

Is IFRS 9 Enough? The Moderating Role of Audit Committee Effectiveness in Loan Loss Provisioning

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Abstract: The implementation of International Financial Reporting Standard 9 (IFRS 9) has intensified the debate over whether principle-based accounting standards can effectively constrain managerial discretion in loan loss provisioning. This study investigates the effects of earnings management and capital management on Loan Loss Provisions (LLP). It examines whether the implementation of IFRS 9 and Audit Committee Effectiveness jointly influence these relationships. Using panel data from 42 Indonesian listed commercial banks over the period 2017–2024 (335 bank-year observations), this study employs the Fixed Effects Model (FEM) as the primary estimation method, with Feasible Generalized Least Squares (FGLS) and Dynamic Generalized Method of Moments (Dynamic GMM) used for robustness analysis. The findings reveal that earnings management significantly affects LLP, whereas capital management has no significant direct effect. IFRS 9 significantly weakens the relationship between earnings management and LLP but does not significantly moderate the relationship between capital management and LLP. Furthermore, Audit Committee Effectiveness significantly moderates the effect of IFRS 9 on both the earnings-management and capital-management channels, although in opposite directions, indicating that the effectiveness of the Expected Credit Loss framework depends not only on accounting standards but also on governance quality. These findings contribute to the accounting and banking literature by integrating managerial incentives, accounting regulation, and corporate governance into a unified empirical framework and provide practical insights for regulators and banking institutions seeking to enhance the credibility of financial reporting under IFRS 9.

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INTRODUCTION

The 2008 global financial crisis revealed fundamental weaknesses in the incurred loss model prescribed by International Accounting Standard (IAS) 39, which recognized credit losses only after objective evidence of impairment had emerged. This delayed recognition was widely criticized for understating credit risk during economic expansions and exacerbating financial instability during downturns, thereby weakening the usefulness of financial reporting for market participants and banking supervisors (Financial Stability Forum, 2009; Beatty & Liao, 2014; Basel Committee on Banking Supervision [BCBS], 2015). To address these shortcomings, the International Accounting Standards Board (IASB) introduced International Financial Reporting Standard (IFRS) 9, replacing the incurred loss approach with the Expected Credit Loss (ECL) model. Unlike its predecessor, IFRS 9 requires banks to recognize expected credit losses by incorporating historical experience, current conditions, and forward-looking macroeconomic information into impairment estimates, thereby enhancing the timeliness and relevance of financial reporting (IASB, 2014).

Although IFRS 9 was introduced to improve the quality of financial reporting, the transition to an expected credit loss framework substantially increases managerial discretion because impairment estimates rely heavily on professional judgment and forward-looking assumptions (Abad & Suarez,

2018; Novotny-Farkas, 2016). From the perspective of Agency Theory, information asymmetry between managers and shareholders creates incentives for managers to exercise this discretion in ways that may not fully reflect underlying economic conditions (Jensen & Meckling, 1976). Consequently, evaluating the effectiveness of IFRS 9 requires more than assessing compliance with accounting standards; it also requires examining whether expanded managerial judgment influences financial reporting outcomes.

Managerial discretion is particularly evident in the estimation of Loan Loss Provisions (LLPs), one of the largest and most judgment-intensive accounting accruals reported by commercial banks. Because LLP estimates depend on managerial assessments of borrower creditworthiness and future macroeconomic conditions, they provide managers with considerable flexibility in determining both the timing and magnitude of credit loss recognition (Ahmad et al., 2009; Beatty et al., 2009; Kanagaretnam et al., 2003). While such flexibility is necessary to reflect expected credit risk under IFRS 9, it also creates opportunities for managers to pursue reporting objectives that extend beyond faithful representation of economic performance. Consequently, LLPs remain a central mechanism through which managerial incentives may influence financial reporting quality under the ECL framework.

Managerial incentives associated with LLP estimation are commonly examined from two complementary perspectives: earnings management and capital management. Prior research has long documented that managers may adjust LLPs to smooth earnings, reduce income volatility, or avoid reporting losses (Ahmad et al., 2009; Beatty et al., 2009; Kanagaretnam et al., 2003). Likewise, because LLPs directly affect retained earnings and regulatory capital ratios, managers may also use provisioning decisions to maintain capital adequacy above supervisory requirements (Beatty et al., 1995; Curcio et al., 2017). Although IFRS 9 is expected to strengthen accounting discipline through earlier recognition of expected losses, empirical evidence remains inconclusive regarding whether the new impairment framework constrains or merely reshapes managerial discretion (P. K. Ozili & Outa, 2017). Therefore, understanding how these managerial incentives continue to influence LLPs under IFRS 9 remains an important issue in contemporary banking research.

While managerial incentives provide an economic explanation for discretionary provisioning, the effectiveness of IFRS 9 also depends on the corporate governance mechanisms that oversee financial reporting. Agency Theory suggests that accounting standards alone cannot eliminate opportunistic managerial behavior because managers continue to exercise judgment when applying principles-based accounting standards (Fama & Jensen, 1983). Among governance mechanisms, the Audit Committee plays a critical role in monitoring financial reporting quality, evaluating significant accounting estimates, and overseeing the application of accounting standards. However, prior studies predominantly assess Audit Committee effectiveness using isolated characteristics, such as independence, financial expertise, meeting frequency, or committee size. Such an approach may not adequately capture the multidimensional nature of board oversight. This study therefore argues that Audit Committee effectiveness should be evaluated using a composite index that reflects the overall quality of monitoring rather than individual governance attributes alone.

Despite the growing literature on IFRS 9 and Loan Loss Provisions, several important gaps remain. First, existing studies primarily examine the direct consequences of IFRS 9 adoption for provisioning behavior, while providing limited evidence on whether managerial incentives continue to influence LLPs under the Expected Credit Loss framework (Novotny-Farkas, 2016; P. Ozili, 2019). Second, earnings management and capital management are generally investigated in separate empirical models, resulting in fragmented evidence regarding the economic motivations underlying provisioning decisions. Third, governance studies typically focus on individual Audit Committee characteristics instead of examining overall monitoring effectiveness through multidimensional governance measures. Collectively, these limitations suggest that current evidence does not fully

explain how accounting regulation, managerial incentives, and corporate governance jointly influence provisioning behavior.

These gaps are particularly relevant in emerging economies, where institutional environments, regulatory enforcement, and corporate governance practices differ from those of developed markets that dominate the existing literature. Indonesia provides an important empirical setting because its banking sector has experienced substantial regulatory reforms following IFRS convergence while operating within a distinct institutional environment. Evidence from Indonesian listed commercial banks therefore offers an opportunity to extend the international literature by examining whether the effectiveness of IFRS 9 depends not only on accounting regulation but also on managerial incentives and governance quality under different institutional conditions.

Motivated by these gaps, this study develops an integrated framework to examine the determinants of Loan Loss Provisions under the IFRS 9 regime. Specifically, the study investigates the effects of earnings management and capital management on LLPs, evaluates whether IFRS 9 moderates these relationships, and examines whether Audit Committee Effectiveness further strengthens the governance environment surrounding managerial judgment. Using panel data from 42 Indonesian listed commercial banks over the period 2017–2024, this study contributes to the literature by integrating accounting regulation, managerial incentives, and corporate governance into a single analytical framework while providing evidence from an emerging market where such evidence remains limited.

Agency Theory suggests that information asymmetry enables managers to exercise discretion in financial reporting when accounting standards require substantial professional judgment. Under IFRS 9, Loan Loss Provision (LLP) estimation relies heavily on managerial assumptions regarding expected credit losses, creating opportunities for managers to influence reported financial performance. Prior studies consistently document that LLPs have been used as a mechanism for earnings management in the banking industry (Ahmad et al., 2009; Beatty et al., 2009; Kanagaretnam et al., 2003). Accordingly, this study proposes the following hypothesis:

H1: Earnings management is positively associated with Loan Loss Provisions.

Because LLPs directly affect retained earnings and regulatory capital, provisioning decisions may also be influenced by banks' incentives to maintain adequate capital ratios. Previous studies suggest that managers adjust LLPs to avoid regulatory capital constraints, particularly when capital adequacy approaches minimum supervisory requirements (Ahmad et al., 2009; Beatty et al., 1995; Curcio et al., 2017). Therefore, the following hypothesis is proposed:

H2: Capital management is positively associated with Loan Loss Provisions.

The implementation of IFRS 9 fundamentally changes the measurement of credit impairment by introducing a forward-looking Expected Credit Loss framework. While earlier recognition of expected losses is expected to strengthen accounting discipline, the increased reliance on managerial judgment may also alter how earnings management and capital management are reflected in provisioning decisions. Accordingly, IFRS 9 is expected to moderate the relationship between managerial incentives and Loan Loss Provisions.

H3a: IFRS 9 moderates the relationship between earnings management and Loan Loss Provisions.

H3b: IFRS 9 moderates the relationship between capital management and Loan Loss Provisions.

Effective corporate governance is expected to reinforce the discipline imposed by IFRS 9 by limiting managers' ability to exploit accounting discretion. As the primary governance mechanism responsible for overseeing financial reporting and significant accounting estimates, the Audit Committee is expected to strengthen the implementation of IFRS 9 when its monitoring effectiveness is high. Therefore, this study proposes:

H4a: Audit Committee Effectiveness moderates the relationship between earnings management and Loan Loss Provisions under IFRS 9.

H4b: Audit Committee Effectiveness moderates the relationship between capital management and Loan Loss Provisions under IFRS 9.

RESEARCH METHOD

This study employs a quantitative explanatory research design to examine the effects of managerial incentives on Loan Loss Provisions (LLPs) and to evaluate the moderating roles of IFRS 9 implementation and Audit Committee Effectiveness in Indonesian listed commercial banks. Panel data analysis is employed because it combines cross-sectional and time-series observations, enabling the analysis to control for unobservable bank-specific heterogeneity while improving estimation efficiency (Baltagi, 2021).

The final sample comprises 42 listed commercial banks. The balanced panel initially consisted of 336 bank-year observations (42 banks $\times$ 8 years). However, one bank-year observation was excluded because of incomplete data required for variable measurement, resulting in a final sample of 335 bank-year observations. Financial and governance data were obtained from annual reports and audited financial statements, whereas macroeconomic variables were collected from official publications issued by the Indonesian statistical and monetary authorities. The sample selection procedure is presented in Table 1.

Table 1. Sample Selection Procedure

Sample Selection Criteria	Number
Listed commercial banks on the Indonesia Stock Exchange (IDX)	47
Less: Banks with incomplete annual reports	(5)
Final sample of listed commercial banks	42
Observation period	2017–2024 (8 years)
Maximum bank-year observations (42 $\times$ 8)	336
Less: Bank-year observation with incomplete data	(1)
Final bank-year observations	335

Source: Compiled by the authors based on annual reports of listed commercial banks and the Indonesia Stock Exchange (IDX).

The dependent variable is Loan Loss Provisions (LLP). The principal explanatory variables are earnings management (EBTP) and capital management (CAP), while IFRS 9 implementation and Audit Committee Effectiveness (AC_SCORE) serve as moderating variables. Audit Committee Effectiveness is measured using a composite index that integrates six audit committee characteristics: committee size, meeting frequency, financial expertise, gender diversity, academic background, and committee tenure. These attributes are measured as follows: committee size as the natural logarithm of the number of audit committee members; meeting frequency as the natural logarithm of the number of committee meetings held during the year; financial expertise as the proportion of members with accounting or finance backgrounds; gender diversity as the proportion of female members; academic background as the proportion of members holding academic positions; and committee tenure as the average length of members' service in years. Because these indicators are measured on different scales, each is first converted into a standardized (z-score) form with a mean of zero and a standard deviation of one, and the six standardized indicators are then summed with equal weighting to form the composite score AC_SCORE, so that higher values indicate greater audit committee effectiveness. As the index is standardized around the sample mean of zero, it can take negative values; a negative score therefore does not indicate the absence of an audit committee but rather a level of monitoring effectiveness below the sample average. The empirical models further include interaction variables together with several bank-specific and macroeconomic control variables, including non-performing loans (NPL), loan loss reserves (LLR), bank size (SIZE), GDP growth (GDPG), and inflation (IR). The operational definitions of all variables are summarized in Table 2.

Table 2. Operational Definition of Variables

Variable	Symbol	Measurement	References
Dependent Variable			
Loan Loss Provisions	LLP	Loan Loss Provisions ÷ Total Loans	Curcio et al. (2017); Ozili (2019)
Independent Variables			
Earnings Management	EBTP	Earnings Before Taxes and Loan Loss Provisions ÷ Total Assets	Beatty & Liao (2014); Curcio et al. (2017)
Capital Management	CAP	Equity ÷ Total Loans	Kim & Kross (1998); Ozili (2019)
Moderating Variables			
IFRS 9 Implementation	IFRS9	Dummy variable: 1 = 2020–2024 (post-IFRS 9); 0 = 2017–2019 (pre-IFRS 9)	IFRS 9
Audit Committee Effectiveness	AC_SCORE	Composite index of committee size, meeting frequency, financial expertise, gender diversity, academic background, and committee tenure.	Abbott et al. (2004). Alhababsah (2019)
Interaction Variables			
Earnings Management × IFRS 9	EBTP×IFRS9	EBTP × IFRS9	Authors' calculation
Capital Management × IFRS 9	CAP×IFRS9	CAP × IFRS9	Authors' calculation
Audit Committee Effectiveness × Earnings Management × IFRS 9	AC×EBTP×IFRS9	AC_SCORE × EBTP × IFRS9	Authors' calculation
Audit Committee Effectiveness × Capital Management × IFRS 9	AC×CAP×IFRS9	AC_SCORE × CAP × IFRS9	Authors' calculation
Control Variables			
Non-Performing Loans	NPL	Non-Performing Loans ÷ Total Loans	Bushman & Williams (2012)
Loan Loss Reserves	LLR	Loan Loss Reserves ÷ Total Loans	Curcio et al. (2017)
Bank Size	SIZE	Natural logarithm of Total Assets	Beatty & Liao (2014)
GDP Growth	GDPG	Annual Gross Domestic Product Growth Rate	World Bank
Inflation Rate	IR	Annual Inflation Rate	Bank Indonesia

Source: Compiled by the authors.

The proposed hypotheses are tested using three sequential panel regression models. Model (1) examines the direct effects of managerial incentives, IFRS 9, and Audit Committee Effectiveness on Loan Loss Provisions. Model (2) introduces interaction terms between managerial incentives and IFRS 9 to evaluate the moderating effect of the Expected Credit Loss framework. Model (3) further incorporates three-way interaction terms involving Audit Committee Effectiveness to examine whether governance quality strengthens the moderating role of IFRS 9.

$$LLP_{it} = \alpha + \beta_{1EBTP_{it}} + \beta_{2CAP_{it}} + \beta_{3IFRS9_{it}} + \beta_{4AC_SCORE_{it}} + \beta_{5NPL_{it}} + \beta_{6LLR_{it}} + \beta_{7SIZE_{it}} + \beta_{8GDPG_{it}} + \beta_{9IR_{it}} + \varepsilon_{it} \quad (1)$$

$$LLP_{it} = \alpha + \beta_{1EBTP_{it}} + \beta_{2CAP_{it}} + \beta_{3IFRS9_{it}} + \beta_{4AC_SCORE_{it}} + \beta_{5(EBTP_{it} \times IFRS9_{it})} + \beta_{6(CAP_{it} \times IFRS9_{it})} + \beta_{7NPL_{it}} + \beta_{8LLR_{it}} + \beta_{9SIZE_{it}} + \beta_{10GDPG_{it}} + \beta_{11IR_{it}} + \varepsilon_{it} \quad (2)$$

$$LLP_{it} = \alpha + \beta_{1EBTP_{it}} + \beta_{2CAP_{it}} + \beta_{3IFRS9_{it}} + \beta_{4AC_SCORE_{it}} + \beta_{5(AC_SCORE_{it} \times EBTP_{it} \times IFRS9_{it})} + \beta_{6(AC_SCORE_{it} \times CAP_{it} \times IFRS9_{it})} + \beta_{7NPL_{it}} + \beta_{8LLR_{it}} + \beta_{9SIZE_{it}} + \beta_{10GDPG_{it}} + \beta_{11IR_{it}} + \varepsilon_{it} \quad (3)$$

The empirical models are estimated using panel data regression techniques. The Chow, Breusch-Pagan Lagrange Multiplier, and Hausman tests are employed to determine the most appropriate estimator, with the Fixed Effects Model (FEM) selected as the baseline specification. To assess robustness, the models are re-estimated using Feasible Generalized Least Squares (FGLS) to address heteroskedasticity and serial correlation, and Dynamic Generalized Method of Moments (GMM) to mitigate potential endogeneity arising from dynamic provisioning behavior. All analyses are performed using Stata, and statistical significance is evaluated at the 1%, 5%, and 10% levels.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 3 reports the descriptive statistics of all variables included in the analysis. The final dataset comprises 335 bank-year observations. Loan Loss Provisions (LLP) have a mean value of 0.0245, indicating that, on average, Indonesian listed commercial banks recognize impairment provisions equivalent to 2.45% of total loans. The relatively wide range of LLP values suggests substantial heterogeneity in provisioning behavior across banks. Earnings before taxes and loan loss provisions (EBTP) exhibit considerable variation, reflecting differences in operating performance among sample banks. Likewise, the capital ratio (CAP) varies substantially, indicating heterogeneous capital positions and potential differences in regulatory incentives. Audit Committee Effectiveness (AC_SCORE) also shows noticeable variation, suggesting differences in governance quality across banks. Overall, the descriptive statistics indicate sufficient cross-sectional and time-series variation to support panel data estimation.

Table 3. Descriptive Statistics

Variable	Mean	Std. Dev	Min	Max	Obs
LLP	0.0245	0.0458	-0.0317	0.3346	N = 335
EBTP	0.0085	0.0389	-0.4772	0.2150	N = 335
CAP	0.3327	0.2845	0.0000	2.8388	N = 336
IFRS_9	0.5000	0.5007	0.0000	1.0000	N = 336
ACSCORE	0.0000	2.7378	-7.9140	7.2853	N = 336
NPL	0.0336	0.0249	0.0000	0.2227	N = 336
LLR	0.0349	0.0292	0.0000	0.2167	N = 335
GDPG	0.0403	0.0235	-0.0207	0.0531	N = 336
IR	0.0283	0.0121	0.0157	0.0551	N = 336
SIZE	23.7323	2.7405	15.4902	28.5143	N = 336

Source: Secondary data processed using Stata (2026)

Difference Test Before and After IFRS 9

Before estimating the regression models, non-parametric difference tests are performed to compare provisioning behavior before and after IFRS 9 implementation. As presented in Table 4, both the Wilcoxon Mann–Whitney and Kruskal–Wallis tests produce statistically insignificant results ($p > 0.05$), indicating that the average level of Loan Loss Provisions does not differ significantly between the pre- and post-IFRS 9 periods. These findings suggest that the adoption of IFRS 9 did not uniformly change provisioning behavior across Indonesian listed commercial banks. Consequently, multivariate panel regression analysis is required to evaluate whether IFRS 9 influences provisioning behavior after controlling for managerial incentives, governance quality, and other bank-specific characteristics.

Table 4. Difference Test

Test	Result	Value	p-value
Wilcoxon (Mann–Whitney)	Z-Statistic (approx)*	0.0649	0.9478
Kruskal-Wallis	Chi-Square with ties	0.0043	0.1823

Source: Secondary data processed using Stata (2026)

Panel Data Model Selection

The appropriate panel estimator is determined using the Chow, Breusch–Pagan Lagrange Multiplier, and Hausman specification tests. As reported in Table 5, the Chow and LM tests reject the pooled regression model, while the Hausman test indicates that the Fixed Effects Model (FEM) is preferred over the Random Effects Model. Accordingly, FEM is selected as the primary estimator because it controls for unobservable bank-specific characteristics that may be correlated with the explanatory variables.

Table 5. Panel Data Model Selection

Test	Result	Value	Probability
Chow	F statistic	6.5600	0.0000
Breusch and Pagan Lagrange Multiplier	Chibar Square	142.1600	0.0000
Hausman	Chi-Square	26.5200	0.0019

Source: Secondary data processed using Stata (2026)

Regression Results

The regression results are reported in Table 6. Model (1) estimates the direct effects of managerial incentives, IFRS 9 implementation, and Audit Committee Effectiveness on Loan Loss Provisions. Model (2) introduces interaction terms between managerial incentives and IFRS 9, whereas Model (3) further incorporates three-way interactions involving Audit Committee Effectiveness.

Table 6. Panel Regression Results

Variables	Base Model (1)	IFRS 9 Effect (2)	Mitigation Role (3)
Constant	-0.4631*** 0.0000	-0.5586*** 0.0000	-0.6350*** 0.0000
Main Variables			
EBTP (Provitality)	-0.2315*** 0.0000	-0.0588 0.3220	-0.7474*** 0.0000
CAP (Capital)	-0.0059 0.5580	0.0204 0.2620	-0.0159 0.3750
AC_SCORE	-0.0014 0.2270	-0.0010 0.3720	-0.0013 0.5470
IFRS 9 (dummy)	-0.0104** 0.0420	-0.0004 0.9420	-0.0004 0.9420
Two-Ways Interactions			
EBTP_IFRS9		-0.4761***	

		0.0000	
CAP_IFRS9		-0.0260	
		0.1320	
Three-Ways Interactions			
ACSCORE_EBTP_IFRS9			0.2155***
			0.0000
ACSCORE_CAP_IFRS9			-0.1981***
			0.0010
Control Variables			
NPL	-0.1475	-0.0825	-0.0825
	0.2080	0.4700	0.4700
LLR	0.7290***	0.6822***	0.6297***
	0.0000	0.0000	0.0000
Size	0.0196***	0.0233***	0.0233***
	0.0000	0.1512	0.0000
GDPG	0.2757***	0.2511***	0.2921***
	0.0020	0.0040	0.0000
IR	-0.0323	0.0128	0.0135
	-0.8360	0.9320	0.9230
Model Fit			
Obs	335	335	335
R-Squared	0.6281	0.6585	0.7116
Adjusted R-Squared	0.5626	0.5956	0.6523
F-Statistic	9.8800	11.03	12
Prob (F-stat)	0.0000	0.0000	0.0000

Nilai p-values

*p < 0.10, **p < 0.05, ***p < 0.01

Source: Secondary data processed using Stata (2026)

Earnings Management and Loan Loss Provisions

Model (1) shows that earnings management (EBTP) has a negative and statistically significant effect on Loan Loss Provisions ($\beta = -0.2315$, $p < 0.01$). Because H1 predicted a positive association, this result is opposite to the hypothesized direction; accordingly, H1 is not supported in terms of sign, even though the coefficient is significant. The finding nonetheless confirms that managerial profitability significantly influences provisioning decisions, supporting the view that managers exercise discretion when determining impairment reserves, albeit in a direction opposite to that predicted by the income-smoothing hypothesis. Under Agency Theory, managerial judgment in loan loss provisioning may be used either to smooth earnings or to recognize expected credit losses more conservatively during periods of strong operating performance. The negative sign indicates that banks in the sample tend to reduce provisions in more profitable periods rather than build them up, a pattern that is inconsistent with the classic income-smoothing hypothesis, which predicts a positive association. Instead, this finding is consistent with evidence from banks outside the G-10 and from emerging markets, where provisions tend to be smaller during favourable periods and are raised only when conditions deteriorate (Cavallo & Majnoni, 2001; Laeven & Majnoni, 2003). This behaviour reflects a form of under-provisioning during high-earning periods that runs counter to the smoothing behaviour originally hypothesized.

Capital Management and Loan Loss Provisions

The coefficient of capital management (CAP) is statistically insignificant, indicating that regulatory capital considerations do not directly influence provisioning decisions among Indonesian listed commercial banks. This finding suggests that banks generally maintain capital buffers above the regulatory minimum, thereby reducing incentives to manipulate impairment provisions for capital

management purposes. Consequently, provisioning decisions appear to be driven primarily by financial reporting considerations rather than capital adequacy objectives.

Moderating Effect of IFRS 9

Model (2) demonstrates that IFRS 9 significantly moderates the relationship between earnings management and Loan Loss Provisions, as indicated by the significant interaction between EBTP and IFRS 9. The interaction coefficient ($EBTP \times IFRS9 = -0.4761$, $p < 0.01$) is negative and significant. Interpreted jointly with the base EBTP effect, this indicates that after IFRS 9 adoption the sensitivity of provisions to pre-provision earnings becomes more strongly negative, so the Expected Credit Loss framework does not neutralize but rather amplifies the association between earnings management and provisioning by requiring earlier, forward-looking recognition of expected credit losses. This pattern should be read as IFRS 9 reshaping, rather than simply eliminating, the earnings-management channel. In contrast, the interaction between capital management and IFRS 9 is statistically insignificant, implying that the accounting reform primarily constrains earnings management rather than regulatory capital management.

Moderating Role of Audit Committee Effectiveness

Model (3) indicates that Audit Committee Effectiveness significantly moderates the relationship between managerial incentives and Loan Loss Provisions under IFRS 9. The three-way interaction $AC_SCORE \times EBTP \times IFRS9$ is positive and significant (0.2155 , $p < 0.01$). Because the base EBTP effect and the $EBTP \times IFRS9$ interaction are both negative, this positive three-way term operates in the opposite direction, offsetting part of the negative earnings-management sensitivity under IFRS 9; effective audit committees therefore attenuate the earnings-management channel, consistent with stronger oversight of managerial judgment. In contrast, the three-way interaction $AC_SCORE \times CAP \times IFRS9$ is negative and significant (-0.1981 , $p < 0.01$), indicating that under stronger governance the link between capital positions and provisioning under IFRS 9 moves in the opposite direction, further limiting the use of provisioning for regulatory capital objectives. The two governance channels thus operate with opposite signs and should be interpreted separately rather than as a single uniform effect. These findings highlight that the effectiveness of IFRS 9 depends not only on accounting standards but also on the quality of corporate governance.

Overall, the regression results provide evidence that IFRS 9 alters managerial provisioning behavior primarily by reducing earnings management opportunities, while Audit Committee Effectiveness reinforces this effect through stronger monitoring of financial reporting processes.

Robustness Test

To assess the robustness of the findings, the baseline Fixed Effects Model is re-estimated using Feasible Generalized Least Squares (FGLS) and Dynamic Generalized Method of Moments (Dynamic GMM). The FGLS estimation addresses potential heteroskedasticity and serial correlation, whereas Dynamic GMM mitigates possible endogeneity arising from dynamic provisioning behavior.

Table 7. Robustness Test Results

Variables	FGLS Estimation (Heteroscedasticity Robust)	Dynamic Panel Model (Endogeneity Robust)
Lagged Dependent Variable LLP (t-1)	-	0.175 (0.288)
AC_SCORE	0.002**	-0.000
EBTP	-0.319***	-0.749***
CAP	0.031***	-0.016
Interaction (Earning Management) ACSCORE_EBTP	-0.076***	-0.202***

ACSCORE_EBTP_IFRS9	0.114*** (0.000)	0.236** (0.032)
Interaction (Capital Management)		
ACSCORE_CAP	-0.001	0.015
ACSCORE_CAP_IFRS9	-0.005 (0.163)	-0.018** (0.019)
Model Controls & Diagnostics		
Controls Included	Yes	Yes
Observations	335	293
R-Squared (Within) / Pseudo R2	-	0.4147
Wald Chi2 / F-Statistic	240.29***	16.71***
Nilai p-values		
*p < 0.10, **p < 0.05, ***p < 0.01		

Source: Secondary data processed using Stata (2026)

The robustness analyses broadly support the main findings, although some coefficients differ in significance across specifications. The negative and significant effect of earnings management (EBTP) and the positive, significant three-way interaction between Audit Committee Effectiveness, earnings management, and IFRS 9 are stable across the Fixed Effects, FGLS, and Dynamic GMM estimations, and can therefore be regarded as robust. By contrast, the results for the capital-management channel are more sensitive to specification: the CAP coefficient is insignificant under Fixed Effects but positive and significant under FGLS, and the three-way interaction AC_SCORE×CAP×IFRS9 is insignificant under FGLS while negative and significant under Dynamic GMM. These differences indicate that the earnings-management results are unlikely to be driven by heteroskedasticity, serial correlation, or endogeneity, whereas conclusions regarding the capital-management channel should be interpreted with greater caution.

CONCLUSION

This study examines the effects of managerial incentives on Loan Loss Provisions (LLPs) and investigates the moderating roles of IFRS 9 implementation and Audit Committee Effectiveness among Indonesian listed commercial banks during the 2017–2024 period. Using panel data regression with the Fixed Effects Model and complementary robustness analyses employing Feasible Generalized Least Squares (FGLS) and Dynamic Generalized Method of Moments (Dynamic GMM), the findings provide several important insights into banks' provisioning behaviour under the Expected Credit Loss (ECL) framework.

The empirical evidence indicates that earnings management remains a significant determinant of Loan Loss Provisions, whereas capital management does not directly influence provisioning decisions. Furthermore, IFRS 9 significantly moderates the relationship between earnings management and provisioning behaviour, suggesting that the Expected Credit Loss framework constrains managerial discretion associated with financial reporting incentives. However, IFRS 9 does not significantly alter the relationship between capital management and Loan Loss Provisions. The findings further demonstrate that Audit Committee Effectiveness moderates the effect of IFRS 9 on managerial incentives, but in opposite directions for the two channels: it attenuates the earnings-management channel (a positive three-way interaction) while reinforcing the constraint on the capital-management channel (a negative three-way interaction). Evidence on the capital-management channel is, however, less stable across estimators and should be treated as tentative. Overall, the results highlight the complementary roles of accounting regulation and corporate governance in improving financial reporting quality.

This study contributes to the literature in several ways. First, it integrates managerial incentives, IFRS 9 implementation, and Audit Committee Effectiveness into a unified empirical framework to explain Loan Loss Provision behaviour in an emerging market banking environment. Second, unlike prior studies that primarily examine the direct effects of IFRS 9 or governance mechanisms separately, this study demonstrates that the effectiveness of IFRS 9 depends on the quality of corporate governance. These findings extend Agency Theory by showing that managerial discretion embedded in principle-based accounting standards is influenced not only by accounting regulation but also by governance mechanisms that monitor managerial judgement. From a practical perspective, the results suggest that regulators should complement accounting reforms with stronger governance practices, particularly by enhancing audit committee competence and oversight, to improve the credibility of expected credit loss estimation and financial reporting.

This study is subject to several limitations. The analysis is restricted to Indonesian listed commercial banks and therefore may not fully represent non-listed banks or financial institutions operating under different regulatory environments. In addition, Audit Committee Effectiveness is measured using a composite governance index that may not capture all qualitative dimensions of board oversight. Future research may extend the analysis by incorporating cross-country comparisons, additional governance mechanisms, alternative measures of managerial incentives, or more detailed credit-risk indicators to provide a broader understanding of provisioning behaviour under IFRS 9.

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