managerial Finance* 15 (2): 130–63.

- 0027.
- Aziz, Abdul Rehman, Shumaila Israr, Sadiya Amin, Bisma Ashraf, and Hanzalah-bin Tahir. 2024. "The Role of Various Factors in Accumulation of Household Debt on OECD Countries." *Bulletin of Business and Economics (BBE)* 13 (3): 403–12. <https://doi.org/10.61506/01.00513>.
- BankIndonesia. 2024. *Analisa Dan Pembahasan Kinerja Bank 2023*.
- Barth, James R, Tong Li, Wen Shi, and Pei Xu. 2015. "China's Shadow Banking Sector: Beneficial or Harmful to Economic Growth?" *Journal of Financial Economic Policy* 7 (4): 421–45. <https://doi.org/10.1108/JFEP-07-2015-0043>.
- Beatson, Nicola J, David A G Berg, Jeffrey K Smith, and Christine Smith-Han. 2019. "Progression to Intermediate Level Courses; Is a 'Pass' Enough?" *Pacific Accounting Review* 31 (2): 275–87. <https://doi.org/10.1108/PAR-03-2018-0025>.
- Betha Chindo, Ellen, Tri Joko Prasetyo, and Harsono edwin Puspita. 2022. "Analisis Hubungan Tingkat Kesehatan Bank Terhadap Pengungkapan Identitas Etika Bank Umum Syariah." *E-Journal Field of Economics, Business and Entrepreneurship (EFEBE)* 1 (2 SE-S1 AKUNTANSI): 165–78. <https://doi.org/10.23960/efebe.v1i2.22>.
- Bhattacharya, Abhijit. 2021. "Economic Integration or Trumponomics: The Choice Is a Big Question for Developing Economies." In *Global Tariff War: Economic, Political and Social Implications*, edited by Ramesh Chandra Das, 271–79. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80071-314-720211021>.
- Bhegawati, Desak Ayu Sriary. 2018. "Analisis Fungsi Intermediasi Dan Risiko Kredit Macet (Studi Kasus Perbandingan Bank Umum Dan BPR) Di Provinsi Bali." *KRISNA: Kumpulan Riset Akuntansi* 10 (1): 22–31. <https://doi.org/10.22225/kr.10.1.2018.2-2-31>.
- Brasliņš, Ģirts, Aleksis Orlovs, Ieva Braukša, and Aldis Bulis. 2021. "Gdp and Lending Behaviour: Empirical Evidence for Baltic States Economies." *Regional Formation and Development Studies* 10 (2): 31–45. <https://doi.org/10.15181/rfds.v10i2.139>.
- Bukowski, Sławomir, and A Kosztowniak. 2022. "The Determinants of Non-Performing Loans in the Polish Banking Sector – the Household Loans Portfolio." *WSEAS TRANSACTIONS ON BUSINESS AND ECONOMICS*. <https://doi.org/10.37394/23207.2022.19.23>.
- Cahyawati, Fernia Arianti Exi, and Ida Nurhayati. 2024. "Faktor-Faktor Yang Mempengaruhi Penyaluran Kredit Perbankan Pada Bank Umum Yang Terdaftar Di BEI Periode 2018-2022." *Kompak :Jurnal Ilmiah Komputerisasi Akuntansi*. <https://doi.org/10.51903/kompak.v17i2.2097>.
- Canale, Rosaria Rita, and Rajmund Mirdala. 2019. "Monetary Policy in the Eurozone." In *Fiscal and Monetary Policy in the Eurozone: Theoretical Concepts and Empirical Evidence*, 65–151. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78743-793-720191007>.
- Charviandi, Adrie, Henny Noviany, Yesi Suhartini, Aden Wijaya, and Muhamad Al Faruq Abdullah. 2023. *Manajemen Pemasaran: Perspektif Digital Marketing*. Eureka Media Aksara. 1st ed. Vol. 7. Purbalingga: Eureka Media Aksara.
- Chow, Peter C Y. 2020. "The Spillover Effect of the US–China Trade War on Taiwan's Economy* ." In *Advances in Pacific Basin Business, Economics and Finance*, edited by Cheng Few Lee and Min-Teh Yu, 8:213–35. *Advances in Pacific Basin Business, Economics and Finance*. Emerald Publishing Limited.

- 46502020000008011.
- Contractor, Farok J. 2025. "Assessing the Economic Impact of Tariffs: Adaptations by Multinationals and Traders to Mitigate Tariffs." *Review of International Business and Strategy* 1 (1): 11–20. <https://doi.org/10.1108/RIBS-01-2025-0013>.
- Dias, Roshanthi. 2020. "Capital Regulation and Bank Risk-taking – New Global Evidence." *Accounting and Finance* 61 (1): 847–84. <https://doi.org/10.1111/acfi.12595>.
- EL-Ansary, Osama, and Heba Al-Gazzar. 2021. "Working Capital and Financial Performance in MENA Region." *Journal of Humanities and Applied Social Sciences* 3 (4): 257–80. <https://doi.org/10.1108/JHASS-02-2020-0036>.
- Eremin, Yuri, and Vladimir Lopushenko. 2025. "Comparative Analysis of Theories Accounting for Quantum Effects in Plasmonic Nanoparticles." *Journal of Quantitative Spectroscopy and Radiative Transfer* 331: 109268. <https://doi.org/https://doi.org/10.1016/j.jqsrt.2024.109268>.
- Eynde, Gunther Vanden, Gert-Jan Put, and Bart Maddens. 2023. "The Coming of Age for Paid Digital Campaigning: Equalization or Normalization in the 2019 Belgian Federal Elections?" *Online Information Review* 47 (4): 749–64. <https://doi.org/10.1108/OIR-12-2021-0679>.
- Ghozali, Imam. 2018. *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 Edisi 9*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghroubi, Mohamed. 2023. "Linkages between Capital, Bank Financing and Economic Growth: The Case of Islamic and Conventional Banks from a Panel of Muslim Countries." *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/jiabr-01-2023-0036>.
- Gurley, John G, and Edward S Shaw. 1956. "Financial Intermediaries and the Saving-Investment Process." *The Journal of Finance* 11 (2): 257–76. <https://doi.org/10.2307/2976705>.
- Hadiyanto, Redi, Lina Pusvisasari, Yadi Januari, and Sofyan Al-Hakim. 2024. "Sejarah Kebijakan Moneter Dalam Islam (Fathimiyah, Mamalik, Persia, India, Dan Turki Utsmani)." *Jurnal Ilmiah Ekonomi Islam* 10 (1): 1117–29. <https://doi.org/10.29040/jiei.v10i1.12256>.
- Hakiki, A., B. Suhaimi, N. Mu'ammam, and D. Kurniasari. 2024. "Analisis Kebijakan Moneter, Fiskal, Dan Inflasi Pada Pertumbuhan Ekonomi." *PRESTISE: Jurnal Pengabdian Kepada Masyarakat Bidang Ekonomi Dan Bisnis* 4 (1): 41–63.
- Hapsari, Ratih Nurmalita. 2022. "Pengaruh Kewajiban Penyediaan Modal Minimum, Risiko Kredit, Risiko Pasar, Risiko Operasional Dan Risiko Likuiditas Terhadap Kinerja Keuangan Bank." *Parsimonia - Jurnal Ekonomi Dan Bisnis* 9 (1): 28–43. <https://doi.org/10.33479/parsimonia.v9i1.584>.
- Harris, Chris, Scott Roark, and Zhe Li. 2019. "Cash Flow Volatility and Trade Credit in Asia." *International Journal of Managerial Finance* 15 (2): 257–71. <https://doi.org/10.1108/IJMF-02-2018-0062>.
- Hasan, Azasi, S Priadana, and P Astuty. 2022. "Influence of Inflation, Bank Interest, Promotion, Information Technology, Third Party Funds and SBI Rates on Credit." *International Journal of Business, Economics & Management*. <https://doi.org/10.21744/ijbem.v5n3.1961>.
- Hutagaol, Yobel Rayfinando Tua, Ronaldo Putra Pratama Sinurat, and Sulthan Muhammad Shalahuddin. 2022. "Strategi Penguatan Keuangan Negara Dalam Menghadapi Ancaman Resesi Global 2023 Melalui Green Economy." *Jurnal Pajak Dan Keuangan Negara*

- (PKN) 4 (1): 378–85.
<https://doi.org/10.31092/jpkn.v4i1S.1911>.
- Ilma Amalia, Nor Isma, and Ramona Putri. 2024. “Analisis Pengaruh Kesehatan Bank Terhadap Stabilitas Keuangan Di Indonesia.” *Jurnal Ilmiah Penelitian Mahasiswa* 2 (6 SE-): 146–58.
<https://doi.org/10.61722/jipm.v2i6.502>
- Ismal, Rifki. 2022. “Assessing the Application of Islamic and Conventional Hedgings in Indonesia.” *International Journal of Islamic and Middle Eastern Finance and Management* 15 (1): 32–47.
<https://doi.org/10.1108/IMEFM-06-2020-0300>.
- Jessica, Theresa, and Dony Abdul Chalid. 2021. “Determinants of Bank Loans in Indonesia.” *Proceedings of the Asia-Pacific Research in Social Sciences and Humanities Universitas Indonesia Conference (APRISH 2019)* 558 (Aprish 2019): 505–12.
<https://doi.org/10.2991/assehr.k.210531.064>.
- Kachula, Svitlana, M Zhytar, L Sidelnykova, O Perchuk, and O Novosolova. 2022. “The Relationship Between Economic Growth and Banking Sector Development in Ukraine.” *WSEAS TRANSACTIONS ON BUSINESS AND ECONOMICS*.
<https://doi.org/10.37394/23207.2022.19.21>.
- Kapriadi, Arie Yanwar, and Nararia Sanggrama Wijaya. 2023. “Dampak Kebijakan Moneter Higher for Longer Terhadap Perekonomian Dan Fiskal Indonesia.” *Lentera APBN* 24 (1): 1–6.
<https://bit.ly/DashboardperpajakanLenteraDesember2023>.
- Karmakar, Asim K, and Sebak K Jana. 2021. “Trade War in the Twenty-First Century: A Historical Perspective.” In *Global Tariff War: Economic, Political and Social Implications*, edited by Ramesh Chandra Das, 3–14. Emerald Publishing Limited.
<https://doi.org/10.1108/978-1-80071-314-720211001>.
- Kashif, Muhammad, Chen Pinglu, Atta Ullah, and Ningyu Qian. 2025. “The Impact of Green Finance and FinTech Mechanisms on Financial Stability: Evidence from Advanced and Emerging Economies.” *China Finance Review International* ahead-of-p (ahead-of-print).
<https://doi.org/10.1108/CFRI-07-2024-0393>.
- Ketaren, Eka Violeta, and Antonius Mulyo Haryanto. 2020. “Pengaruh Kinerja Keuangan Terhadap Stabilitas Perbankan Yang Terdaftar Di Bursa Efek Indonesia (Studi Kasus Pada Bank Yang Terdaftar Di BEI Tahun 2014-2018).” *Diponegoro Journal of Management* 9 (2): 1–13.
<http://ejournal-s1.undip.ac.id/index.php/dbr>.
- Khair, Alfa, Widiya Indah Lestari, and Maryam Batubara. 2024. “Penurunan Nilai Tukar Rupiah Terhadap Dollar.” *Jurnal Studi Multidisipliner* 8 (6): 248–70.
- Khan, Muhammad Azam, Zulfiqar Khan, and Sardar Fawad Saleem. 2023. “Monetary Policy Effectiveness in Asian Developing Economies: The Moderating Role of Financial Sector Development.” *Journal of Financial Economic Policy* 15 (3): 226–47.
<https://doi.org/10.1108/JFEP-01-2023-0021>.
- Khotimah, Farida Qusnul, and Suci Atiningsih. 2018. “Pengaruh DPK, NPL, LDR Dan Suku Bunga Kredit Terhadap Penyaluran Kredit Umkm (Studi Pada BPR Di Kota Semarang Tahun 2013-2016).” *Jurnal STIE Semarang* 10 (2): 42–57.
<https://doi.org/10.33747/stiesmg.v10i2.198>.
- Klein, P, and Rima Turk-Ariss. 2022. “Bank Capital and Economic Activity.” *Journal of Financial Stability*.
<https://doi.org/10.1016/j.jfs.2022.101068>.
- Kohardinata, Cliff, Riyan Suwhikno, and

- Pian Sopian. 2022. "Pengaruh Pinjaman P2P Terhadap Kredit Perbankan Pada Kondisi Literasi TIK (Digital) Rendah-Tinggi." *Jurnal Ekonomi Manajemen Akuntansi Keuangan Bisnis Digital* 1 (2): 97–106. <https://doi.org/10.58222/jemakbd.v1i2.130>.
- Kong, Yan, Yang Li, and Bonan Wan. 2025. "Big Data Development, Accounting Information Quality, and Corporate Innovation." *Finance Research Letters* 78: 107257. <https://doi.org/https://doi.org/10.1016/j.frl.2025.107257>.
- Li, Yina, Zhuyuan Li, and Fei Ye. 2025. "Financing the Capital-Constrained Farmer under Random Yield and Investment Information Asymmetry: Bank Credit versus Trade Credit." *Industrial Management & Data Systems* 125 (1): 262–78. <https://doi.org/10.1108/IMDS-04-2024-0331>.
- Lisaholet, Asril. 2023. "Peranan Suku Bunga Kredit, Capital Adequacy Ratio (Car) Dan Loan To Deposit Ratio (Ldr) Bagi Pertumbuhan Ekonomi Indonesia." *Jurnal Ekonomi Dan Pembangunan*. <https://doi.org/10.14203/jep.30.2.2022.145-156>.
- Loissa, Angelica Febbryana, and Gede Harry Krisnanda. 2023. "Determinants of Credit Growth in Commercial Banks in Indonesia." *Journal of Tourism Economics and Policy*. <https://doi.org/10.38142/jtep.v3i4.881>.
- Lubis, Alexander, Constantinos Alexiou, and Joseph G Nellis. 2022. "Monetary and Macropudential Policies in the Presence of External Shocks: Evidence from an Emerging Economy." *Journal of Economic Studies* 49 (6): 960–77. <https://doi.org/10.1108/JES-11-2020-0577>.
- Maharani, Yunita, and Marhaeni. 2022. "Strategi Kebijakan Dalam Mengatasi Krisis Ekonomi Di Masa Pandemi Covid-19: (Studi Kasus Indonesia)." *JEMASI: Jurnal Ekonomi Manajemen Dan Akuntansi* 17 (1): 34–38. <http://117.74.115.107/index.php/jemasi/article/download/532/154>.
- Mahrani, Windy. 2023. "Peranan Perbankan Dalam Meningkatkan Perekonomian Di Indonesia." *Jurnal Al Wadiah* 1 (2): 164–77. <https://doi.org/10.62214/jaw.v1i2.138>.
- Mamuaja, R C, Is Saerang, H H D Tasik, Renso C Mamuaja, Ivonne S Saerang, Hizkia H D Tasik, Jurusan Manajemen, and Fakultas Ekonomi dan Bisnis Universitas Sam Ratulangi Manado. 2024. "Analysis Of The Impact Of Money Supply, Interest Rates, And Inflation On Bank Credit Growth In Indonesia Pre And Post Covid-19 Pandemic" 12 (3): 892–901.
- Mardiyani, Siti, and Izharudin. 2024. "Pengaruh Infrastruktur, Belanja Pariwisata, Dan Investasi Domestik Terhadap Pertumbuhan Ekonomi Di Sumatera." *Oikos: Jurnal Kajian Pendidikan Ekonomi Dan Ilmu Ekonomi* 10 (1): 296–310.
- Masujima, Yuki. 2020. "Global Shock and Foreign Bank Lending: Choice of Home and Local Currency Loans in Indonesia." In *Emerging Market Finance: New Challenges and Opportunities*, edited by Bang Nam Jeon and Ji Wu, 21:89–112. International Finance Review. Emerald Publishing Limited. <https://doi.org/10.1108/S1569-376720200000021006>.
- Maulana, Arief. 2019. "Faktor-Faktor Pembentukan Daerah Otonomi Baru Dan Dampaknya Terhadap Keuangan Negara." *Ekuitas: Jurnal Pendidikan Ekonomi* 7 (2): 53–67. <https://doi.org/10.23887/ekuitas.v7i2.17862>.
- Moura e Sá, Patrícia. 2024. "Analysing the Use of Mixed Methods in Quality Management Literature." *The TQM Journal* 36 (8): 2676–92. <https://doi.org/10.1108/TQM-03-2023-0075>.
- Murrar, Abdullah, Bara Asfour, and

- Veronica Paz. 2024. "Banking Sector and Economic Growth in the Digital Transformation Era: Insights from Maximum Likelihood and Bayesian Structural Equation Modeling." *Asian Journal of Economics and Banking* 8 (3): 335–53. <https://doi.org/10.1108/AJEB-12-2023-0122>.
- Nakashima, Kiyotaka, and Koji Takahashi. 2021. "Credit Allocation and Real Effects of Negative Interest Rates: New Micro-Evidence from Japan." *Social Science Research Network*. <https://doi.org/10.2139/SSRN.3828900>.
- Ngaruiya, Jane, Pat Obi, and David Mathuva. 2025. "Interest Rate Regulation and Bank Lending Behaviour: Evidence from Kenya." *Journal of Financial Regulation and Compliance* 1 (1): 112–30. <https://doi.org/10.1108/JFRC-07-2024-0130>.
- Novianto, Fajar, and R A Sista Paramita. 2023. "Pengaruh Harga Minyak, Inflasi, Suku Bunga, Dan Kurs Terhadap Indeks Saham Sektoral IDXEnergy." *Jurnal Ilmu Manajemen* 11 (3): 536–49. <https://doi.org/10.26740/jim.vn.p536-549>.
- Nwoke, Uchechukwu. 2020. "Imposition of Trade Tariffs by the USA on China: Implications for the WTO and International Trade Law." *Journal of International Trade Law and Policy* 19 (2): 69–84. <https://doi.org/10.1108/JITLP-01-2019-0003>.
- OCDE. 2024. *OECD Economic Outlook. Rapport Final*.
- Okofu-Dartey, Emmanuel. 2025. "Profit Persistence in the Ghanaian Banking Industry: A First Order Autoregressive Approach." *Journal of Economic and Administrative Sciences* 1 (2): 2311–25. <https://doi.org/10.1108/JEAS-08-2024-0300>.
- Oktaviani, Asih, Mexano Hans Gery, and Agusman Agusman. 2022. "Analisis Pengaruh Tingkat Suku Bunga Dan Pendapatan Terhadap Penyaluran Kredit Pada Pt Bank Pengkreditan Rakyat Piala Makmur." *Jurnal Point Equilibrium Manajemen Dan Akuntansi*. <https://doi.org/10.59963/jpema.v4i2.239>.
- Ozili, Peterson K. 2018. "Bank Loan Loss Provisions, Investor Protection and the Macroeconomy." *International Journal of Emerging Markets* 13 (1): 45–65. <https://doi.org/10.1108/IJoEM-12-2016-0327>.
- Ozili, Peterson, and Olajide Oladipo. 2025. "Impact of Credit Expansion and Contraction on Unemployment." *International Journal of Social Economics* 52 (2): 205–19. <https://doi.org/10.1108/IJSE-12-2023-0939>.
- Polizzi, Salvatore, Enzo Scannella, and Nuria Suárez. 2020. "The Role of Capital and Liquidity in Bank Lending: Are Banks Safer?" *Global Policy* 11 (S1): 28–38. <https://doi.org/10.1111/1758-5899.12750>.
- Pratama, Muhammad Setya, Sari Mubaroh, and Riki Afiransyah. 2021. "Pengaruh CAR, LDR, NIM, BOPO Terhadap ROA Pada Sektor Perbankan Go Public Di BEI 2016 - 2018." *Jurnal Ekonomi Dan Keuangan Manajemen* 7 (1): 118–26.
- Purwati, Asih, and Sigit Mareta. 2024. "The Effect of Return on Risk Assets (RORA), Loan To Deposit Ratio (LDR) and Capital Adequacy Ratio (CAR) on Stock Prices (Empirical Study on Banking Sector Companies on the Indonesia Stock Exchange in 2020-2023)." *JAFM: Journal of Accounting and Finance Management* 5 (5): 1100–1108. <https://doi.org/10.58812/wsaf.v2i02.1033>.
- Qomariah, Nurul. 2016. *Marketing Adactive Strategy*. Jember: Penerbit Cahaya

- Ilmu.
- Rahman, R Eki. 2021. "Understanding Indonesia's Exchange Rate Behavior." *Studies in Economics and Finance* 38 (2): 189–206. <https://doi.org/10.1108/SEF-09-2018-0296>.
- Rahmatullah, Dedy. 2025. "Analisis Pengaruh Kebijakan Moneter Terhadap Likuiditas Perbankan Di Indonesia." <https://doi.org/10.62710/9wq2nd63>.
- Ramadhani, Hanifah, Muhammad Yunus Sofian, and Sri Dewi Anggraini. 2022. "Analisis Perubahan Kurs Rupiah Terhadap Mata Uang Asing Dalam Menghadapi Resesi Tahun 2023." *Jurnal Manajemen Dan Ekonomi Kreatif* 1 (1): 100–112. <https://doi.org/10.59024/jumek.v1i1.34>.
- Rehman, Naveed Ur. 2024. "Effects of Interest Rate Change on Private Sector Investment, Evidence From Pakistan." *Social Science Review Archives*. <https://doi.org/10.70670/sra.v2i2.129>.
- Ria, M, Asfi Manzilati, and M Ria. 2023. "Faktor Eksternal Dan Internal Yang Mempengaruhi Pembiayaan Bank Umum Syariah Kepada Umkm." *Islamic Economics and Finance in Focus*. <https://doi.org/10.21776/ieff.2023.02.03.04>.
- Roreng, Petrus Peleng, Johannes Baptista Halik, Maria Yessica Halik, and Irdawati. 2025. "Systematic Literature Review: Kondisi Makroekonomi Indonesia Pasca Pandemi Covid-19 Dan Prospek Di Masa Mendatang." *Journal of Marketing Management and Innovative Business Review* 2 (2): 56–67. <https://doi.org/10.63416/mrb.v2i2.306>.
- Rusydiana, Aam Slamet, and Ihsanul Ikhwan. 2024. "Bank Credit and Economic Growth: Evidence from OIC Countries." *Accounting and Sustainability*. <https://doi.org/10.58968/as.v2i2.341>.
- Schelling, Tan, and Pascal Towbin. 2022. "What Lies beneath—Negative Interest Rates and Bank Lending." *Journal of Financial Intermediation* 51: 100969. <https://doi.org/https://doi.org/10.1016/j.jfi.2022.100969>.
- Sekaran, Uma, and Roger Bougie. 2017. *Metode Penelitian Untuk Bisnis: Pendekatan Pengembangan Keahlian, Edisi 6 Buku 1 Dan Buku 2*. Jakarta: Salemba Empat.
- Setia Devi, Anak Agung Istri, Putu Pande R Aprilyani Dewi, Putu Sri Arta Jaya Kusuma, and I G A Desy Arlita. 2024. "Pengaruh Struktur Modal, Risiko Kredit Dan Dana Pihak Ketiga Terhadap Kinerja Keuangan Perbankan." *Jurnal Revenue: Jurnal Ilmiah Akuntansi* 5 (2): 1751–63. <https://doi.org/10.46306/rev.v5i2.714>.
- Stefanus, Daniel, Florencia Irena Lawita, and Silvia Eka Putri. 2023. "Pengaruh CAR, ROA, dan NPL Terhadap Penyaluran Kredit Modal Kerja Pada Bank Umum." .
- Stokes, Jeffrey, and Arthur Cox. 2023. "Commercial Real Estate Finance and the Lending Cap Rate." *Journal of Property Investment & Finance* 41 (1): 2–10. <https://doi.org/10.1108/JPIF-10-2021-0081>.
- Suhendra, Indra, and Edwin Ronaldo. 2017. "Pengaruh Intermediasi Perbankan Terhadap Pertumbuhan Ekonomi Indonesia." *Tirtayasa Ekonomika* 12 (1): 169. <https://doi.org/10.35448/jte.v12i1.4443>.
- Sumarni, Yenti. 2020. "Pandemi COVID-19: Tantangan Ekonomi Dan Bisnis." *Al-Intaj: Jurnal Ekonomi Dan Perbankan Syariah* 6 (2): 46–58.
- Sunaryono. 2024. "Pembiayaan Syariah Dan Stabilitas Makroekonomi: Implikasi Terhadap Perkembangan UMKM Di Indonesia." *Jurnal Ekonomi STIEP* 9 (1): 131–43. <https://doi.org/10.54526/jes.v9i1.270>.
- Suryanto, Dadang Agus. 2019. "Pertumbuhan Kredit Di Indonesia: Sebuah Analisis Kepatuhan Bank

- Terhadap Implementasi Basel Accord I-III.” *Jurnal ASET (Akuntansi Riset)* 11 (2): 224–37. <https://doi.org/10.17509/jaset.v11i2.18721>.
- Suseno, Adinda Maharani, and Lestari Agusalim. 2024. “Journal of Economic, Management and Entrepreneurship Hubungan Suku Bunga Dan Inflasi: Studi Empiris Di Indonesia” 2 (3). <https://doi.org/10.61502/jemes.v2i3.104>.
- Susilowati, Yeye, Nur Aini, Tjahjaning Poerwati, and Reny Rahayuningsih. 2019. “Analisis Kecukupan Modal, Efisiensi Dan Likuiditas Terhadap Profitabilitas.” In *Proceeding SENDI*, 1:12–30. <https://www.unisbank.ac.id/ojs/index.php/sendiu/article/view/7347>.
- Tanjung, Oppie Meisya, Isfenti Sadalia, and Nisrul Irawati. 2022. “The Effect of Macroeconomics on Non-Performing Loans with Credit Growth as an Intervening Variable at PT. Bank SUMUT.” *International Journal of Research and Review* 9 (7): 535–49. <https://doi.org/10.52403/ijrr.20220758>.
- Teruna, Dipa, and Tedi Ardiansyah. 2024. “Analisis Trend Posisi Kredit UMKM Pada Bank Umum Untuk Skala Menengah Di Indonesia.” *Jurnal Usaha* 5 (1): 107–23.
- Tinoco-Zermeño, M, V Torres-Preciado, and Francisco Venegas-Martínez. 2022. “Inflation and Bank Credit.” *Investigación Administrativa*. <https://doi.org/10.35426/iav51n129.02>.
- Tsindeliani, Imeda A, and Irina E Mikheeva. 2022. “Review of Information Asymmetry in Banking in the Russian Federation.” *Journal of Money Laundering Control* 25 (4): 779–91. <https://doi.org/10.1108/JMLC-09-2021-0092>.
- Vialtsev, Mikhail, and Mikhail Komarov. 2024. “Qualitative and Quantitative Models of Smart Contracts Implementation in the Sharing Economy Using a Case Study of Delimobil.” *Journal of Asia Business Studies* 1 (2): 223–45. <https://doi.org/10.1108/JABS-06-2024-0348>.
- Wa, Dicky Kushadi. 2024. “Tajuk Khusus Penyerahan DIPA Dan Daftar Alokasi TKD Tahun Anggaran 2025.” *Lentera APBN* 36 (1): 1–7.
- Wahab, Abdul, and Ilma Mahdiya. 2023. “Islamadina: Jurnal Pemikiran Islam Peran Lembaga Keuangan Syariah Terhadap Pertumbuhan UMKM Dalam Revitalisasi Ekonomi Pembangunan Di Indonesia.” *Maret* 24 (1): 109–24.
- Wahyu, Eka, Hestya Budianto, Nindi Dwi, and Tetria Dewi. 2023. “Pemetaan Penelitian Rasio Net Operating Margin (NOM) Pada Perbankan Syariah: Studi Bibliometrik VOSviewer Dan Literature Review.”
- Wahyuningsih, Sri, Jasmin Jasmin, and Edhi Juwono. 2024. “Peran Strategi Manajemen Risiko Dalam Mengoptimalkan Likuiditas Dan Meminimalkan Risiko Kredit Di Industri Perbankan Di Indonesia.” *Sanskara Manajemen Dan Bisnis* 2 (03): 156–67. <https://doi.org/10.58812/smb.v2i03.420>.
- Wakatabe, Masazumi. 2017. “The Great Depression and Macroeconomics Reconsidered: The Impact of Policy and Real-World Events on Economic Doctrines.” In *Including a Symposium on New Directions in Sraffa Scholarship*, 35:237–302. Research in the History of Economic Thought and Methodology. Emerald Publishing Limited. <https://doi.org/10.1108/S0743-41542017000035B011>.
- Warjiyo, Perry, and Solikin M Juhro. 2019a. “Exchange Rates and the Economy.” In *Central Bank Policy: Theory and Practice*, 81–113. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-751-620191007>.
- . 2019b. “Monetary Policy Transmission Mechanism.” In *Central*

- Bank Policy: Theory and Practice*, 115–58. Emerald Publishing Limited. <https://doi.org/10.1108/978-1-78973-751-620191008>.
- Watts, Ross L, and Jerold L Zimmerman. 1990. “Positive Accounting Theory.” *The Accounting Review* 65 (1): 131–56. <https://faculty.etsu.edu/POINTER/watts&zimmerman2.pdf>.
- Ximenes, Ana Meliana B, Reyner F Makatita, Petrus E De Rozari, and Paulina Y Amtiran. 2025. “Pengaruh Jumlah Anggota, Jumlah Simpanan, Dan Jumlah Pinjaman Terhadap Sisa Hasil Usaha (SHU) Pada Koperasi Simpan Pinjam Di Kecamatan Oebobo.”
- Yadav, Ashutosh. 2025. “Promoting Economic Stability: The Role of Renewable Energy Transition in Mitigating Global Volatility.” *International Journal of Energy Sector Management* ahead-of-p (ahead-of-print). <https://doi.org/10.1108/IJESM-06-2024-0032>.
- Yulyanti, Sinta, Poppy Camenia Jamil, and Haugesti Diana. 2023. “Pengaruh Variabel Makroekonomi Terhadap Pertumbuhan Kredit Bank Umum Di Indonesia.” *Jurnal Ekonomi KIAT* 35 (2). <https://journal.uir.ac.id/index.php/kiat>.
- Zegarra, Luis Felipe. 2019. “Information Asymmetries and Agricultural Credit.” *Agricultural Finance Review* 79 (2): 217–33. <https://doi.org/10.1108/AFR-08-2018-0062>.
- Zumarnis, Rizki, and Moch. Irsad. 2023. “Pengaruh CAR (Capital Adequacy Ratio), NPL (Non Performing Loan), ROA (Return On Asset), Dan BOPO (Biaya Operasional Pendapatan Operasional) Terhadap Penyaluran Kredit Pada Bank Umum Yang Terdaftar Di Otoritas Jasa Keuangan Periode 2016-2021.” *Journal of Economic, Bussines and Accounting (COSTING)*. <https://doi.org/10.31539/costing.v6i2.5259>.