

Risk at the Top: Board Demographics, Political Affiliation, and Bank Risk-Taking in Indonesia

Aulia Keiko Hubbansyah^{1*}, Yuli Ardianto¹, Muhammad Nuruddin Subhan¹,
Darmanto¹

¹Pancasila University, Jl. Raya Lenteng Agung No. 56-80, South Jakarta, Special
Capital Region of Jakarta 12630, Indonesia

*Corresponding Email: akhubbansyah@univpancasila.ac.id

ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE

Hubbansyah, A. K., Ardianto, Y., Subhan, M. N., & Darmanto, D. (2026). Risk at the top: Board demographics, political affiliation, and bank risk-taking in Indonesia. *International Journal of Applied Business & International Management*, 11(2), 1079-1100.

DOI:

<https://doi.org/10.32535/ijabim.v11i2.4702>

Copyright © 2026 owned by Author(s).

Published by IJABIM



This is an open-access article.

License:

Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 11 June 2026

Accepted: 15 July 2026

Published: 20 August 2026

ABSTRACT

Indonesia's heavy reliance on bank intermediation makes the demographic composition of bank boards a first-order governance concern, yet board-level determinants of risk-taking remain underexplored relative to structural factors. This study aims to identify which board characteristics systematically shift risk-weighted assets (RWA) among 46 banks listed on the Indonesia Stock Exchange, observed from 2015 to 2024, by comparing banks that experienced a board-composition change with matched banks that did not across a five-year event window. This quantitative, quasi-experimental study uses a difference-in-differences (DiD) design to examine how board age, gender, education, and political affiliation affect bank risk-taking in Indonesia. The DiD estimates show that a younger board ($b = 4.53$, $p < 0.05$), a higher share of female directors ($b = 7.32$, $p < 0.05$), and a higher share of politically affiliated directors ($b = 9.27$, $p < 0.10$) each raise risk-taking, while a higher share of directors holding master's or doctoral degrees lowers it ($b = -6.26$, $p < 0.05$). These findings indicate that bank risk-taking is shaped as much by who sits on the board as by organizational structure, offering regulators a demographic lens for strengthening governance oversight.

Keywords: Bank Governance; Board Composition; Difference-in-Differences; Political Affiliation; Risk-Taking; Upper Echelons Theory

JEL Classification: G21, G32, G34, M12

INTRODUCTION

The Asian and American financial crises have raised policymakers' awareness of the importance of maintaining stability in the banking sector. At that time, highly risky banking behavior was one of the main factors that triggered turmoil in both the financial sector and the broader economy. Issues of governance and banking stability are crucial, not only because of the vital role of banks as engines of economic growth, business activity, and corporate productivity, but also because economic recessions triggered by financial crises are extremely dangerous due to their deep and persistent impacts (Hubbansyah & Husodo, 2018). Previous studies analyzing banking risk-taking behavior have found that board size (Javed et al., 2024), regulations (Addou et al., 2024), interest rates and macroprudential policies (Anwar et al., 2024) may influence banks' preferences for engaging in risky business behavior.

Although these studies have extensively examined risk-taking behavior in banking, their discussions largely remain limited to factors external to the individual decision-makers themselves. In fact, top management teams, as the ultimate decision-makers in banking, interact collectively in the decision-making process, and therefore, the demographic and cultural backgrounds of each individual may shape the manner and process of organizational decision-making (Boubakri et al., 2023). The Upper Echelons Theory (Hambrick & Mason, 1984) posits that executives' observable characteristics (including age, gender, education, and experience) significantly influence their strategic choices and organizational outcomes. This theoretical lens has been applied extensively to explain corporate decision-making, including risk-taking (Cid-Aranda & López-Iturriaga, 2023; Hambrick, 2007). Recent systematic reviews confirm that CEO and board member characteristics significantly influence banks' risk-taking (Hertrampf et al., 2025). Empirically, prior evidence found that female directors can improve bank performance while reducing risky banking behavior. Conversely, Rodriguez et al. (2024), who focused on non-financial firms, revealed that a higher share of women on boards does not affect organizational risk.

This study aims to fill the gap in the literature by exploring the impact of demographic diversity within top-level management on banking risk-taking behavior in the Indonesian context. This issue has received limited attention in Indonesian studies, which have largely focused on external determinants such as banking competition (Ekananda, 2023), market concentration, and banking liquidity (Rahmizal et al., 2022). Prior research has predominantly centered on factors external to top-level management, even though top executives collectively shape organizational strategies. Consequently, both the demographic composition and political affiliations of board members may influence banks' decision-making processes, including their preferences toward risk.

Substantively, this study is of great importance given Indonesia's heavy reliance on the banking sector (Hubbansyah & Husodo, 2018). It is expected to uncover new dimensions in the dynamics of banking behavior and provide fresh insights into banking risk management in Indonesia amid an increasingly dynamic and complex economic environment. This gap is specific to Indonesia's institutional setting: state ownership remains substantial in the domestic banking sector, board appointments, particularly in state-owned and regional development banks, are routinely subject to political vetting alongside professional criteria, and the prudential regulator (OJK) evaluates governance largely through structural indicators rather than the demographic make-up of the board itself. This structural emphasis is codified in OJK Regulation No. 17 of 2023 on the Implementation of Governance for Commercial Banks, which replaced the 2016 governance regulation and sets minimum requirements for board size, independence, and committee structure (including risk-monitoring and nomination committees) without

addressing directors' age, gender, education, or political-affiliation profile. Because political affiliation and demographic composition change discretely when a new director is appointed, they are best understood not as static firm attributes but as governance events whose risk consequences can be traced directly, consistent with the broader finding that governance implementation in Indonesian institutions is often uneven across entities (Sari, 2024). This concern over governance-driven instability echoes broader emerging-market evidence that bank capitalization and risk-taking respond systematically to competitive and regulatory conditions (Mateev et al., 2021).

Accordingly, this study aims to examine how four dimensions of board composition and affiliation (age, gender, education, and political connection) affect bank risk-taking in Indonesia, using a difference-in-differences design that exploits within-bank changes in board composition between 2015 and 2024. Its significance lies in linking a governance-level demographic change directly to a regulatory risk metric (risk-weighted assets) in a banking system where state ownership and politically influenced board appointments remain common. The novelty of the study is twofold: it treats a change in board composition as a quasi-experimental treatment rather than a static covariate, and it jointly estimates the age, gender, education, and political-affiliation channels within a single Indonesian DiD framework rather than examining each in isolation. Its contribution is to give regulators, including the Otoritas Jasa Keuangan (OJK), an evidence base for treating demographic and political board composition as governance risk factors in their own right, alongside conventional structural indicators such as board size and capital regulation.

LITERATURE REVIEW

Theoretical Framework: Upper Echelons Theory

The theoretical foundation of this study is the Upper Echelons Theory (UET) developed by Hambrick and Mason (1984). UET posits that organizations are a reflection of their top managers, and that executives' values, experiences, and personalities significantly influence their interpretation of organizational situations and, consequently, their strategic decisions. Observable managerial characteristics, such as age, gender, educational background, and career experience, serve as reliable proxies for cognitive styles and risk preferences (Hambrick, 2007). UET has been widely used to explain corporate risk-taking behavior, strategic change, and financial decisions across industries, including banking (Cid-Aranda & López-Iturriaga, 2023; Hertrampf et al., 2025).

In the banking context, UET provides a compelling framework for understanding how board composition shapes risk preferences at the organizational level. Since bank directors collectively make decisions about credit policies, investment strategies, and capital allocation, the demographic heterogeneity within the board may produce divergent risk orientations that manifest in observable outcomes such as risk-weighted assets, non-performing loans, and capital adequacy ratios. This study therefore examines four specific demographic and affiliation dimensions (age, gender, education, and political affiliation) as predictors of bank risk-taking in Indonesia, consistent with evidence that board composition and oversight quality shape governance outcomes more broadly in the Indonesian corporate setting (Bhegawati et al., 2024) and that board attributes and ownership structures jointly influence bank risk-taking in other emerging-market settings (Adu, 2024).

Hypotheses Development

Age Composition of Board Directors and Bank Risk-Taking Behavior

Both theory and empirical evidence suggest that as individuals age, their propensity to take risks tends to decline. In the context of investment behavior, [Wang et al. \(2023\)](#) found that older individuals are less likely to invest in the stock market. Similarly, [Sahm \(2012\)](#) found that risk tolerance declines with age. This may be due to the accumulation of knowledge and experience related to risk among older individuals.

[Doerr et al. \(2024\)](#) showed that older executives tend to make more conservative decisions. More recently, [Aureli and Brighi \(2025\)](#) confirmed, within the banking sector, that board age diversity is associated with distinct financial outcomes, highlighting the need for demographic balance in governance. [Hertrampf et al. \(2025\)](#), in a systematic review of CEO characteristics and bank risk-taking, further confirmed that younger leadership profiles are consistently linked to more risk-oriented decision-making behavior.

H1: A decrease in the average age of the board of directors increases banks' risk-taking behavior.

Gender Composition of Board Directors and Bank Risk-Taking Behavior

Previous studies show that women tend to be more risk-averse in financial decision-making compared to men. This appears to be related to findings by [Liu et al. \(2022\)](#), who suggest that women generally exhibit lower levels of overconfidence than men. However, in the context of corporate governance, research findings are not always consistent with individual-level evidence.

[Sbai and Ed-Dafali \(2023\)](#) found that the presence of female directors on boards is associated with lower firm risk, whereas [Adams and Funk \(2012\)](#) showed that female directors are more inclined to take risks compared to their male counterparts. In the banking sector specifically, [Brock and Haas \(2023\)](#) reported that default rates on loans managed by female officers are lower. [Psillaki et al. \(2024\)](#) examined European banks and found that board gender diversity interacts with risk culture in nuanced ways, indicating that the effect of female representation on bank risk is highly context-dependent. Studies on emerging markets, including Indonesia, have similarly produced mixed results ([Nainggolan et al., 2023](#)). In the Indonesian banking context specifically, [Sa'adah et al. \(2024\)](#) found that the executive and independent roles of women board members have distinct effects on bank risk, while [Suhardono et al. \(2023\)](#) reported that board diversity shapes the performance of banks listed on the Indonesia Stock Exchange alongside credit risk. [Muhammad et al. \(2023\)](#) demonstrated that the moderating role of board gender diversity on risk-taking depends heavily on the institutional and governance context of the firm.

H2: An increase in the proportion of female directors on the board of directors reduces banks' risk-taking behavior.

Educational Composition of Board Directors and Bank Risk-Taking Behavior

An increasing number of studies discuss the links between educational background and risk-taking behavior. [Molina-García et al. \(2023\)](#) show that higher educational attainment increases individuals' propensity to take risks in financial decisions. In contrast, [Grable et al. \(2022\)](#) do not find a significant correlation between education and household risk attitudes. Evidence on the effect of directors' educational background on corporate financing policies shows that executives holding advanced degrees more frequently use sophisticated project valuation techniques.

However, other evidence indicates that MBA-educated executives are more aggressive and run more highly levered firms, suggesting that advanced degrees do not uniformly reduce risk. More specifically, regarding master/doctoral education, [Berger et al. \(2014\)](#) found that executives with advanced academic credentials tend to implement more sophisticated risk management frameworks, resulting in lower bank risk exposure. [Hertrampf et al. \(2025\)](#) similarly confirmed that educational attainment is among the CEO characteristics most consistently associated with reduced bank risk, as higher education equips executives with structured analytical approaches to risk assessment.

H3: An increase in the proportion of directors with master's or doctoral-level education on the board of directors reduces banks' risk-taking behavior.

Political Affiliation Composition of Board Directors on Bank Risk-Taking Behavior

The presence of politically affiliated board members tends to create moral hazard incentives for bank management due to expectations of public protection or bailout in the event of financial distress. Political connections grant preferential access to resources and politically valuable projects, such as loans to government-related firms or regional development projects, which encourage less selective credit expansion and increase risk concentration. Empirical evidence demonstrates that political ties provide tangible economic benefits to firms and influence financial institutions' behavior, including a greater likelihood of preferential treatment from lenders ([Khwaja & Mian, 2005](#)).

In emerging market contexts, politically connected banks are particularly prone to risk-taking behavior consistent with moral hazard theory. [Braham et al. \(2022\)](#) found, using a sample of 67 MENA banks, that politically patronized banks exploit their connections through riskier activities. [Lambert et al. \(2023\)](#) further demonstrated that politically connected banks ease lending conditions, especially for riskier firms, that temporarily boost economic activity but increase long-term vulnerability. Evidence also shows that the relation between bank risk and regulations depends critically on each bank's ownership structure, an effect amplified when boards are politically connected.

In Indonesia, the appointment process of bank directors in state-owned banks is often influenced not only by competence but also by political considerations ([Hubbansyah & Husodo, 2018](#)). Political interests influence financing decisions and the distribution of credit to politically connected groups ([Huang & Thakor, 2024](#)), resulting in riskier lending portfolios. These effects are exacerbated by conflicts of interest and the weakening of oversight functions within the board ([Braham et al., 2022](#)).

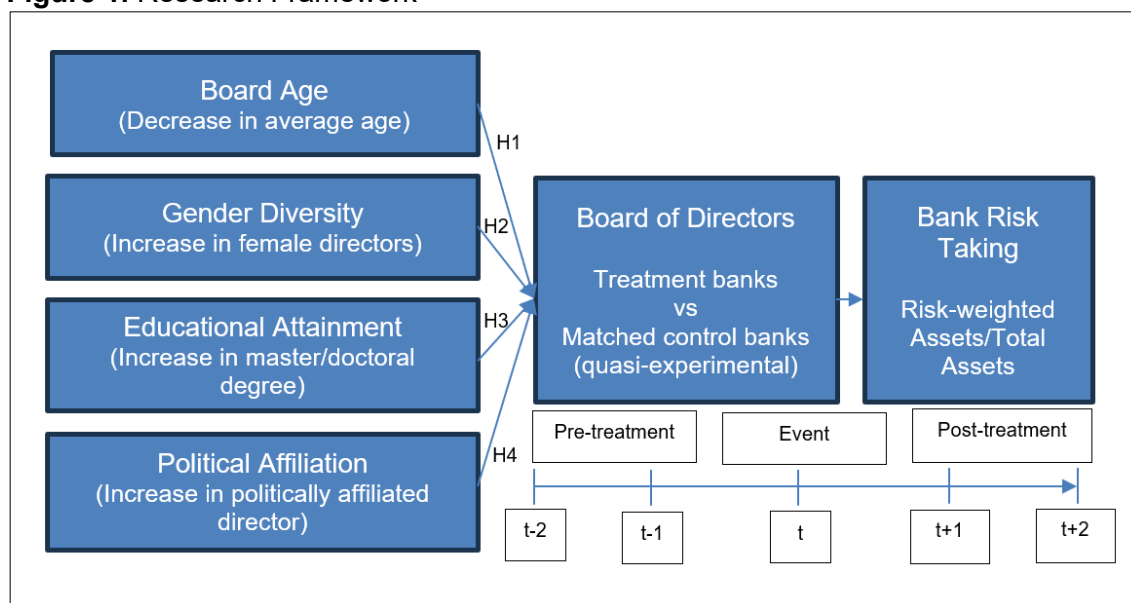
H4: An increase in the proportion of politically affiliated directors on the board of directors increases banks' risk-taking behavior.

Conceptual Framework

[Figure 1](#) summarizes the conceptual framework guiding this study. Four board-composition treatments: a decrease in average board age, an increase in the proportion of female directors, an increase in the proportion of directors holding a master's or doctoral degree, and an increase in the proportion of politically affiliated directors; are each modeled as a discrete change observed in treatment banks' boards, against a matched control group of banks without such a change. Consistent with Upper Echelons Theory, each treatment is hypothesized to alter the board's collective risk orientation, which in turn is expected to shift the single outcome variable common to all four models: bank risk-taking, proxied by risk-weighted assets relative to total assets (RWA/TA). The framework treats age, gender, education, and political affiliation as parallel, independently estimated channels rather than competing explanations, so that each

hypothesis (H1–H4) corresponds to one treatment-outcome pathway estimated within the same DiD design.

Figure 1. Research Framework



RESEARCH METHOD

Research Design

The analytical method employed in this study is the Difference-in-Differences (DiD) approach, which is commonly used in program evaluation research. DiD compares a treatment group with a control group before and after the intervention takes place. This method is straightforward to interpret and has been widely adopted in studies across economics, public policy, and management. More recently, DiD applications in finance and banking research have grown substantially: [Baker, Larcker, and Wang \(2022\)](#) document how staggered treatment timing can bias conventional DiD estimators in finance and accounting settings, motivating the single-event-window design used here; [Jiang and Ji \(2024\)](#) apply a DiD design to evaluate the effect of a US bank regulatory reform on risk management outcomes; and [Roth et al. \(2023\)](#) synthesize recent advances in DiD identification and pre-trends testing that inform the parallel-trends verification procedure described below. The basic logic of DiD is that, in the absence of treatment, there should be no difference between the treatment and control groups over time.

Sample and Treatment Construction

The subjects of this study are members of the boards of directors of banks listed on the Indonesia Stock Exchange (IDX), covering 46 banks over the period 2015 to 2024. These banks are categorized into two groups: the treatment group consists of banks experiencing changes in the composition of their boards of directors, while the control group consists of banks with similar characteristics but without changes in board composition during the same period. This study constructs four types of treatment groups: (a) changes in board age composition, (b) changes in board gender composition, (c) changes in board education composition, and (d) changes in board political affiliation. Control banks are selected based on similarities in size and performance with their treatment-group counterparts, following the approach of [Schnabl \(2012\)](#).

Because a bank board may experience more than one demographic or political-affiliation change, the treatment and control samples for each hypothesis are constructed carefully. A bank qualifies as a treatment case only if one specific board-composition change occurs in the event year (t), namely a decrease in average board age, an increase in the proportion of female directors, an increase in the proportion of directors with a master's or doctoral degree, or an increase in the proportion of politically affiliated directors. The change must be isolated: no other board change may occur in the two years before or after the event ($t-2$, $t-1$, $t+1$, $t+2$). Banks with more than one change in the same event year are excluded from the treatment sample because the effect cannot be attributed to a single demographic dimension. A bank qualifies as a control case only if its board composition remains unchanged throughout the five-year window and if it is comparable to its matched treatment bank in total assets and ROE, following Berger et al. (2014).

Accordingly, each hypothesis has its own treatment and control group, both drawn from the same pool of 46 sample banks. The unit of analysis is the bank-year. Each treatment bank contributes five bank-year observations around its event year, while each matched control bank contributes observations over the same calendar window without any board-composition change. Director-level data are then aggregated into bank-level values, for example, female director proportion for H2 or average board age for H1, and used to construct the treatment dummy in each regression. Since each hypothesis is estimated separately, a bank-year observation belongs only to the relevant treatment panel, although the same bank may appear in more than one panel if it qualifies for more than one hypothesis. The sample and treatment-control structure is presented in Table 1.

Table 1. Sample and Treatment-Control Structure

Treatment Group	Hypothesis	Treatment Definition	Control Group Logic	Event-Window Construction
Board age	H1	Isolated decrease in average board age at event year (t), with no other type of board change at t and no change of any kind at $t-2$, $t-1$, $t+1$, or $t+2$	Banks with no board change of any kind (age, gender, education, or political affiliation) throughout $t-2$ to $t+2$, matched on total assets and ROE	$t-2$, $t-1$ (pre) and $t+1$, $t+2$ (post) around each treatment bank's own event year; matched controls observed over the same calendar years
Board gender	H2	Isolated increase in proportion of female directors at event year (t), with no other type of board change at t and no change of any kind at $t-2$, $t-1$, $t+1$, or $t+2$	Banks with no board change of any kind (age, gender, education, or political affiliation) throughout $t-2$ to $t+2$, matched on total assets and ROE	$t-2$, $t-1$ (pre) and $t+1$, $t+2$ (post) around each treatment bank's own event year; matched controls observed over the same calendar years
Board education	H3	Isolated increase in proportion of directors with a master's/doctoral degree at event year (t), with no other type of board	Banks with no board change of any kind (age, gender, education, or political affiliation) throughout $t-2$ to	$t-2$, $t-1$ (pre) and $t+1$, $t+2$ (post) around each treatment bank's own event year; matched controls observed over the

		change at t and no change of any kind at t-2, t-1, t+1, or t+2	t+2, matched on total assets and ROE	same calendar years
Political affiliation	H4	Isolated increase in proportion of politically affiliated directors at event year (t), with no other type of board change at t and no change of any kind at t-2, t-1, t+1, or t+2	Banks with no board change of any kind (age, gender, education, or political affiliation) throughout t-2 to t+2, matched on total assets and ROE	t-2, t-1 (pre) and t+1, t+2 (post) around each treatment bank's own event year; matched controls observed over the same calendar years

All 46 sample banks are drawn from the same underlying pool. Within any single event window, a bank's status is mutually exclusive: at a given point in time, it is either an isolated treatment case for exactly one hypothesis, a control case with no board change of any kind, or excluded altogether if multiple change types occur simultaneously, consistent with the exclusion rule described above. Across different, non-overlapping event windows, however, the same bank can serve as a treatment or control case for more than one hypothesis. For example, a bank with an isolated age change in 2017 (evaluated over 2015-2019) may separately qualify as an education-treatment case if it later experiences an isolated increase in educated directors in 2022 (evaluated over 2020-2024), because these are two distinct, non-overlapping events rather than a single simultaneous change. The four treatment categories are therefore not mutually exclusive at the level of bank identity across the full sample period, but they remain mutually exclusive at the level of any single event window. The main dependent variable is risk-weighted assets (RWA) relative to total bank assets. RWA is a key metric under Basel IV, where a higher RWA indicates greater risk embedded in the bank's asset portfolio.

Variables and Measurement

The detailed list of research variables is presented in [Table 2](#).

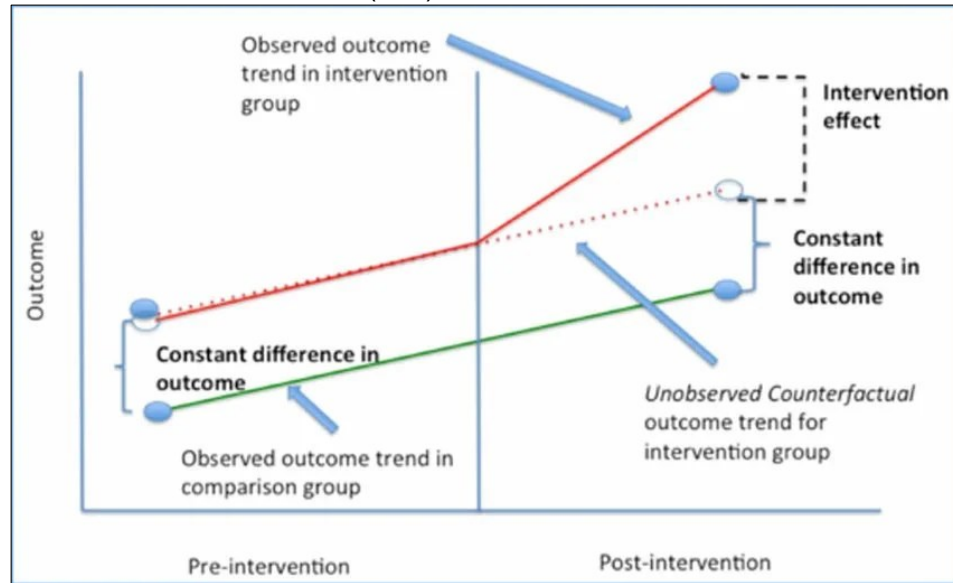
Table 2. Research Variables and Operationalization

No	Variable	Variable Notation	Variable Operationalization
1	Board Age Composition	Age	Changes in the board group with younger members
2	Board Gender Composition	Gender	Changes in the board group with the addition of female executives
3	Board Education Composition	Educ	Changes in the board group with the addition of executives holding a master/doctoral degree (PhD)
4	Politically Affiliated Board Composition	Pol	Changes in the board group with the addition of politically affiliated executives
5	Total Asset Bank	TOA	Ln total asset
6	Return on Equity	ROE	Net income / total equity
7	Capital Adequacy Ratio	CAR	(tier 1 capital + tier 2 capital)/RWA
8	Economic Growth	GRO	GDP per capita growth
9	Risk-weighted Asset	RWA	RWA / total asset

Parallel-Trends Verification and Estimation Model

One of the key assumptions of the DiD method is the parallel trends assumption, which states that in the absence of treatment, the treatment and control groups would exhibit the same time trend for the variable under analysis. An illustration of this concept is shown in Figure 2.

Figure 2. Difference-in-Difference (DiD)



Therefore, the similarity of characteristics between banks in the treatment group and the control group becomes critically important to satisfy this assumption. This study employs three approaches to ensure that differences in banking risk-taking behavior between the two groups are indeed driven by changes in demographic composition and political affiliation at the top level of bank management: (a) ensuring that banks in the treatment and control groups share similar characteristics in terms of total assets and ROE, and (b) testing data in the pre-treatment period for both groups. This approach is adopted from a study (Schnabl, 2012), which examined the effects of the 1998 Russian financial crisis on bank lending.

If the results are not statistically significant, it can be formally concluded that the parallel trends assumption holds for both groups, allowing the DiD method to genuinely demonstrate that any observed differences are caused by changes in demographic composition and political affiliation at the top level of management influencing banking risk-taking behavior; (c) alternatively, using the full dataset by including interaction terms between each pre-treatment period and the treatment group indicator in the regression specification, as applied in study (Jiang & Ji, 2024). This staged approach to checking pre-trends and covariate balance follows current best-practice guidance for DiD designs (Roth et al., 2023). The regression specification using the DID method in this study is as follows:

$$\begin{aligned} RWA_{it} &= \delta_0 + \delta_1 Age_{it} + \delta_2 Post_t + \delta_3 (Post_t \times Age_{it}) + \delta_4 X_{it} + \varepsilon_{it} \quad (1) \\ RWA_{it} &= \delta_0 + \delta_1 Gender_{it} + \delta_2 Post_t + \delta_3 (Post_t \times Gender_{it}) + \delta_4 X_{it} + \varepsilon_{it} \quad (2) \\ RWA_{it} &= \delta_0 + \delta_1 Educ_{it} + \delta_2 Post_t + \delta_3 (Post_t \times Educ_{it}) + \delta_4 X_{it} + \varepsilon_{it} \quad (3) \\ RWA_{it} &= \delta_0 + \delta_1 Pol_{it} + \delta_2 Post_t + \delta_3 (Post_t \times Pol_{it}) + \delta_4 X_{it} + \varepsilon_{it} \quad (4) \end{aligned}$$

Where RWA_{it} denotes banking risk-taking behavior; *age*, *gender*, *educ*, and *pol* are dummy variables equal to 1 if a bank experiences, respectively, a decrease in average board age, an increase in female directors, an increase in directors with a master's or

doctoral degree, or an increase in politically affiliated directors. $Post_{it}$ is the post-treatment dummy, and the interaction terms are $Post_{it} \times age_{it}$, $Post_{it} \times gender_{it}$, $Post_{it} \times educ_{it}$, and $Post_{it} \times pol_{it}$. X_{it} denotes the control variables, while ε_{it} is the error term. The coefficient δ_1 is the main parameter of interest; δ_2 captures common shocks, and δ_3 captures pre-treatment differences.

RESULTS

Descriptive Statistics

The analysis begins with an explanation of the descriptive statistics of the research variables, as presented in Table 3.

Table 3. Descriptive Statistics

Variable	Treatment Group		Control Group		All Banks	
	Mean	SD	Mean	SD	Mean	SD
Board Characteristics						
Board Size	7.07	2.69	6.89	2.61	6.98	2.65
Bank Characteristics and Macroeconomy						
Total Aset	4.15	1.85	4.05	1.87	4.11	1.86
Return on Equity	7.60	13.85	7.54	10.82	7.57	12.34
Capital Adequacy Ratio	26.68	13.85	26.73	13.45	26.71	13.65
GDP Growth	4.22	2.15	4.22	2.15	4.22	2.15
Bank Risks						
RWA/Total Asset	61.98	32.43	62.66	29.31	62.32	30.87

In terms of board characteristics, the average board size in the treatment group is 7.07 members (SD = 2.69), while in the control group it is 6.89 members (SD = 2.61). This difference is relatively small, indicating that board size between the two groups is fairly comparable, which satisfies a preliminary condition for the DiD estimation.

Regarding bank characteristics, total assets are similar between the treatment group (4.15) and the control group (4.05). Return on Equity (ROE) stands at 7.60% for the treatment group and 7.54% for the control group, with higher variability in the treatment group (SD = 13.85 vs. 10.82). The Capital Adequacy Ratio (CAR) is nearly identical in both groups (approximately 26.70%). GDP growth is exactly the same (mean = 4.22%; SD = 2.15). For bank risk, the average RWA/Total Assets ratio is 61.98% for the treatment group and 62.66% for the control group, indicating comparable baseline risk levels. The similarity in baseline characteristics across groups supports the parallel trends assumption and validates the DiD design.

Pre-Treatment Balance Check: Overall Sample

Table 4. Pre-Treatment Balance Check — All Treatment Groups vs. Control

Variable	Treatment Group		Control Group		Difference Test (Welch t-test)			
	Mean	SD	Mean	SD	t-stat	p-value	Cohen's d	Conclusion
RWA/Total Asset (%)	62.85	10.71	63.76	10.68	-0.28	0.7743	-0.085	Not Significant
Total Asset (Ln)	4.34	0.75	4.16	0.61	0.88	0.3837	0.26	Not Significant
ROE (%)	8.98	5.19	5.86	6.41	1.814	0.0768	0.535	Not Significant
CAR (%)	26.39	6.47	26.3	5.88	0.045	0.9643	0.013	Not Significant

Note: Welch t-test (two-tailed); pre-treatment window = 2 years before event year; unit of analysis = bank-level average; Cohen's d: <0.20 trivial, 0.20–0.49 small, 0.50–0.79 medium, ≥0.80 large;
* p < 0.05

Table 4 presents the pre-treatment balance check for the overall sample, comparing all treatment banks against the control group in the two-year window prior to any board composition change. Welch t-test results indicate that none of the five baseline variables, RWA/Total Assets ($t = -0.289$, $p = 0.774$), Total Assets ($t = 0.880$, $p = 0.384$), Return on Equity ($t = 1.814$, $p = 0.077$), Capital Adequacy Ratio ($t = 0.045$, $p = 0.964$), differ significantly between the two groups. Cohen's d values range from -0.127 to 0.535 , all within the small-to-negligible range. These findings confirm that, at the aggregate level, treatment and control banks were statistically equivalent prior to any intervention, providing strong support for the parallel trends assumption underlying the DiD estimation.

Pre-Treatment Balance Check: Board Age Composition

Table 5. Pre-Treatment Balance Check — Board Age Composition Change

Variable	Treatment Group		Control Group		Difference Test (Welch t-test)			
	Mean	SD	Mean	SD	t-stat	p-value	Cohen's d	Conclusion
RWA/Total Asset (%)	66.51	5.91	63.76	10.68	0.837	0.4158	0.319	Not Significant
Total Asset (Ln)	4.53	0.62	4.16	0.61	1.319	0.2251	0.608	Not Significant
ROE (%)	7.39	7.06	5.86	6.41	0.482	0.6439	0.227	Not Significant
CAR (%)	21.93	7.05	26.3	5.88	-1.39	0.2052	-0.674	Not Significant

Note: Welch t-test (two-tailed); pre-treatment window = 2 years before event year; unit of analysis = bank-level average; Cohen's d: <0.20 trivial, 0.20–0.49 small, 0.50–0.79 medium, ≥0.80 large;
* p < 0.05

Table 5 reports the pre-treatment balance check for banks that subsequently experienced a decrease in the average age of their board of directors (H1). Prior to the event, the treatment group exhibits a slightly higher mean RWA/Total Assets ratio (66.51% vs. 63.76%), a larger total asset base (4.53 vs. 4.16 in logarithm), and a lower Capital Adequacy Ratio (21.93% vs. 26.30%). However, none of these differences reach statistical significance (all $p > 0.20$). Cohen's d values remain below 0.68 across all variables, indicating small-to-medium effect sizes that do not threaten the validity of the design. These results confirm that banks experiencing board rejuvenation were not systematically riskier or better-capitalized before the change, satisfying the parallel trends assumption for this treatment group.

Pre-Treatment Balance Check: Board Gender Composition

Table 6. Pre-Treatment Balance Check — Board Gender Composition Change

Variable	Treatment Group		Control Group		Difference Test (Welch t-test)			
	Mean	SD	Mean	SD	t-stat	p-value	Cohen's d	Conclusion
RWA/Total Asset (%)	59.44	3.74	63.76	10.68	-1.59	0.1233	-0.539	Not Significant
Total Asset (Ln)	4.41	0.55	4.16	0.61	0.983	0.353	0.438	Not Significant

ROE (%)	6.02	3.74	5.86	6.41	0.082	0.936	0.032	Not Significant
CAR (%)	28.24	5.15	26.3	5.88	0.795	0.4478	0.35	Not Significant

Note: Welch t-test (two-tailed); pre-treatment window = 2 years before event year; unit of analysis = bank-level average; Cohen's d: <0.20 trivial, 0.20–0.49 small, 0.50–0.79 medium, ≥0.80 large; * p < 0.05

Table 6 presents the pre-treatment balance check for banks that subsequently saw an increase in the proportion of female directors (H2). The treatment group displays a slightly lower mean RWA/Total Assets ratio (59.44% vs. 63.76%), suggesting marginally lower baseline risk exposure; however, this difference is not statistically significant ($t = -1.597$, $p = 0.123$). All remaining variables—Total Assets, ROE, and CAR—also show no significant differences (all $p > 0.35$). Cohen's d values are universally small (ranging from -0.539 to 0.438). These results indicate that banks subsequently adding female directors were comparable to the control group in their baseline risk profile and financial characteristics, validating the parallel trends assumption for the gender treatment group.

Pre-Treatment Balance Check: Board Education Composition

Table 7. Pre-Treatment Balance Check — Board Education Composition Change

Variable	Treatment Group		Control Group		Difference Test (Welch t-test)			
	Mean	SD	Mean	SD	t-stat	p-value	Cohen's d	Conclusion
RWA/Total Asset (%)	61.57	11.49	63.76	10.68	-0.42	0.686	-0.197	Not Significant
Total Asset (Ln)	4.5	1.05	4.16	0.61	0.762	0.4753	0.397	Not Significant
ROE (%)	13.02	2.92	5.86	6.41	3.995	0.0008	1.437	Significant *
CAR (%)	26.81	5.52	26.3	5.88	0.199	0.8472	0.089	Not Significant

Note: Welch t-test (two-tailed); pre-treatment window = 2 years before event year; unit of analysis = bank-level average; Cohen's d: <0.20 trivial, 0.20–0.49 small, 0.50–0.79 medium, ≥0.80 large; * p < 0.05

Table 7 presents the pre-treatment balance check for banks that subsequently increased the proportion of directors holding a master's or doctoral degree (H3). Four of the five baseline variables show no significant pre-treatment differences (all $p > 0.47$). However, Return on Equity differs significantly between groups (Mean Treatment = 13.02%, Mean Control = 5.86%; $t = 3.995$, $p = 0.001$; Cohen's d = 1.437), indicating that banks subsequently recruiting more highly educated directors were already more profitable before the board change. This imbalance warrants attention: while the RWA baseline and other risk-related variables remain comparable, the ROE gap suggests a potential confounding channel. To address this, ROE is retained as a control variable in the education treatment model, following Schnabl (2012).

Pre-Treatment Balance Check: Board Political Affiliation Composition

Table 8. Pre-Treatment Balance Check — Board Political Affiliation Change

Variable	Treatment Group		Control Group		Difference Test (Welch t-test)			
	Mean	SD	Mean	SD	t-stat	p-value	Cohen's d	Conclusion
RWA/Total Asset (%)	64.06	19.06	63.76	10.68	0.035	0.9737	0.02	Not Significant
Total Asset (Ln)	3.82	0.64	4.16	0.61	-1.10	0.3151	-0.553	Not Significant
ROE (%)	9.58	3.96	5.86	6.41	1.677	0.1268	0.698	Not Significant
CAR (%)	29.0	7.29	26.3	5.88	0.774	0.4729	0.407	Not Significant

Note: Welch t-test (two-tailed); pre-treatment window = 2 years before event year; unit of analysis = bank-level average; Cohen's d: <0.20 trivial, 0.20–0.49 small, 0.50–0.79 medium, ≥0.80 large; * p < 0.05

Table 8 reports the pre-treatment balance check for banks that subsequently experienced an increase in the proportion of politically affiliated directors (H4). None of the five baseline variables differ significantly between the treatment and control groups. The RWA/Total Assets ratio is virtually identical (64.06% vs. 63.76%; $t = 0.035$, $p = 0.974$), and Total Assets, ROE, and CAR also show no statistically significant differences (all $p > 0.13$). While Cohen's d for ROE (0.698) and Total Assets (−0.553) approach a medium-effect threshold, these do not reach significance given the smaller within-group sample. Overall, these results support the parallel trends assumption and validate the DiD estimator for the political affiliation treatment group.

All tables show that both the treatment and control groups have relatively comparable characteristics in terms of board size, bank performance, capital structure, and portfolio risk levels. Therefore, any differences observed in the subsequent analysis are more likely to be attributed to the treatment applied, rather than to fundamental differences in the initial characteristics of the two groups.

Estimation Results

Table 9. Estimation Results

Variable	Board Age Composition	Board Gender Composition	Board Education Composition	Board Political Affiliation Composition
	(Decreased)	(Increased)	(Increased)	(Increased)
Board Change	26.66*** (2.71)	-8.32*** (-3.57)	70.72** (2.37)	-20.08*** (-4.07)
Post Period	4.96 (0.32)	-9.35*** (-2.82)	-6.08 (-0.44)	-5.55 (-1.30)
Board Change* Post Period	4.53** (2.13)	7.32** (2.03)	-6.26** (-2.18)	9.27* (1.87)
Board Size	8.29** (2.09)	2.04 (1.31)	-2.81 (1.27)	-1.67 (-0.96)
Total Asset	-79.76*** (-3.14)	-15.52* (-2.02)	-74.19 (-1.58)	-1.04*** (-14.91)
ROE	33.65 (0.68)	-0.39*** (-3.39)	-9.21 (-0.59)	1.51*** (5.05)
CAR	14.56	-0.57**	-1.49	-3.07***

	(0.33)	(-2.22)	(-1.12)	(-4.23)
GDP Growth	139.77 (0.66)	1.25*** (2.81)	-189.09 (-1.17)	-0.54 (-0.94)
Constant	7.22*** (3.41)	15.26*** (5.29)	15.01*** (3.30)	14.52*** (6.56)
R-Square	0.25	0.85	0.79	0.89
F-Stat	6.05	21.51	6.53	52.67

Note: t-statistics in parentheses; * p<0.10, ** p<0.05, *** p<0.01

Table 9 shows that changes in the composition of the board of directors have a statistically significant effect on banks' risk-taking behavior across all four treatment dimensions. A decline in average board age, an increase in the proportion of female directors, and an increase in the proportion of politically affiliated directors are each associated with higher risk-weighted assets relative to total assets, while an increase in the proportion of directors holding a master's or doctoral degree is associated with lower risk-weighted assets. These patterns are discussed hypothesis by hypothesis in the following section.

DISCUSSION

These findings reinforce the argument that banking risk-taking is influenced not only by structural-organizational factors such as board size (Javed et al., 2024), banking regulations (Addou et al., 2024), interest rates and macroprudential policies (Anwar et al., 2024), and bank size, but also by individual-level demographic backgrounds and political affiliations of top executives (Hertrampf et al., 2025). These results are consistent with the predictions of the Upper Echelons Theory (Hambrick, 2007; Hambrick & Mason, 1984), which suggests that observable board characteristics are meaningful proxies for the cognitive and motivational orientations that drive strategic risk decisions. Each hypothesis is discussed in turn below.

Age Composition of Board Directors and Bank Risk-Taking Behavior

The estimation results confirm H1: a decline in the average age of the board of directors has a positive and significant impact on increasing banks' risk-taking behavior ($\beta = 4.53$, $p < 0.05$). This finding is consistent with prior studies by Doerr et al. (2024) and Sahm (2012). This result aligns with the personality-trait approach embedded in UET, which characterizes risk-taking as a personal trait that varies systematically with age. Younger executives tend to be more risk-seeking as a form of self-assertion and professional recognition. Moreover, younger board members are relatively less risk-averse because they perceive themselves as having more time to recover from mistakes. This behavioral pattern has also been observed in individual financial decision-making contexts and confirmed at the aggregate level by Hertrampf et al. (2025) in their systematic review of CEO characteristics across banking institutions.

Substantively, the finding fits a managerial-myopia channel: executives with shorter expected tenures weigh long-run franchise value less heavily and are more willing to accept downside risk for short-term performance signals (Hertrampf et al., 2025). Because age is measured compositionally, a board-level shift toward younger members, rather than a single CEO's age, the effect likely also reflects group dynamics, with younger cohorts less bound by incumbent risk norms, consistent with UET's emphasis on the top management team as the relevant unit of analysis.

This channel is corroborated by more recent evidence linking youth-adjacent traits to bank risk: Liu et al. (2022) show that overconfidence, a trait more prevalent among younger executives, raises U.S. bank holding companies' systemic risk, while Doerr et

al. (2024) find that banks exposed to demographically older customer bases shift toward safer, lower-yield strategies as older depositors' savings behavior depresses local credit demand. Read together, these studies suggest that the age channel documented here is not unique to Indonesia: whether measured at the board level, the executive level, or the depositor base, a younger demographic profile is repeatedly associated with a more risk-seeking orientation in banking.

Gender Composition of Board Directors and Bank Risk-Taking Behavior

The estimation results do not support H2 as originally stated. Instead of reducing risk, an increase in the proportion of female executives is found to increase banks' risk-taking behavior in Indonesia ($\beta = 7.32$, $p < 0.05$). This counter-intuitive finding may reflect context-specific selection dynamics in Indonesia's banking sector, where women who reach board-level positions are likely highly selected individuals who have demonstrated exceptional competence and strategic confidence in a traditionally male-dominated environment. This interpretation is consistent with studies showing that the relationship between board gender diversity and risk-taking depends on institutional, governance, and organizational contexts rather than following a universal pattern (Muhammad et al., 2023; Nainggolan et al., 2023; Psillaki et al., 2024).

Adams and Funk (2012) similarly found that female directors may be more risk-oriented than their male counterparts, challenging the stereotype of female conservatism at the board level. Accordingly, the finding contrasts with much of the international evidence, including OECD banking samples linking female representation to lower risk, and may reflect either the selection of unusually assertive women into board positions or their greater representation on boards already pursuing growth-oriented strategies. Distinguishing these explanations would require director-level role data, such as risk-committee versus business-development assignments, but the overall evidence suggests that the effect of board gender diversity is context-dependent rather than universal.

Sbai and Ed-Dafali (2023), studying dual banking systems across 14 emerging economies, find that female board presence lowers bank risk only once a critical mass of at least two female directors is reached; if Indonesian bank boards have generally not yet crossed this threshold, the risk-increasing coefficient estimated here could partly reflect a token-representation dynamic rather than a stable long-run relationship. Rodriguez et al. (2024) similarly show that whether board gender diversity raises or lowers a firm's expected risk depends on how risk is measured and on firm-specific governance context, reinforcing that the direction of the gender-risk relationship documented in the literature is conditional rather than universal.

Aureli and Brighi (2025), examining gender, age, and nationality diversity across European bank boards jointly, likewise find that the performance and sustainability effects of diversity depend heavily on which dimension and which outcome are examined, rather than diversity uniformly improving governance. Within Indonesia specifically, this reading is reinforced by Sa'adah et al. (2024), who distinguish between executive and independent women directors and find that the two roles carry different risk implications, and by Suhardono et al. (2023), who find that board diversity's effect on Indonesian bank performance operates alongside, rather than instead of, credit risk. Read together, these Indonesian findings suggest that the risk-increasing effect of female board representation estimated here is unlikely to be a uniquely Indonesian anomaly, but rather one local instance of a context-dependent relationship that is now well documented across multiple emerging-market banking systems.

Educational Composition of Board Directors and Bank Risk-Taking Behavior

The estimation results support H3: an increase in the proportion of directors with master or doctoral-level education reduces banks' risk-taking behavior ($\beta = -6.26$, $p < 0.05$). This suggests that higher education levels enable executives to implement better and more structured risk management techniques (Berger et al., 2014). Highly educated executives may also leverage regulatory frameworks and engage in deliberate capital arbitrage in a manner that reduces net portfolio risk. Executives with advanced degrees are more likely to use sophisticated capital budgeting and risk assessment practices.

Hertrampf et al. (2025) confirmed that educational attainment is among the CEO characteristics most consistently associated with reduced bank risk across banking systems globally. This finding also echoes recent evidence from other emerging-market banking systems: Adu (2024), studying 220 banks across 16 sub-Saharan African countries, finds that independent directors who are financial experts significantly reduce bank risk-taking, suggesting that it is the specific expertise a director brings to the board, not board diversity or independence in general, that disciplines risk. A parallel mechanism has been documented outside banking: Setiawan et al. (2024), studying ESG-rated firms across Southeast Asia, find that CEOs educated at reputable universities run less leveraged companies, consistent with the interpretation that formal education instills more conservative financial decision-making generally, not only in a banking-specific context.

Read against the age and political-affiliation findings, this result suggests that what disciplines bank risk-taking is not demographic diversity broadly, but the analytical toolkit that master's or doctoral training confers, quantitative risk modeling, scenario analysis, and familiarity with regulatory capital frameworks, consistent with the broader finding that managerial style varies systematically with formal education, and with Berger et al.'s (2014) view that more sophisticated boards build structured risk frameworks rather than simply becoming more risk-averse.

This estimate carries one important qualification. Table 7 shows that banks that later increased the proportion of highly educated directors already had substantially higher ROE than their matched controls before the change (13.02% versus 5.86%, $p = 0.001$), even though the two groups were statistically similar in baseline risk (RWA/TA), asset size, and capital adequacy. This is a selection concern rather than a measurement one: banks that were already more profitable, and plausibly better managed, may simply be the ones that recruit more highly educated directors. Two features of the design limit, though do not fully eliminate, this concern. First, ROE enters the education-treatment regression as a time-varying control, so the education coefficient is estimated net of each bank's own profitability trajectory. Second, because baseline risk is balanced across the two groups, the DiD estimate is not merely reproducing a pre-existing risk gap. Taken together, the negative coefficient on education is unlikely to be a pure artifact of the ROE imbalance, but $\beta = -6.26$ is best read as a conservative, profitability-adjusted association rather than a fully isolated causal effect.

Political Affiliation Composition of Board Directors on Bank Risk-Taking Behavior

The estimation results confirm H4: an increase in the proportion of directors with political affiliations raises banks' risk-taking behavior ($\beta = 9.27$, $p < 0.10$). The appointment process of bank directors in Indonesia, particularly in state-owned banks, is often influenced by political considerations. As a result, top-level managers may have affiliations with certain political groups, which in turn affect banking behavior consistent with moral hazard theory (Braham et al., 2022). Lambert et al. (2023) showed that politically connected banks ease lending conditions for riskier firms, temporarily boosting economic activity but increasing long-term risk. Danisman and Tarazi (2024) found that

state-owned banks exhibit more countercyclical lending behavior, while [Porta et al. \(2002\)](#) argued that politicians exploit state banks for personal and political interests, ultimately leading to riskier and less efficient banking practices.

Two complementary channels may explain this finding. First, politically connected directors may exhibit greater risk-taking because they expect implicit government support during financial distress, creating a moral hazard effect ([Braham et al., 2022](#)). This mechanism is reinforced by [Huang and Thakor \(2024\)](#), who argue that banks anticipating political pressure in credit allocation tend to reduce capital buffers, increasing financial fragility. Second, political connections may influence credit allocation toward government-linked or politically favored borrowers whose risks are more difficult to assess, consistent with [Khwaja and Mian \(2005\)](#). Although the current board-level affiliation measure and portfolio-level risk indicator do not allow these channels to be distinguished empirically, both imply that political affiliation contributes to higher bank risk-taking. This finding is consistent with [Uddin et al. \(2023\)](#), who reported that politically connected bank boards in Bangladesh are associated with significantly higher non-performing loans, supporting broader evidence that political connections amplify the relationship between governance and bank risk.

Control Variables and Overall Pattern

The control variables provide additional insight into bank risk-taking. Bank size (total assets) is negative and significant in the Age, Gender, and Political models, indicating that larger banks tend to maintain more diversified, lower-risk-weighted portfolios, consistent with previous evidence and recent findings on Indonesian banks ([Aryani & Assegaf, 2026](#)). ROE changes sign across models, being significantly negative in the Gender model but positive in the Political model, suggesting that profitability may stem from different business strategies across subsamples. The negative CAR coefficient in the Gender and Political models should be interpreted cautiously because CAR is mechanically related to RWA. Meanwhile, board size is significant only in the Age model, and GDP growth only in the Gender model, indicating that these controls contribute limited explanatory power once board demographic variables are considered.

Overall, the findings suggest a more nuanced conclusion than simply linking board diversity to higher risk-taking. Younger boards, greater female representation, and political affiliation are associated with higher risk, whereas higher educational attainment is associated with lower risk. Rather than demographic diversity itself, these results indicate that board members' cognitive capabilities and institutional characteristics shape strategic risk-taking, consistent with Upper Echelons Theory ([Hambrick, 2007](#)). Accordingly, regulators should emphasize the competencies and expertise introduced through board appointments rather than diversity targets alone.

CONCLUSION

This study demonstrates that changes in the composition of the board of directors have a significant and measurable impact on banks' risk-taking behavior in Indonesia. Grounded in the Upper Echelons Theory, the study provides evidence that observable board characteristics (age, gender, education, and political affiliation) are meaningful predictors of strategic risk decisions in the banking sector. The results confirm that a younger board and greater political affiliation among directors are associated with higher levels of risk-taking, while a higher proportion of directors with master/doctoral-level education reduces risk. Contrary to the initial hypothesis, increased female representation on the board is found to raise banks' risk-taking behavior, suggesting a selection effect whereby women who reach board positions in Indonesia's banking sector are particularly assertive and strategically bold executives. These findings are consistent

with recent international evidence showing that the gender-risk relationship is highly context-dependent.

These findings carry important policy implications. Regulators and supervisory bodies, including the OJK, should consider board demographic and political profiles as material governance factors in their supervisory frameworks. OJK Regulation No. 17 of 2023 already requires minimum board size, independence, and committee structures; these findings suggest that fit-and-proper assessments could also consider board demographics and political affiliation. Specifically, strengthening board educational qualifications, promoting merit-based appointments free from political influence, and maintaining balanced age diversity may enhance the stability of Indonesia's banking system. Future research should examine interaction effects among these demographic variables and the moderating roles of ownership structure, regulatory environment, and cultural factors in shaping bank risk-taking.

LIMITATION

This study has several limitations. First, board risk-taking is proxied solely by risk-weighted assets relative to total assets; this captures portfolio-level risk under Basel IV but does not reflect other risk dimensions such as liquidity or operational risk. Second, the DiD design identifies the average effect of a board-composition change within a five-year event window and cannot rule out unobserved concurrent events at the individual bank level, even though the pre-treatment balance checks support the parallel-trends assumption. Third, political affiliation is measured as a director-level dummy based on publicly available records, which may understate informal political ties that are not publicly disclosed. Finally, the sample is limited to 46 banks listed on the Indonesia Stock Exchange between 2015 and 2024, so the findings may not generalize to unlisted banks or to other emerging-market banking systems with different governance structures.

ACKNOWLEDGMENT

The authors thank the Ministry of Education of the Republic of Indonesia for institutional support during the completion of this study.

DECLARATION OF CONFLICTING INTERESTS

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Adams, R. B., & Funk, P. (2012). Beyond the glass ceiling: Does gender matter? *Management Science*, 58(2), 219–235. <https://doi.org/10.1287/mnsc.1110.1452>
- Addou, K. I., Boulanouar, Z., Anwer, Z., Bensghir, A., & Mohammad, S. M. R. (2024). The impact of Basel III regulations on solvency and credit risk-taking behavior of Islamic banks. *International Journal of Islamic and Middle Eastern Finance and Management*, 17(5), 915–935. <https://doi.org/10.1108/IMEFM-05-2024-0248>
- Adu, D. A. (2024). How do board and ownership characteristics affect bank risk-taking? New evidence from sub-Saharan Africa. *Journal of Banking Regulation*, 25(3), 209–233. <https://doi.org/10.1057/s41261-023-00226-7>
- Anwar, C. J., Okot, N., Suhendra, I., Indriyani, D., & Jie, F. (2024). Monetary policy, macroprudential policy, and bank risk-taking behaviour in the Indonesian banking industry. *Journal of Applied Economics*, 27(1), 2295732. <https://doi.org/10.1080/15140326.2023.2295732>
- Aryani, D. N., & Assegaf, H. H. (2026). Risk management and bank profitability: Moderating effects on lending and credit risk in Indonesia. *International Journal*

- of *Applied Business and International Management*, 11(1), 208–223.
<https://doi.org/10.32535/ijabim.v11i1.4506>
- Aureli, S., & Brighi, P. (2025). Gender, age, and nationality diversity in banks' board: Do they affect financial and sustainability performance? In P. Paoloni (Ed.), *Shaping Tomorrow: Gender Perspectives in a Sustainable World* (pp. 3–21). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-78999-1_1
- Baker, A. C., Larcker, D. F., & Wang, C. C. Y. (2022). How much should we trust staggered difference-in-differences estimates? *Journal of Financial Economics*, 144(2), 370–395. <https://doi.org/10.1016/j.jfineco.2022.01.004>
- Berger, A. N., Kick, T., & Schaeck, K. (2014). Executive board composition and bank risk taking. *Journal of Corporate Finance*, 28, 48–65. <https://doi.org/10.1016/j.jcorpfin.2013.11.006>
- Bhegawati, D. A. S., Rustiarini, N. W., Widyantari, I. A. P. S., Ariandini, I. A. M., & Dewi, N. K. L. (2024). The determinants of earnings management in manufacturing companies listed on the Indonesia Stock Exchange. *Journal of International Conference Proceedings*, 7(2), 377–388. <https://doi.org/10.32535/jicp.v7i2.3447>
- Boubakri, N., Cao, Z., Ghoul, S. E., Guedhami, O., & Li, X. (2023). National culture and bank liquidity creation. *Journal of Financial Stability*, 64, 101086. <https://doi.org/10.1016/j.jfs.2022.101086>
- Braham, R., de Peretti, C., & Belkacem, L. (2022). On the measurement and extent of banks' political connection in the Middle East and North Africa region. *Comparative Economic Studies*, 64(4), 606–645. <https://doi.org/10.1057/s41294-021-00179-8>
- Brock, J. M., & Haas, R. D. (2023). Discriminatory lending: Evidence from bankers in the lab. *American Economic Journal: Applied Economics*, 15(2), 31–68. <https://doi.org/10.1257/app.20210180>
- Cid-Aranda, C., & López-Iturriaga, F. (2023). C.E.O. characteristics and corporate risk-taking: evidence from emerging markets. *Economic Research-Ekonomska Istrazivanja*, 36(2), 2175008. <https://doi.org/10.1080/1331677X.2023.2175008>
- Danisman, G. O., & Tarazi, A. (2024). ESG activity and bank lending during financial crises. *Journal of Financial Stability*, 70, 101206. <https://doi.org/10.1016/j.jfs.2023.101206>
- Doerr, S., Kabaş, G., & Ongena, S. (2024). Population aging and bank risk-taking. *Journal of Financial and Quantitative Analysis*, 59(7), 3037–3061. <https://doi.org/10.1017/S0022109023001011>
- Ekananda, M. (2023). The impact of banking competition on bank financial stability: Evidence from ASEAN 5 countries. *Etikonomi*, 22(2), 409–428. <https://doi.org/10.15408/etk.v22i2.31003>
- Grable, J. E., Kwak, E. J., & Chen, P.-J. (2022). An evaluation of the association between marital status and financial risk tolerance. *Journal of Financial Planning*, 35(7), 84–96.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2), 334–343. <https://doi.org/10.5465/amr.2007.24345254>
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206. <https://doi.org/10.5465/amr.1984.4277628>
- Hertrampf, P., Brunner-Kirchmair, T. M., Hiebl, M. R., & Wiedemann, A. (2025). The Relationship Between CEO Characteristics and Banks' Risk-Taking: Review and Research Directions. *Schmalenbach Journal of Business Research*, 77(1), 127–178. <https://doi.org/10.1007/s41471-024-00199-x>
- Huang, S., & Thakor, A. V. (2024). Political influence, bank capital, and credit allocation. *Management Science*, 70(11), 8134–8162. <https://doi.org/10.1287/mnsc.2022.04056>

- Hubbansyah, A. K., & Husodo, Z. A. (2018). The interdependence between the financial sector and business sector in ASEAN 4 Countries. *Journal of Indonesian Economy and Business*, 33(1), 77–94. <http://journal.ugm.ac.id/jieb>
- Javed, M., Mehmood, K., Ghafoor, A., & Parveen, A. (2024). Board structure and risk-taking behavior: evidence from the financial sector of Pakistan. *Corporate Governance: The International Journal of Business in Society*, 24(5), 1060–1082. <https://doi.org/10.1108/CG-03-2023-0101>
- Jiang, L., & Ji, M. (2024). Risk management committee and bank performance: Evidence from the adoption of the Dodd-Frank Act. *Journal of Business Finance & Accounting*, 51(7–8), 1762–1788. <https://doi.org/10.1111/jbfa.12765>
- Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4), 1371–1411. <https://doi.org/10.1162/003355305775097524>
- Lambert, T., Wagner, W., & Zhang, E. Q. (2023). Banks, political capital, and growth. *The Review of Corporate Finance Studies*, 12(3), 613–655. <https://doi.org/10.1093/rcfs/cfac005>
- Liu, L., Le, H., & Thompson, S. (2022). CEO overconfidence and bank systemic risk: Evidence from U.S. bank holding companies. *International Journal of Finance & Economics*, 27(3), 2977–2996. <https://doi.org/10.1002/ijfe.2308>
- Mateev, M., Tariq, M. U., & Sahyouni, A. (2021). Competition, capital growth and risk-taking in emerging markets: Policy implications for banking sector stability during COVID-19 pandemic. *PLoS ONE*, 16(6), e0253803. <https://doi.org/10.1371/journal.pone.0253803>
- Molina-García, A., Cisneros-Ruiz, A. J., López-Subires, M. D., & Diéguez-Soto, J. (2023). How does financial literacy influence undergraduates' risk-taking propensity? *The International Journal of Management Education*, 21(3), 100840. <https://doi.org/10.1016/j.ijme.2023.100840>
- Muhammad, H., Migliori, S., & Mohsni, S. (2023). Corporate governance and firm risk-taking: The moderating role of board gender diversity. *Meditari Accountancy Research*, 31(3), 706–728. <https://doi.org/10.1108/MEDAR-07-2020-0949>
- Nainggolan, Y. A., Prahmila, D. I., & Syaputri, A. R. (2023). Do board characteristics affect bank risk-taking and performance? Evidence from Indonesian and Malaysian Islamic banks. *Journal of Management and Governance*, 27(4), 1115–1145. <https://doi.org/10.1007/s10997-022-09625-w>
- Porta, R. L., Lopez-de-Silanes, F., & Shleifer, A. (2002). Government ownership of banks. *Journal of Finance*, 57(1), 265–301. <https://doi.org/10.1111/1540-6261.00422>
- Psillaki, M., Mavrakana, C., Hasannasab, M., & Margaritis, D. (2024). *Board Gender Diversity, Risk Culture and Bank Performance: Evidence from European Banks* (University of Auckland Business School Research Paper Series). SSRN. <https://ssrn.com/abstract=4767508>
- Rahmizal, M., Yusra, I., & Sari, L. (2022). Pengaruh likuiditas pendanaan terhadap pengambilan risiko pada Bank Perkreditan Rakyat Syariah di Indonesia. *Jurnal Kajian Manajemen Bisnis*, 11(2), 101–110. <https://doi.org/10.24036/jkmb.11941800>
- Rodriguez, J., Dandapani, K., & Lawrence, E. R. (2024). Does board gender diversity affect firms' expected risk? *Studies in Economics and Finance*, 41(2), 389–409. <https://doi.org/10.1108/SEF-05-2023-0245>
- Roth, J., Sant'Anna, P. H. C., Bilinski, A., & Poe, J. (2023). What's trending in difference-in-differences? A synthesis of the recent econometrics literature. *Journal of Econometrics*, 235(2), 2218–2244. <https://doi.org/10.1016/j.jeconom.2023.03.008>
- Sa'adah, W. N., Nadia, L. P., & Soegiarto, D. (2024). The influence of executive and independent roles of women board members on bank risk: Evidence from

- Indonesia. *KnE Social Sciences*, 9(18), 217–231.
<https://doi.org/10.18502/kss.v9i17.16328>
- Sahm, C. R. (2012). How much does risk tolerance change? *Quarterly Journal of Finance*, 2(4), 1–38. <https://doi.org/10.1142/S2010139212500206>
- Sari, D. M. M. Y. (2024). The implementation of good corporate governance perspective: A case study on BUMDes Samsam. *International Journal of Accounting & Finance in Asia Pasific*, 7(2), 303–316. <https://doi.org/10.32535/ijafap.v7i2.3231>
- Sbai, H., & Ed-Dafali, S. (2023). Gender diversity and risk-taking: Evidence from dual banking systems. *Journal of Financial Reporting and Accounting*, 23(5), 1813–1836. <https://doi.org/10.1108/JFRA-07-2022-0248>
- Schnabl, P. (2012). The International Transmission of Bank Liquidity Shocks: Evidence from an Emerging Market. *Journal of Finance*, 67(3), 897–932. <https://doi.org/10.1111/j.1540-6261.2012.01737.x>
- Setiawan, D., Harymawan, I., Adhariani, D., Pratama, F. A. F., & Santoso, A. (2024). Does the leverage of a company differ when led by a CEO from a reputable university? *Journal of Open Innovation: Technology, Market, and Complexity*, 10(2), 100310. <https://doi.org/10.1016/j.joitmc.2024.100310>
- Suhardono, A. N., Simamora, A., Agung, J. R. D. M. S., Lestari, H. S., & Leon, F. M. (2023). The effect of credit risk and board diversity on the performance of banks listed on the Indonesian Stock Exchange. *International Journal of Islamic Business Ethics*, 8(2), 144–159. <https://doi.org/10.30659/ijibe.8.2.144-158>
- Uddin, M. M., Islam, M. T., & Farooque, O. A. (2023). Effects of politically controlled boards on bank loan performance: An emerging economy perspective. *Journal of Accounting in Emerging Economies*, 13(3), 566–588. <https://doi.org/10.1108/JAEE-11-2021-0353>
- Wang, Z., Rafaï, I., & Willinger, M. (2023). Does age affect the relation between risk and time preferences? Evidence from a representative sample. *Southern Economic Journal*, 90(2), 341–368. <https://doi.org/10.1002/soej.12662>

ABOUT THE AUTHOR(S)

1st Author

Aulia Keiko Hubbansyah is a permanent lecturer at the Management Department, Faculty of Economics and Business, Universitas Pancasila, Jakarta, Indonesia. He completed his undergraduate studies at Universitas Indonesia and Universitas Terbuka and holds dual master's degrees from both universities, specializing in Economics and Management. His research interests include Financial Economics, Finance, Public Finance, and Monetary Economics.

Email: akhubbansyah@univpancasila.ac.id

ORCID ID: <https://orcid.org/0009-0006-2280-1521>

2nd Author

Yuli Ardianto is a permanent lecturer at the Faculty of Economics and Business, Universitas Pancasila, Jakarta, Indonesia. His research interests are in the field of Economics.

Email: yuliardianto@univpancasila.ac.id

ORCID ID: <https://orcid.org/0000-0001-6181-7450>

3rd Author

Muhammad Nuruddin Subhan is a permanent lecturer at the Management Department, Faculty of Economics and Business, Universitas Pancasila, Jakarta, Indonesia. His research interests include Finance, Public Finance, and Monetary Economics.

Email: nuruddin.subhan@univpancasila.ac.id

ORCID ID: <https://orcid.org/0000-0002-8297-0646>

4th Author

Darmanto is a student at the Faculty of Economics and Business, Universitas Pancasila, Jakarta, Indonesia.

Email: darmanto@univpancasila.ac.id