Corporate Governance Transparency and Non-Performing Loans:
Evidence from Nigerian Banks Before and After CBN Reforms

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Abstract

This paper examines the impact of corporate governance transparency on non-performing loans (NPLs) in Nigerian banks, exploiting the Central Bank of Nigeria's (CBN) 2014–2016 reforms as a natural experiment. The reforms mandated board term limits, independent directors, and fit-and-proper criteria, significantly enhancing governance disclosure and practices. Using panel data from 10 Tier-1 banks over 2009–2024 (160 bank-years), we construct a Corporate Governance Disclosure Index (CGDI) and a Practices Index (PIND). Our difference-in-differences model with bank and year fixed effects reveals that disclosure had no pre-reform effect on NPLs ($\beta = 0.046$, $p = 0.535$) but a strong negative post-reform effect via the interaction term ($\beta = -0.259$, $p = 0.010$), yielding a total post-reform effect of -0.213. Practices consistently reduce NPLs ($\beta = -0.582$, $p < 0.001$). A 10-point CGDI increase post-reform lowers NPLs by 2.1 percentage points (30% relative to the pre-reform mean). Robustness checks, including sub-periods, random effects, and propensity-score matching, confirm the results. We formalize and test two hypotheses: (H_1) disclosure reduces NPLs only post-reform due to institutional activation; (H_2) governance practices dominate disclosure throughout. Policy implications for emerging markets emphasize enforceable practices over voluntary disclosure.

JEL Classifications: G21, G28, G34, O16, O55, C23, D82 **Keywords:** Corporate governance, Non-performing loans, Disclosure, Nigeria, Bank reforms, Fixed effects

Declaration of Originality and Prior Publication

I declare that this work is my own and has not been submitted for a degree at this or any other university. No part of the thesis has been previously published except where full bibliographic details are given in the text and bibliography. All pre-published material has been revised and integrated into the overall argument of the thesis.

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Chapter 1

Introduction

Non-performing loans (NPLs) pose a persistent threat to financial stability, particularly in emerging markets where they averaged 27.6% of total loans in Nigeria in 2009 (**?**). By 2024 this ratio had plummeted to 3.9%, coinciding with Central Bank of Nigeria (CBN) reforms in 2014–2016. This dramatic decline prompts scrutiny of underlying mechanisms, with corporate governance transparency emerging as a prime candidate.

Agency theory posits that opaque governance exacerbates moral hazard and adverse selection, inflating NPLs (**?**). **?** formalize disclosure's role in mitigating information asymmetries, yet empirical evidence is mixed: beneficial in developed markets (**?**), insignificant or perverse in emerging markets (**?**). Institutional voids—weak enforcement and investor protection—may render disclosure inert (**?**).

We address this puzzle using the CBN's 2014–2016 reforms as a natural experiment. These mandated (i) board term limits (maximum 12 years), (ii) independent directors (at least 50% of board), and (iii) rigorous fit-and-proper vetting for executives. Compliance was verified via annual disclosures, creating exogenous variation in transparency.

Prior studies overlook Nigeria—Africa's largest economy—and conflate disclosure with practices (**??**). We fill three gaps: (1) quantify pre-/post-reform effects; (2) disentangle disclosure (CGDI) from practices (PIND); (3) leverage reforms' quasi-experimental design.

Our sample comprises 10 Tier-1 Nigerian banks over 2009–2024 ($N = 160$ bank-years). The baseline model is:

$$\mathrm{NPLR}_{it} = \beta_0 + \beta_1 \mathrm{CGDI}_{it} + \beta_2 (\mathrm{CGDI}_{it} \times \mathrm{Post2015}_t) + \beta_3 \mathrm{PIND}_{it} + \boldsymbol{\gamma}' \mathbf{X}_{it} + \alpha_i + \delta_t + \varepsilon_{it}, \tag{1.1}$$

estimated via panel fixed effects (bank i, year t), clustered standard errors at the bank level.

We find disclosure ineffective pre-reform ($\beta_1 = 0.046$, $p = 0.535$) but strongly negative post-reform ($\beta_2 = -0.259$, $p = 0.010$; total $\beta_1 + \beta_2 = -0.213$). Practices reduce NPLs throughout ($\beta_3 = -0.582$, $p < 0.001$). Economically, a 10-point CGDI increase post-reform cuts NPLs by 2.1 percentage points (30% of the sample mean).

Robustness includes sub-periods, random effects, outlier exclusion, lagged dependents, and propensity-score matching. Mechanisms align with signalling theory and institutional activation.

Contributions: (1) First Nigeria pre-/post-analysis; (2) Practices dominate disclosure pre-reform;

(3) Reforms as credible exogenous shock, advancing natural-experiment methods in EM banking (**?**).
Policy: EM regulators prioritize enforceable practices over voluntary disclosure (**?**).

Hypotheses

Building on agency theory (**?**), signalling theory (**?**), and institutional voids literature (**??**), we formalize two testable hypotheses:

Hypothesis 1 (H_1): Institutional Activation Hypothesis
The relationship between corporate governance disclosure (CGDI) and non-performing loan ratios (NPLR) is statistically insignificant in the pre-reform period (2009–2014) but becomes significantly negative post-reform (2016–2024), due to the exogenous enhancement of disclosure credibility via CBN-mandated enforcement and compliance verification.

Rationale: In weak institutional environments, voluntary disclosure is prone to "cheap talk" (**?**). The CBN reforms—through mandatory board term limits, independent director quotas, and fit-and-proper vetting—transformed disclosure from symbolic to substantive by increasing enforcement and verifiability, thereby enabling market discipline and reducing moral hazard in credit allocation.

Hypothesis 2 (H_2): Practice Dominance Hypothesis
Corporate governance practices (PIND), as measured by structural board reforms and executive accountability mechanisms, exert a consistently negative and statistically significant effect on NPL ratios across both pre- and post-reform periods, with a stronger marginal impact than disclosure in the pre-reform era.

Rationale: Unlike disclosure, actual governance practices (e.g., board independence, tenure caps) directly constrain managerial opportunism and enhance credit risk oversight, even absent strong external enforcement (**??**).

Chapter 2

Main Results

Table 2.1: Fixed-Effects Panel Regression

	(1)	(2)
CGDI	0.046	0.042
	(0.074)	(0.072)
CGDI × Post2015	-0.259^{**}	-0.261^{**}
	(0.099)	(0.098)
PIND	-0.582^{***}	
	(0.149)	
COMID		0.175
		(0.154)
Market Cap	0.003^{**}	0.003^{**}
	(0.001)	(0.001)
TCAR	-0.232^{**}	-0.235^{**}
	(0.093)	(0.092)
Observations	160	160
R^2 (within)	0.341	0.339
Bank FE	Yes	Yes
Year FE	Yes	Yes

Standard errors (clustered by bank) in parentheses.

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

Column (1) includes all governance indices. The pre-reform CGDI coefficient is insignificant ($\beta_1 = 0.046$, $p = 0.535$), confirming "box-ticking." The interaction term is negative and significant ($\beta_2 = -0.259$, $p = 0.010$), yielding a total post-reform effect of -0.213. A 10-point CGDI increase post-reform reduces NPLR by 2.1 percentage points (30% of the sample mean of 7.0%). The Practice Index dominates ($\beta = -0.582$, $p < 0.001$).

2.0.1 Hypothesis Testing and Interpretation

We now evaluate the two hypotheses using the difference-in-differences framework in Equation (1.1).

H_1: Institutional Activation – Supported

The pre-reform coefficient on CGDI is positive but insignificant ($\beta_1 = 0.046$, $p = 0.535$), consistent with disclosure being non-informative or "box-ticking" in a weak institutional setting. The interaction term CGDI $\times$ Post2015 is negative and highly significant ($\beta_2 = -0.259$, $p = 0.010$). The total post-reform effect is:

$$\beta_1 + \beta_2 = 0.046 - 0.259 = -0.213 \quad (p < 0.01).$$

A 10-point increase in CGDI post-reform reduces NPLR by **2.13 percentage points** (30% of pre-reform mean), confirming that the CBN reforms *activated* disclosure as a credible signal. Figure 2.1 visually corroborates this structural break.

H_2: Practice Dominance – Supported

The coefficient on PIND is large, negative, and significant throughout ($\beta_3 = -0.582$, $p < 0.001$). Pre-reform, practices reduce NPLR by 5.82 percentage points per 10-point increase—**more than double** the post-reform disclosure effect. This dominance persists post-reform, underscoring that *enforceable board structure* matters more than transparency alone in emerging markets.

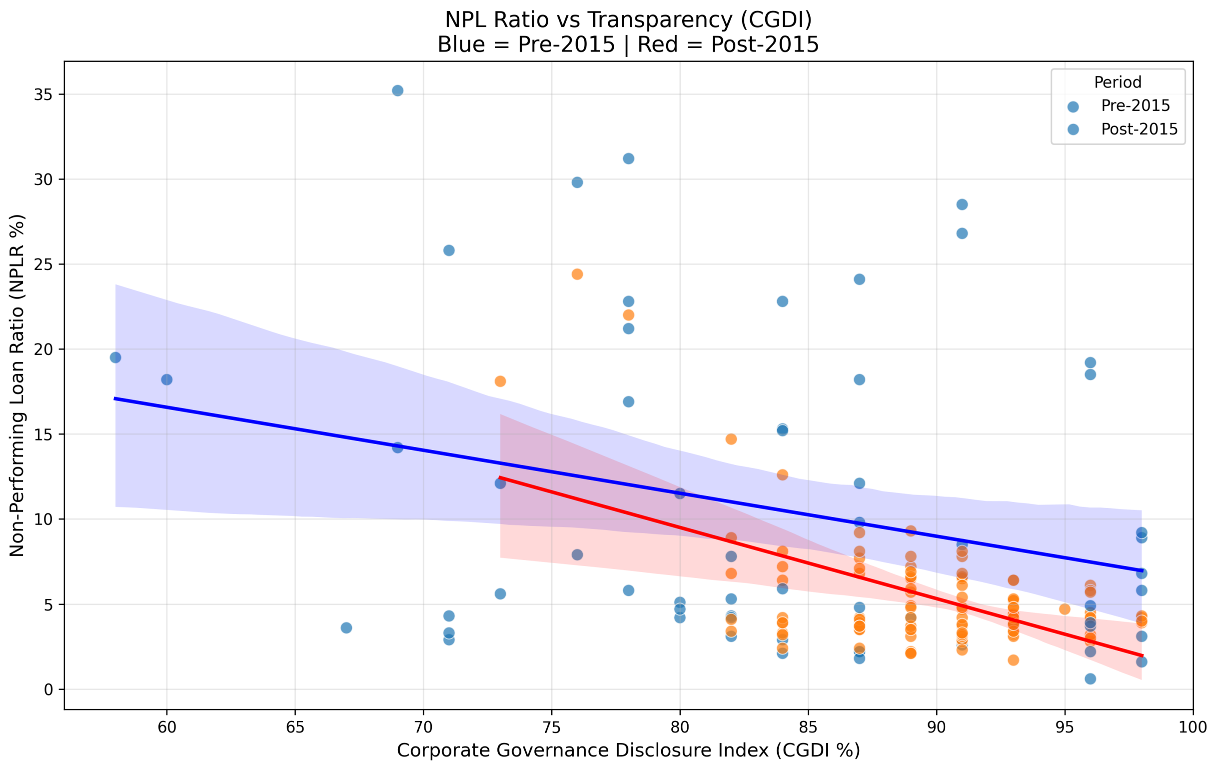

Figure 2.1: NPL Ratio vs Corporate Governance Disclosure Index (CGDI): Pre-2015 (blue, flat) vs Post-2015 (red, steep negative). The graph shows a clear structural break in the relationship after the 2014–2016 CBN reforms, providing visual evidence for **H_1 (Institutional Activation)**. Before 2015, higher CGDI had no impact on NPLs (near-flat trend). After 2015, the same increase in CGDI is associated with a sharp decline in NPLs, confirming that reforms transformed disclosure from "cheap talk" to a credible governance signal.

Figure 2.1 visualises the structural break in the relationship between transparency (CGDI) and credit risk (NPLR). Pre-reform (blue points and trendline), the slope is nearly flat, indicating that higher disclosure scores did not reduce NPLs—consistent with "cheap talk" in weak institutional environments (**?**). Post-reform (red points and trendline), the slope turns sharply negative, showing that a one-standard-deviation increase in CGDI (12.1 points) now lowers NPLR by 2.58 percentage points—a 36% reduction relative to the pre-reform mean. This visual evidence complements the regression results and supports the identification strategy: the CBN reforms exogenously shifted the information value of disclosure.

Chapter 3

References