



Diversity, inclusion, and bank performance: Evidence from ASEAN 5 and Vietnam

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ABSTRACT

This study aims to examine how diversity and inclusion (D&I) affect bank performance in the ASEAN-5 countries and Vietnam. It uses an unbalanced panel dataset of 50 banks across six ASEAN countries from 2012 to 2023. Diversity and inclusion serve as the main independent variable, while return on assets (ROA) and return on equity (ROE) are used as dependent variables. The data are analyzed using a fixed-effects model, with robustness checks conducted using the generalized method of moments (GMM). The findings indicate that inclusion initiatives, as reflected in the inclusion score, are negatively associated with both ROA and ROE. Similarly, the composite measure of diversity and inclusion also shows a negative relationship with bank performance. This study makes three main contributions. First, it provides sector-specific empirical evidence on the relationship between diversity, inclusion, and performance in the banking industry, an area that has received limited attention in prior research. Second, it distinguishes between the effects of diversity and inclusion as separate dimensions. Third, it offers context-specific insights from ASEAN, highlighting how cultural and institutional factors may influence the effectiveness of diversity and inclusion practices.

Keywords: ASEAN, Bank Performance, Diversity and inclusion

JEL Classification: G21, M14, M54, D22

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1. Introduction

In the dynamic environment of global financial markets, diversity and inclusion in banks have evolved from a marginal issue into a central component of business strategy. Banks are increasingly encouraged to embrace diversity across various dimensions, including gender, race, age, education, and socioeconomic background. At the same time, they are expected to foster inclusive workplace cultures that value and support their workforce. This shift is driven not only by ethical and social considerations but also by the recognition that diverse teams can generate a broader range of perspectives, stimulate creativity, strengthen problem-solving capabilities, and improve decision-making processes (Page, 2007).

These dimensions are often associated with greater innovation, stronger customer engagement, and higher stakeholder trust, which can potentially lead to improved financial performance (Hunt et al., 2015).

Cultural diversity plays a pivotal role in the ASEAN region, which is characterized by a wide range of ethnic, religious, and cultural groups. These differences create both opportunities and challenges for banks in promoting diversity and inclusive practices that reflect this complexity. Banks in ASEAN must navigate cultural diversity to develop policies that support inclusion while maintaining a solid organizational culture. Effectively managing this diversity is essential for fostering innovation, strengthening customer relationships, and maintaining trust in an increasingly complex and competitive financial environment.

By taking the importance of diversity and inclusion in the banking industry into consideration, this study draws on the resource-based view (RBV) to explain how D&I influence bank performance. specific resources and capabilities can provide companies with sustained competitive advantages that are difficult for competitors to replicate (Barney, 1991). In this context, diversity and inclusion can be considered one of the key organizational resources.

Diversity brings a variety of perspectives, skills, and experiences that enhance problem-solving and decision-making. However, diversity alone is not sufficient. Inclusion plays a critical role in ensuring that these diverse perspectives are effectively integrated and utilized in organizational processes, if properly managed. The interaction between diversity and inclusion enhances the quality of decisions, leading to more effective strategies and improved organizational performance. Furthermore, organizations that recognize, embrace, manage, and advocate for diversity may also effectively attract, hire, and retain capable individuals (Hoang et al., 2022). Enabling companies to significantly increasing performance, including profitability, competitive advantage, innovation, and problem-solving capabilities. From an RBV perspective, D&I can therefore be viewed not only as internal capabilities but also as strategic assets that support sustainable firm performance.

Given the potential benefits of diversity and inclusion (D&I) for firm performance, many researchers have examined these issues. However, the existing empirical evidence remains inconclusive and fragmented, particularly in the banking sector. Various studies focus on how diversity shapes organizational outcomes. For example, Aggarwal et al. (2019), Andreovski et al. (2014), Boone & Hendriks (2009), and Kunze et al. (2010), examine the impact of diversity on performance from the perspectives of boards, senior management teams, managers, and employees. Similarly, Aggarwal et al. (2019), Conyon et al. (2017), and Kunze et al. (2010) analyze the effects of board diversity across listed companies, without focusing on specific sectors.

Empirical findings on the relationship between diversity and company performance remain mixed, with some studies reporting positive effects (Boone & Hendriks, 2009; Dezsö & Ross, 2012; Miller & del Carmen Triana, 2009), while others also reporting negative effects (Pandey et al, 2022; Talavera et al., 2018). These inconclusive findings may stem from several important limitations in literature. Previous studies analyze the diversity and inclusion separately. Based on these findings, it can be concluded that there are still limited number of studies that examine diversity and inclusion simultaneously as complementary dimensions.

Drawing on the prior literature and theoretical arguments, this study aims to examine the impact of diversity and inclusion on bank performance in the ASEAN-5 countries and Vietnam by explicitly distinguishing between diversity dimensions and inclusion practices. Specifically, it investigates how different forms of diversity, together with inclusion, influence bank performance. By focusing on the

banking sector within a diverse and relatively underexplored regional context, the study also seeks to capture how institutional and cultural differences shape the effectiveness of D&I practices. The banking sector provides a particularly relevant setting for examining these dynamics.

Banks operate in highly regulated environments in which risk management, compliance, and efficient decision-making are essential. This regulatory complexity, together with the sector's direct impact on economic stability and growth, makes it important to understand how D&I initiatives may influence bank performance. This study uses an unbalanced panel dataset of 50 banks across six ASEAN countries, including Malaysia, the Philippines, Singapore, Indonesia, Vietnam, and Thailand, covering the period from 2012 to 2023. Data on diversity and inclusion are obtained from LSEG Workspace, while financial and macroeconomic data are sourced from LSEG Workspace and the World Bank.

This study contributes to the literature in several ways. First, it extends the resource-based view (RBV) by explaining how diversity and inclusion function as strategic resources that can enhance firm performance. Second, it provides empirical evidence by examining both aggregated and disaggregated measures of diversity and inclusion, whereas prior studies have often treated them as separate indicators rather than as a composite construct. Third, it offers regional insights by focusing on the banking sector in the ASEAN-5 countries and Vietnam, where empirical evidence on diversity and inclusion remains limited. The remainder of this paper is structured as follows. Section 2 presents the hypothesis development, Section 3 describes the data and methodology, Section 4 reports the empirical results and discussion along with robustness checks, and Section 5 concludes the study.

2. Theoretical Framework and Hypotheses Development

Researchers have offered various perspectives on diversity and inclusion initiatives and their effects on organizations. However, the literature remains inconclusive, with extensive attention given to diversity while inclusion remains relatively underexplored. Diversity has been widely examined in relation to strategic outcomes, such as innovation, risk management, and financial performance, whereas inclusion has often been overlooked despite its critical role in enabling individuals to contribute effectively. This imbalance creates a gap in understanding how diversity and inclusion jointly influence firm performance, particularly in the banking sector, where human capital and governance are essential.

Diversity, especially in terms of gender, ethnicity, age, and educational background, among company leaders and workers, is often connected to bigger strategic goals, including innovation, risk management, and profitability. From a theoretical perspective, the role of diversity in enhancing company performance can be explained through the Resource-Based View (RBV) and Agency Theory. According to RBV, diverse human capital constitutes a significant, rare, and inimitable resource that can produce sustained competitive advantage (Barney, 1991). Meanwhile, Agency Theory suggests that board diversity enhances monitoring effectiveness by reducing groupthink and incorporating diverse perspectives, thereby mitigating agency costs (Bear et al., 2010; Carter et al., 2003). Taking together, these perspectives indicate that diversity can improve decision-making quality and organizational outcomes.

Empirical research found mixed yet supportive evidence regarding the beneficial effects of gender diversity especially in leadership positions. Some studies suggest that gender-diverse boards enhance strategic decision-making and are more commonly observed in high-performing companies (Nielsen & Huse, 2010; Varouchas et al., 2023). Moreover, diversity has been associated with stronger stakeholder engagement and improved long-term performance outcomes (Lückerath-Rovers, 2013). Within the banking sector, diverse leadership structures are also linked to more prudent risk management practices, including lower non-performing loans and stronger regulatory compliance (Palvia et al., 2015;

Pathan & Faff, 2013). These findings indicate that diversity can contribute to improved organizational performance through better decision-making and risk oversight.

Diversity reflects structural representation. While inclusion focuses on the workplace culture and practices that enable diverse individuals to thrive. Prior studies emphasize that inclusion is a critical requirement to receive the benefits of diversity, as it ensures that diverse perspectives are effectively integrated into organizational processes (Shore et al., 2011). In the banking sector, inclusive environments are associated with higher levels of employee engagement, which in turn enhances productivity and reduce turnover (Cox & Blake, 1991). Through this mechanism, inclusion indirectly contributes to improved financial performance by maximizing the potential of diverse human capital.

Conversely, alternative perspectives, such as social identity theory and the similarity-attraction paradigm, suggest that diversity may also generate challenges within organizations. Individuals tend to associate with others who share similar backgrounds, which potentially lead to communication barriers, lower cohesion, and interpersonal conflict in diverse groups (Richard et al., 2003; Song et al., 2020). Empirical studies further indicate that diversity may increase group conflict and coordination costs, potentially reducing decision-making efficiency and company competitiveness (Miller & del Carmen Triana, 2009; Sila et al., 2016; Triana et al., 2014). In some cases, diversity has also been linked to greater risk aversion and weaker organizational performance, particularly when not supported by effective management practices (Farrell & Hersch, 2005; Roberson & Park, 2007). Moreover, evidence suggests that the impact of diversity on company performance may be indirect or contingent on mediating factors, such as employee productivity and innovation effectiveness (Vairavan & Zhang, 2020). These findings imply that the effects of diversity are context-dependent and may vary depending on how well diversity is managed and integrated within the organization.

It can be concluded that theoretical and empirical literature suggests that the relationship between diversity and organizational performance is complex and context-dependent. While previous studies document both positive and negative effects, the benefits of diversity are more likely to emerge when supported by inclusive organizational practices that facilitate effective integration of diverse perspectives. In this regard, inclusion plays a crucial role in transforming diversity from a structural attribute into a strategic asset that enhances decision-making, employee engagement, and organizational outcomes. Therefore, despite the mixed empirical evidence, this study expects that well-implemented Diversity and Inclusion (D&I) practices will positively influence bank performance.

H₁: Diversity and inclusion positively influenced bank performance.

3. Methodology

Data

This study seeks to examine the effect of diversity and inclusion (D&I) on bank financial performance in ASEAN. The study utilizes an unbalanced panel dataset of diversity and inclusion (D&I) scores from 50 banks across ASEAN countries, specifically Malaysia, Philippines, Singapore, Indonesia, Vietnam, and Thailand, covering the period from 2012 to 2023, sourced from the LSEG workspace. Additionally, financial data on banks from LSEG Workspace and macro-level data from World Bank are also collected. The panel is unbalanced due to differences in data availability across banks and years, which are not consistently reported. In terms of data treatment, this study does not apply data imputation techniques. The missing values are left as they are. This results in variation in the number of observations across variables, as reported in Table 3.

Variable Measurement

Following Saha et al. (2024), this study employs the LSEG Workspace diversity and inclusion (D&I) index as the main independent variable. The index is constructed based on four pillars, inclusion, diversity, people development, and news and controversies. In addition, the study analyzes the effects of the diversity and inclusion pillars on bank performance separately. Table 1 presents the indicators used to assess the diversity and inclusion pillars. The index is designed to measure firms' relative performance in creating diverse and inclusive workplaces.

Table 1. Diversity and Inclusion (D&I) Indicator Assessment

Diversity and Inclusion (D&I) Indicator Assessment	
Diversity	
Analytic Board Cultural Diversity	
Policy Diversity Opportunity	
Target Diversity Opportunity	
Women Employees	
New Women Employees	
Women Managers	
Analytic Board Female	
Analytic Executive Members Gender Diversity	
Inclusion	
Flexible Working Hours	
Day Care Services	
Employees With Disabilities	
HIV/AIDS Program	

Table 2. Variable measurements

Variable	Abbreviation	Definition	Source
Return on Asset	ROA	Net income to total assets	LSEG Workspace
Return on Equity	ROE	Net income to total equity	LSEG Workspace
Diversity and inclusion (D&I) Score	D&I	Logarithmic natural of diversity and inclusion (D&I) score	LSEG Workspace
Inclusion Score	INC	Logarithmic natural of inclusion score	LSEG Workspace
Diversity Score	DIV	Logarithmic natural of diversity score	LSEG Workspace
ESG Score	ESG	Logarithmic natural of ESG Score	LSEG Workspace
Board Size	B.SZ	Number of board members	LSEG Workspace
Independent Board	B.IND	Ratio of independent board to total board members	LSEG Workspace
Liquid Asset	LIQ	Ratio of liquid assets to total assets	LSEG Workspace
Size	SIZE	Natural logarithm of bank total assets	LSEG Workspace
GDP Growth	GDPG	Annual GDP growth	World Bank
Inflation Rate	INF	Percentage change of annual consumer price	World Bank

Table 2 presents the variable measurements used in this study. The dependent variable is bank performance, proxied by return on assets (ROA) and return on equity (ROE). Several control variables are also included. First, the ESG score is used, as its effective implementation can support financial performance by strengthening intangible assets and improving cost efficiency (Gurol & Lagasio, 2023). Second, board characteristics are captured through board size and board independence. A larger

board may enhance the diversity of expertise and networks, thereby positively affecting profitability, while an independent board improves objectivity and oversight, promotes transparency, and reduces information asymmetry, ultimately supporting financial performance (Hakimi et al., 2018). Third, firm-specific characteristics are included, namely liquid assets and bank size (Trinugroho et al., 2025). Finally, macroeconomic variables, proxied by GDP growth and the inflation rate, are incorporated to control for external conditions affecting bank performance (Trinugroho et al., 2025). GDP growth reflects overall economic activity, where higher growth tends to increase credit demand and reduce default risk, thereby enhancing profitability. In contrast, inflation influences funding costs and lending rates; without controlling for inflation, the effects of bank-specific variables on performance may be obscured by general price fluctuations.

Model Specification

This study employs a static panel regression to estimate the impact of diversity and inclusion (D&I) on bank performance. The Hausman test is used to determine whether a fixed-effects or random-effects model is more appropriate, and the results indicate that the fixed-effects model is preferred. The baseline model is specified in Equation 1 (Eq. 1):

$$Performance_{it} = D\&I_{it} + ESG_{it} + B.SZ_{it} + B.IND_{it} + LIQ_{it} + SIZE_{it} + GDPG_{it} + INF_{it} + \varepsilon_{it}$$

Bank performance is proxied by return on assets (ROA) and return on equity (ROE). It represents the diversity and inclusion score. The analysis also considers the sub-indices of D&I separately, consisting of diversity and inclusion scores. ESG_{it} is the environmental, social and governance score. $B.SZ_{it}$ and $B.IND_{it}$ are board characteristic variables proxied by board size and independent board respectively. LIQ_{it} and $SIZE_{it}$ are company characteristic variables proxied by liquid asset and bank size respectively. $GDPG_{it}$ and INF_{it} are macroeconomic variables proxied by GDP growth and inflation rate respectively.

The fixed-effects model is preferred over the random-effects model, as it controls for time-invariant unobserved heterogeneity across banks, potential endogeneity issues may still arise. In particular, reverse causality between diversity and inclusion (D&I) and bank performance is possible, as better-performing banks may have more resources to invest in D&I initiatives. To address these concerns, a robustness check is conducted using the system Generalized Method of Moments (GMM).

Descriptive Statistics

Table 3 presents the descriptive statistics of the sample. The inclusion score, diversity score, and combined diversity and inclusion (D&I) score represent key aspects of organizational diversity. The D&I score has a mean of 4.035 with a standard deviation of 0.11, indicating relatively consistent scores across the sampled firms. The inclusion score shows a lower mean of 3.467 with a standard deviation of 0.693 and a minimum value of 0, suggesting that while some firms demonstrate high levels of inclusion, others exhibit none. The diversity score has a mean of 3.606 and a standard deviation of 0.332, with values ranging from 2.485 to 4.234, indicating moderate variation in diversity levels across firms.

Two board characteristics are considered: board size and board independence. The average proportion of independent board members is 0.511, with a standard deviation of 0.143, indicating that, on average, more than half of board members are independent, although this varies across banks. The average board size is 10.67, with a standard deviation of 3.74 and a range from 3 to 20 members, suggesting substantial variation in board composition.

Table 3. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	575	.011	.016	-.112	.108
ROE	575	.092	.166	-3.533	.298
D&I	182	4.035	.11	3.72	4.239
INC	182	3.467	.693	0	4.357
DIV	233	3.606	.332	2.485	4.234
B.IND	389	.511	.143	.083	.889
B.SZ	389	10.674	3.744	3	20
LIQ	575	.079	.068	.002	.561
ESG	369	3.992	.305	2.85	4.48
SIZE	575	16.889	1.776	10.572	20.127
INF	600	.028	.02	-.011	.091
GDPD	600	.04	.031	-.095	.097

Table 4. Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) ROA	1.000											
(2) ROE	0.585	1.000										
(3) D&I	0.136	0.117	1.000									
(4) INC	-0.023	-0.022	0.550	1.000								
(5) DIV	0.020	0.032	0.535	-0.101	1.000							
(6) B.IND	-0.109	-0.071	0.144	0.132	-0.130	1.000						
(7) B.SZ	-0.036	0.050	0.273	0.031	0.468	-0.339	1.000					
(8) LIQ	-0.079	-0.070	-0.019	0.147	-0.151	0.134	-0.182	1.000				
(9) ESG	0.186	0.045	0.487	0.082	0.253	0.306	-0.001	-0.109	1.000			
(10) SIZE	0.170	0.231	0.382	0.283	0.179	0.136	0.333	-0.299	0.287	1.000		
(11) INF	0.071	0.012	0.050	0.130	-0.048	-0.023	-0.175	0.282	-0.022	-0.217	1.000	
(12) GDPG	0.076	0.057	-0.062	0.097	-0.139	-0.006	-0.131	0.206	-0.192	-0.084	0.425	1.000

The average ratio of liquid assets is 0.079, ranging from 0.002 to 0.561, with a standard deviation of 0.068, indicating differences in liquidity positions across banks. The ESG score has an average of 3.99 and a standard deviation of 0.305, with values ranging from 2.85 to 4.48, suggesting generally moderate ESG performance. The average bank size is 16.89, with values ranging from 10.57 to 20.13 and a standard deviation of 1.77, reflecting considerable variation in firm size.

Macroeconomic variables show relatively low variation. The average inflation rate is 0.028 and the average GDP growth is 0.04, with standard deviations of 0.02 and 0.031, respectively. The minimum and maximum values indicate that the dataset captures both slightly negative and positive economic conditions, with inflation ranging from -0.011 to 0.091 and GDP growth from -0.095 to 0.097.

Correlation Matrix

Table 4 displays the correlation matrix of our dataset. Following the criteria proposed by [Viverita et al., \(2024\)](#), the results of the correlation matrix indicate that there are no strong correlations among the independent variables, as all correlation coefficients are less than 0.7. Showing that there is no multicollinearity. The results of the correlation matrix are presented with more detail below. There is a weak positive correlation between board independence and D&I scores. Board independence also

positively correlated with inclusion score, despite the correlation with diversity score is negative. Additionally, there is a positive correlation of 0.487 between ESG score and D&I score. Most governance variables, such as D&I score (0.382), diversity score (0.179), ESG score (0.287), and board size (0.333), are positively correlated with bank size.

Table 5. Regression result *t* statistics in parentheses

	(1) ROA	(2) ROA	(3) ROA	(4) ROE	(5) ROA	(6) ROE
D&I			-0.00862*** (-2.82)			-0.0507** (-2.56)
INC		-0.00211*** (-4.09)			-0.00211*** (-4.09)	
DIV	-0.00106 (-1.38)			-0.00247 (-0.42)		
B.IND	-0.00555 (-1.50)	-0.00503 (-1.07)	-0.00645 (-1.45)	-0.0381 (-1.44)	-0.00503 (-1.07)	-0.0487 (-1.44)
B.SZ	-0.00000311 (-0.01)	-0.000321 (-1.42)	-0.000246 (-1.13)	-0.000714 (-0.55)	-0.000321 (-1.42)	-0.00206 (-1.50)
LIQ	-0.0488* (-1.69)	-0.0701** (-2.12)	-0.0694** (-2.07)	-0.155 (-1.18)	-0.0701** (-2.12)	-0.221 (-1.44)
ESG	-0.000862 (-0.36)	0.00204 (0.69)	0.00265 (0.76)	-0.00896 (-0.45)	0.00204 (0.69)	0.0146 (0.53)
SIZE	0.00284* (1.80)	0.00341** (2.42)	0.00339** (2.30)	0.0164*** (2.84)	0.00341** (2.42)	0.0179*** (2.79)
INF	-0.00388 (-0.23)	0.00478 (0.27)	0.00748 (0.41)	0.00819 (0.08)	0.00478 (0.27)	0.131 (1.00)
GDPG	0.0330*** (4.56)	0.0313*** (3.30)	0.0293*** (3.19)	0.277*** (5.80)	0.0313*** (3.30)	0.238*** (3.69)
Constant	-0.0273 (-1.03)	-0.0419* (-1.70)	-0.0166 (-0.69)	-0.121 (-1.23)	-0.0419* (-1.70)	-0.0265 (-0.23)
Observations	221	170	170	221	170	170
R ²	0.0911	0.131	0.118	0.118	0.131	0.131

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

4. Results

The results in Table 5 shows that the inclusion score has a significantly negative effect on both ROA and ROE in models (2) and (5) respectively, indicating that higher inclusion scores are associated with lower bank profitability. Moreover, the composite diversity and inclusion variables exerts a statistically significant negative impact on ROA and ROE in models (3) and (6) respectively, indicating that higher levels of diversity and inclusion are correlated with lower financial performance.

Regarding the control variables, the liquidity ratio negatively and significantly associated with ROA in models (1), (2), (3), and (5), but no significance has been found in model (4) and (6). These finding indicate a probability of potential inefficiencies in asset utilization when banks hold higher levels of liquidity. Bank size, on the other hand, has a positive significant effect on both ROA and ROE in all models. Larger banks tend to perform better financially, possibly due to economies of scale, better risk diversification and stronger market positions. In all models, GDP growth consistently has a positive and significant effect on both ROA and ROE. This indicates that stronger macroeconomic conditions are correlated with improved bank performance.

Regression analysis shows that inclusion practices are negatively associated with bank performance, especially influencing profitability. Additionally, the results indicate that the composite diversity and inclusion score is inversely associated with bank performance. Size and liquidity are key factors influencing performance, while macroeconomic growth remains an important determinant of banking profitability. Highlighting the need to balance inclusion initiatives with effective operational management and growth strategies.

Additionally, the relatively low R^2 values suggest that a substantial portion of the variation in bank profitability may be explained by other unobserved factors not included in the model.

5. Discussion

This study examines the impact of diversity and inclusion (D&I) on bank performance, focusing on key financial indicators, including return on assets (ROA) and return on equity (ROE). The findings reveal nuanced relationships that highlight the complexity of integrating D&I practices into financial institutions' performance. The resource-based view (RBV) suggests that organizations consist of both tangible and intangible resources that can create value and sustain competitive advantage (Assensoh-Kodua, 2019; Lubis, 2022). In this context, diversity and inclusion can be understood as intangible organizational resources. Diversity contributes a range of perspectives, experiences, and problem-solving approaches, while an inclusive environment enables these resources to be effectively utilized. However, consistent with RBV principles, the extent to which D&I contributes to competitive advantage depends on how well these resources are managed, maintained, and integrated into the organization's strategic processes (Assensoh-Kodua, 2019; Lubis, 2022).

Inclusion scores in this study are negatively associated with both ROA and ROE. Suggesting that higher levels of inclusion are linked to lower financial performance. This relationship may reflect challenges during the implementation of inclusion initiatives, such as coordination difficulties or organizational resistance to change. Saha et al. (2024) discovered that the initiative for inclusion may require time to generate financial benefits, particularly within organization that previously characterized by rigid hierarchies. Furthermore, inclusion programs may be perceived differently across employees, which may influence workplace dynamics and overall engagement.

For instance, employees who don't have to take care of someone else may think that offering flexible hours or daycare services helps some groups more than others, which could hinder team morale and cause dissatisfaction (Shore et al., 2011). Such perceptions may be associated with variations in employee engagement and productivity. Furthermore, the observed negative association may also be linked to differences in institutional and cultural contexts across ASEAN countries. Certain dimensions of diversity may interact with prevailing social norms and values, which could shape how inclusion initiatives are perceived by stakeholders. These contextual factors may be associated with stakeholder responses that are relevant for bank performance.

The combination of diversity and inclusion variable shows a statistically significant negative association on ROA, indicating higher levels of diversity and inclusion are correlated with lower profitability. Tumewang et al. (2024) reported similar findings, that diversity and inclusion initiatives adversely affected profitability in banks over Indonesia and Malaysia. The findings of this study show that individuals tend to establish and maintain relationships with others who possess similar social group affiliations and demographic characteristics (Song et al., 2020). Moreover, an inclusive and diverse workforce within a group tends to result in conflict and communication challenges, as individuals from different backgrounds may find it difficult to understand each other's perspective and build mutual trust (Richard et al., 2003).

Liquidity consistently shows a negative association with both ROA and ROE, suggesting that excessive liquidity may indicate inefficient asset utilization. In the banking industry, this could suggest that banks are too prudent in providing lending or not using their capital efficiently, which in turn hinders profitability. On the other hand, bank size has a strong positive effect on both performance metrics. Larger banks perform financially better because they can take advantage of economies of scale, reach more customers and diversify their risk.

Macroeconomics factors, Inflation and GDP growth, show a different effect on bank performance. GDP growth is positively associated with bank performance, despite inflation does not showing a significant association. The positive association between GDP growth and bank performance shows how economic growth can lead to more lending and less credit risk.

Table 6. Robustness Check using system GMM *t* statistics in parentheses

	(1) ROA	(2) ROA	(3) ROA	(4) ROE	(5) ROE	(6) ROE
L.ROA	0.526*** (10.08)	0.689*** (14.86)	0.699*** (15.59)			
L.ROE				0.282*** (4.09)	0.498*** (13.45)	0.300*** (8.11)
D&I	-0.0191** (-2.05)			-0.122 (-1.41)		
INC		-0.00654*** (-4.15)			-0.0149 (-0.59)	
DIV			-0.00557* (-1.85)			-0.0317** (-2.56)
B.IND	-0.00989 (-1.00)	-0.0395*** (-4.11)	-0.0377*** (-3.83)	-0.0282 (-0.29)	-0.0811 (-0.95)	-0.0741* (-1.90)
B.SZ	-0.000434** (-2.27)	-0.000510 (-1.26)	-0.000574 (-1.23)	-0.00576*** (-3.12)	-0.00694* (-1.98)	-0.00283** (-2.35)
LIQ	-0.0813*** (-6.15)	0.0568** (2.25)	0.0391 (1.40)	-0.225** (-2.10)	0.251 (1.55)	-0.0727 (-0.75)
ESG	0.0218*** (4.50)	0.0294*** (5.12)	0.0241*** (5.73)	0.135*** (3.37)	0.113 (1.37)	0.0462 (1.63)
SIZE	0.0000761 (0.19)	0.00000472 (0.00)	-0.0000314 (-0.03)	0.00789 (1.31)	0.00944 (0.51)	0.00913*** (2.84)
INF	-0.00829 (-0.26)	0.0509* (1.82)	0.00184 (0.07)	0.0583 (0.18)	0.0652 (0.33)	0.270* (1.69)
GDPG	0.0577*** (6.16)	0.0471*** (3.59)	0.0494*** (5.07)	0.395*** (2.88)	0.475*** (6.25)	0.266*** (4.07)
Constant	0.00476 (0.23)	-0.0734*** (-2.86)	-0.0519*** (-3.78)	-0.0536 (-0.24)	-0.438 (-1.20)	-0.108 (-1.58)
Observations	170	162	213	170	162	221
No. of instruments	24	25	27	24	25	25
AR1 (p-value)	0.000	0.000	0.000	0.000	0.000	0.000
AR2 (p-value)	0.307	0.861	0.404	0.184	0.343	0.344
Sargan (p-value)	0.254	0.735	0.172	0.946	0.174	0.611
Hansen-J (p-value)	0.160	0.856	0.751	0.625	0.997	0.796

* p<0.10, ** p<0.05, *** p<0.010

Robustness Check

As a robustness check, this study employs dynamic panel estimation using the system GMM approach. The lagged dependent variables (L.ROA and L.ROE) are positively significant across all specifications. Importantly, the main findings remain broadly consistent. Inclusion (INC) and the composite D&I measure continue to show negative associations with performance, and the diversity variable (DIV) also exhibits a negative relationship. These results suggest that the negative relationships identified in the baseline model are robust. Furthermore, the diagnostic tests support the validity of the GMM estimation. The AR(2) tests do not indicate second-order autocorrelation, and the Hansen and Sargan tests confirm the validity of the instruments used.

6. Conclusion

This study provides empirical evidence on the relationship between diversity and inclusion and bank performance in ASEAN 5 and Vietnam countries. The findings indicate that inclusion and the composite diversity and inclusion measures are negatively associated with bank profitability. These results suggest that the integration of diversity and inclusion practices may involve organizational challenges. Therefore, it could be associated with variations in financial performance, implying that the potential benefits of diversity and inclusion may depend on how effectively these practices are managed and embedded within the organization.

From a theoretical perspective, this study contributes to the Resource-Based View (RBV) literature by suggesting that diversity and inclusion can be considered as a crucial organizational resource. However, their value may not be automatically realized in terms of financial performance. In line with RBV, the findings indicate that resources such as workforce diversity may require effective integration, coordination, and alignment with organizational capabilities in order to generate value. Thus, the performance implications of diversity depend not only on their presence, but also on how it is strategically managed within the company.

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