Moderating Role of Internationalization and Firm Size on The Relationship between Institutional Ownership and Earnings Quality

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Abstract

This study examines the moderating effects of internationalization and firm size on the relationship between institutional ownership and earnings quality. The sample consisted of 326 firm-year observations from four industries listed on the Stock Exchange of Thailand (SET) during the period 2017–2019. The findings revealed that institutional ownership did not have a significant effect on earnings quality. However, internationalization positively moderated this relationship, while firm size did not exhibit such an effect. Further analysis indicated that institutional ownership was positively and significantly associated with earnings quality only in firms that operated internationally and were of medium to large size. These results point to the value of effective corporate governance mechanisms, particularly for firms expanding into international markets with institutional investors as shareholders. The study contributes to a more profound understanding of the conditional factors affecting earnings quality in emerging market contexts.

Keywords: Earnings Quality, Institutional Ownership, Internationalization, Firm Size

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Introduction

Financial reporting is an important aspect of business communication because it gives stakeholders, especially investors, the clear information they need to make decisions (Francis et al., 2008; Schroeder et al., 2019; White et al., 2002). However, agency theory shows how opportunistic managers can harm the credibility of reports. When shareholders (principals) allocate tasks to executives (agents), it can lead to information gaps and possible conflicts of interest (Clarke, 2004; Jensen & Meckling, 1976). These disagreements can lead to earnings management, defined as the practice of managers altering accounting numbers for their own benefit, which may ultimately harm the company's value (Healy & Wahlen, 1999).

Corporate governance tools like institutional ownership try to ensure that managers do what is best for shareholders (Anand, 2007). Institutional investors, including pension and mutual funds, possess the financial resources and expertise necessary to closely monitor companies (Bao & Lewellyn, 2017). Research from developing countries like Nigeria and India suggests that more institutional ownership leads to better earnings quality by stopping opportunistic reporting (Oyebamiji, 2021; Potharla et al., 2021). These results support the idea that institutional investors have both the motivation and the ability to look closely at how managers act, which makes financial statements more reliable (Lima et al., 2018; Solikhah et al., 2022).

However, the efficiency of institutional monitoring may depend on things like a company's level of globalization. When business goes global, it must confront more complicated and unclear rules and markets, which provide managers with more freedom to make decisions (Denis et al., 2002; Hussain et al., 2021; Welch & Luostarinen, 1988). From the perspective of an agency, this operational dispersion can raise agency expenditure, which means that monitoring needs to be stricter (Denis et al., 1999). Because of this, the size of a company's overseas operations could have a big effect on the link between institutional ownership and earnings quality (Choi, 2021). Firm size is another factor that could influence this interaction. Regulators and analysts scrutinize larger companies more closely, which can prevent them from manipulating earnings (Watts & Zimmerman, 1978). These companies also benefit from already existing governance mechanisms that can help them provide clear financial disclosures (Mutunga & Owino, 2017; Solikhah et al., 2022). Still, the evidence from studies is mixed. Some studies indicate that bigger companies have better profit quality (Purnamasari & Fachrurrozie, 2020), while

others show that size doesn't matter (Kristiawan, 2024). Therefore, a closer examination is necessary to determine whether a company's size facilitates or hinders institutional investors' ability to monitor operations.

In this context, the current study looks at how institutional ownership, internationalization, and firm size all affect the quality of earnings in the Thai corporate sector. This is a suitable place to do the study since it has a mix of companies that do business around the world and companies of different sizes. Using Conditional Process Analysis Hayes (2017), a quantitative tool that lets us look closely at these complicated connections, the study looks at the combined effects. This method makes the analysis more accurate and in-depth. The results should have real world effects on stakeholders in Thailand and other emerging countries. They should help improve company governance and make financial reporting clearer.

Literature review

Agency Theory

Agency theory, as proposed by Jensen and Meckling (1976), examines the principal-agent relationship within corporate structures, where owners (principals) delegate management to executives (agents). This theory explains how managers may engage in earnings management (EM) to prioritize personal interests over shareholder value. Information asymmetry and environmental uncertainties contribute to this agency problem, where agents may act contrary to principals' objectives. Effective corporate governance mechanisms, including monitoring and control frameworks, are crucial for aligning agent behavior with principal interests (Anand, 2007; Clarke, 2004).

Earnings quality

Earnings quality is a complicated notion that includes various qualities, such as persistence, predictability, and the separation of discretionary and non-discretionary components (Schipper & Vincent, 2003). Accrual-based models are frequently used in academic literature to measure earnings quality, with the assumption that earnings include both cash flow and accrual components (Dechow et al., 2010). Accruals are important in accounting because they ensure that revenues and expenses are properly reported at the same time. However, the discretionary components of management also serve as a route for earnings management, which can distort genuine performance (Healy & Wahlen, 1999).

Accrual accounting recognizes revenues and expenses as they are received or incurred, regardless of when the cash is exchanged. This procedure requires management to make estimates and judgments. Total accruals can be divided into two categories: non-discretionary and discretionary accruals. Non-discretionary accruals are typical and expected accruals resulting from a company's business activities and influenced by its economic circumstances. Discretionary accruals, on the other hand, are the outcome of opportunistic administrative decisions in applying accounting standards (Healy, 1985; Jones, 1991). A larger degree of discretionary accruals is typically viewed as indicating lower profit quality, implying that earnings are artificially inflated or deflated.

Researchers created several models that experimentally measure discretionary accruals. Jones (1991) suggested one of the most influential and extensively used models, which was later revised by Dechow et al. (1995) into what is now known as the modified Jones model. According to the original Jones model, non-discretionary accruals are determined by changes in revenue and gross property, plant, and equipment. The model is generated using a time-series or cross-sectional regression on a sample of firms, and the residuals are used to estimate discretionary accruals. Dechow et al. (1995) discovered a flaw in the Jones model: it implies that all increases in revenue are non-discretionary. Managers, on the other hand, can manipulate profitability by extending lax credit terms to speed up revenue recognition. To address this, the modified Jones model adjusts total revenue for changes in accounts receivable. This adjustment is intended to better account for the effect of changes in a company's economic situation on nondiscretionary accruals. The model is typically specified as follows:

$$TA_{it} = NI_{it} - CFO_{it} \quad (1)$$

$$TA_{it}/A_{i,t-1} = \beta_1(1/A_{i,t-1}) + \beta_2(\Delta Rev_{i\,t}/A_{i,t-1} - \Delta Rec_{i\,t}/A_{i,t-1}) + \beta_3(PPE_{it}/A_{i,t-1}) + \varepsilon_{it} \quad (2)$$

$$NDA_{it} = \beta_1(1/A_{i,t-1}) + \beta_2(\Delta Rev_{i\,t}/A_{i,t-1} - \Delta Rec_{i\,t}/A_{i,t-1}) + \beta_3(PPE_{it}/A_{i,t-1}) \quad (3)$$

$$DA_{it} = TA_{it} - NDA_{it} \quad (4)$$

Where:

TA_{it} = Total accruals for firm i in year t, calculated as (Net Income - Cash Flow from Operations)

$A_{i,t-1}$ = Total assets for firm i in year t –1.

Δ Rev = Change in revenues for firm i in year t

Δ Rec = Change in net receivables for firm i in year t

NDA_{it} = Non-discretionary accruals of firm i in year t

DA_{it} = Discretionary accruals of firm i in year t

Institutional Ownership

Institutional investor participation has become a significant force in corporate monitoring, safeguarding minority shareholder interests (Daily et al., 2003). The substantial growth in institutional holdings has established powerful constituencies that play a crucial role in corporate governance. Specifically, institutional investors can enhance corporate governance in Asian firms by mitigating conflicts between controlling and minority shareholders (Claessens & Fan, 2002). Their resources, including expertise and active voting rights, facilitate diligent monitoring (Donnelly & Mulcahy, 2008). These institutional stakeholders often represent diverse sectors, such as insurance, banking, pension funds, and investment firms (Abd Alhadi et al., 2020).

Internationalization

Internationalization, geographic diversification, international diversification, international expansion, and globalization are interrelated terms often used to describe the same strategic management construct (Hitt et al., 2006). According to Hanson et al. (2016), internationalization represented a strategic approach through which firms extend their products or services beyond domestic borders to target diverse geographic markets worldwide. This process encompasses the strategies and mechanisms companies employ to enter and establish operations in foreign nations (Welch & Luostarinen, 1988).Through internationalization, businesses can expand into new geographical territories, explore novel revenue generation opportunities, and ultimately achieve substantial financial gains (Costa et al., 2018).

Institutional Ownership and Earnings Quality

Institutional shareholders, such as pension funds, investment funds, banks, and insurance companies, have considerable power due to their enormous financial commitments and greater access to information (Bao & Lewellyn, 2017). Their resources allow for more accurate profit estimates and comprehensive evaluations of corporate performance. According to research, institutional ownership has a good association with earnings quality. For example, research in

Nigeria and India suggests that institutional ownership improves monitoring, lowering earnings management and supporting the active monitoring hypothesis (Oyebamiji, 2021; Potharla et al., 2021). With large ownership, these investors adopt greater governance, resulting in higher financial reporting standards, especially in countries with lax shareholder rights (Lima et al., 2018; Solikhah et al., 2022). These data indicate that higher institutional ownership improves earnings quality by enhancing governance and reducing opportunistic accounting.

Hypothesis 1: There is a positive effect of institutional ownership on earnings quality, as proxied by discretionary accruals.

Moderating effect of Internationalization and Firm Size on Institutional Ownership and Earnings Quality

Internationalization

Internationalization can facilitate the separation of ownership and control, potentially leading to agency costs if managers make decisions that negatively impact shareholders (Denis et al., 2002; Jensen & Meckling, 1976). As a result, businesses operating in various regions are more likely to have their profits manipulated due to increasing complexity. This conclusion is backed up by real-world research that shows that international diversity is linked to higher discretionary accruals and long-term profitability, which gives managers more freedom (Choi, 2021; Hussain et al., 2021). This study looks at how internationalization changes the link between institutional ownership and profit quality in Thailand. This is because cross-border complexity can make institutional monitoring less effective.

Hypothesis 2: Internationalization moderates the relationship between institutional ownership and earnings quality, as proxied by discretionary accruals.

Firm Size

Firm size, typically measured by its total assets, significantly influences the quality of its profitability. According to Positive Accounting Theory, regulators and analysts pay more attention to large companies, which leads these companies to use more conservative accounting methods that make it harder to manage earnings (Watts & Zimmerman, 1978). Larger companies can benefit from economies of scale and more institutional owners, which can lower the incentives to manipulate and encourage clear reporting (Mutunga & Owino, 2017; Solikhah et al.,

2022). There is inconsistent evidence about its direct effect (Kristiawan, 2024; Purnamasari & Fachrurrozie, 2020), although firm size has been shown to be an important factor in other corporate governance situations (Githaiga et al., 2022). Therefore, this study looks at how it works as a moderator in Thai businesses.

Hypothesis 3: Firm size moderates the relationship between institutional ownership and earnings quality, as proxied by discretionary accruals.

Internationalization and Firm Size effects on Institutional Ownership and Earnings Quality

This study additionally investigates the joint moderating influence of internationalization and firm size, building on the prior ideas. Large companies operating in multiple countries face more complex rules and regulations, potentially complicating institutional oversight (Choi, 2021). But the extra attention that comes with being a big company might make up for the agency expenses that come with doing business in other countries (Denis et al., 1999; Solikhah et al., 2022). Examining these elements collectively provides a clearer understanding of how firm-level characteristics influence the impact of institutional ownership on the quality of financial reporting. This shows how complicated governance is in a worldwide economy.

Hypothesis 4: Internationalization and Firm size moderate the relationship between institutional ownership and earnings quality, as proxied by discretionary accruals.

Control Variables

Leverage: Firms with high leverage ratios may feel additional pressure to control their profitability so they don't break their debt covenants or obtain better terms on future loans (Yi-Mien & Tzu-Wen, 2016). Conversely, having a lot of debt can make creditors pay more attention, which could improve the quality of earnings (Muhtaseb et al., 2024). The Market-to-Book Ratio: Firms with many investment opportunities feel pressure from the market to keep positive expectations, which might lead them to adjust their earnings; however, having solid fundamentals can reduce the need to do so. There are several ways that sales growth affects earnings management. Rapid development could make it less tempting to cheat because strong, real performance meets the needs of stakeholders (Firnanti & Pirzada, 2019). On the other hand, slowing growth can make it harder to control profitability. Also, a history of great growth might set

high standards, which can lead to opportunistic manipulation when growth slows down as management tries to fulfill analyst projections (Naue et al., 2023). Finally, fixed effects for industry and year correct for unobserved heterogeneity. This method decreases omitted variable bias by considering industry-specific time-invariant characteristics and macroeconomic shocks that affect all businesses (Gormley & Matsa, 2014).

Conceptual framework

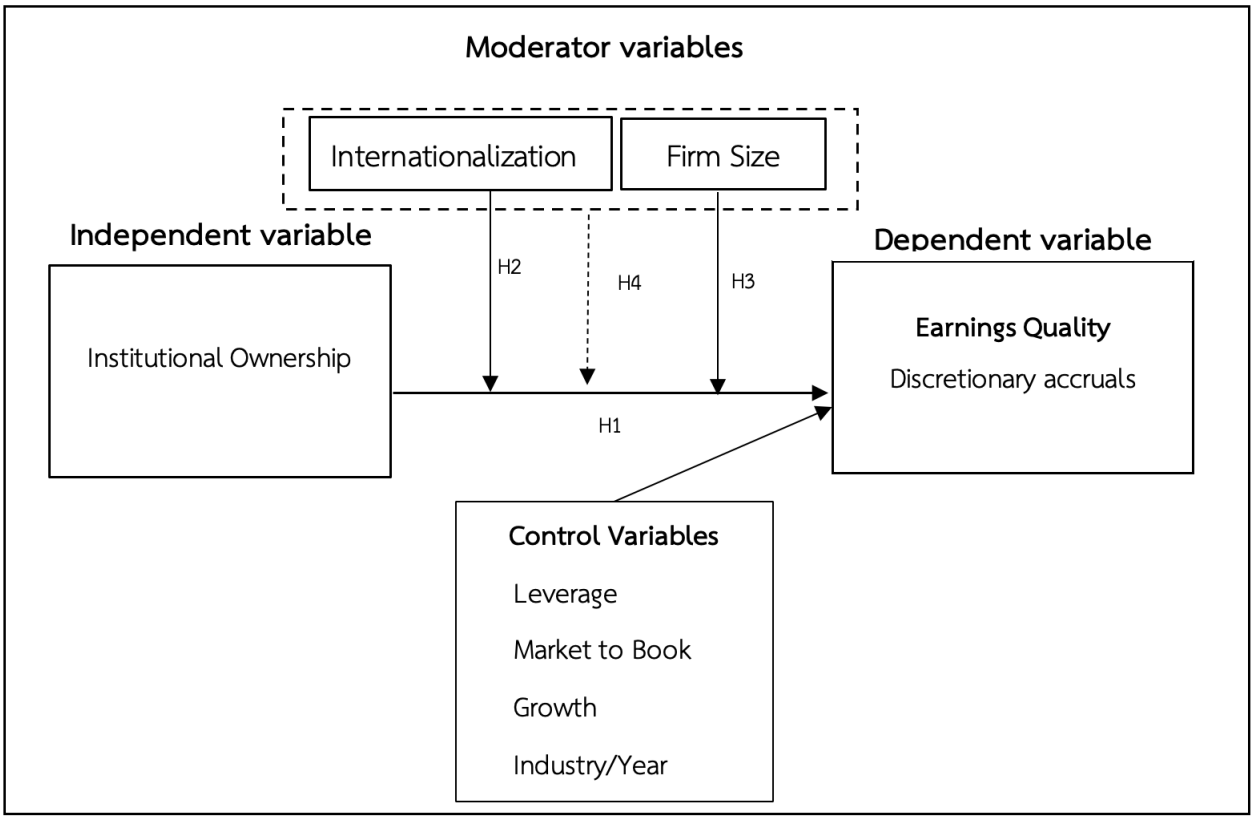

Figure 1 Conceptual framework

The conceptual framework (Fig. 1) combines agency theory with domestically generated governance capacity. Institutional owners operate as external monitors (agency alignment), but their success is dependent on environmental complexity (international diversification) and organizational resource endowment (firm size). Internationalization raises agency costs by spreading activities across jurisdictions (Denis et al., 1999), yet bigger size can enhance both monitoring demand and available monitoring resources (Watts & Zimmerman, 1978). The model thus predicts (a) a direct monitoring effect of institutional ownership on earnings quality, (b)

amplification of this effect through overseas operations, and (c) conditional reinforcement or dilution by firm size.

Methodology

Data and statistical analysis

This study focuses on companies listed on the Stock Exchange of Thailand (SET) in the agricultural and food, consumer products, industrial, and technology sectors between 2017 and 2019. The main reason for choosing these four industries is that they earn a large part of their money from foreign sources compared to their total revenue, making them a good fit for studying how companies manage their earnings when they have a lot of international business. The study period of 2017-2019 was deliberately chosen to capture pre-COVID-19 conditions, thereby avoiding potential data distortions from the pandemic's unprecedented economic disruptions that could confound the analysis of normal earnings management patterns.

Table 1 Number of samples and observations

	AGRO	CONSU	INDUS	TECH	Total
All listed companies during 2017-2019	165	108	246	108	627
Less: Unavailable or inadequate data	21	6	18	12	57
Outlier	18	4	10	8	40
Non institutional ownership	27	56	96	25	204
Final sample	99	42	122	63	326

SOURCE: Stock Exchange of Thailand

Statistical Analysis

Descriptive statistics were employed to present the fundamental features of the dataset, and hierarchical multiple regression analysis is conducted using Hayes (2017) PROCESS macro to test the hypotheses. To mitigate multicollinearity, direct terms are mean-centered (Aiken, 1991). For two-way interactions involving a single moderator (Hypotheses 2 and 3) use PROCESS Model 1, whereas for two-way interactions involving two moderators (Hypothesis 4) use PROCESS Model 2. Additionally, the pick-a-point method is utilized to interpret the interaction effects.

Regression Assumptions and Diagnostics

Prior to analysis, key regression assumptions were verified. Normality was confirmed through skewness (<3) and kurtosis (<10) (Kline, 2011), with transformations applied where necessary. The Durbin-Watson statistic (1.5–2.5) indicated no autocorrelation, while residual scatter plots confirmed homoscedasticity. Multicollinearity was assessed using tolerance values (near 1) and variance inflation factors (all VIF<10), confirming independence among predictors. These diagnostic checks ensured the robustness of the findings regarding ownership structures, earnings quality, and the moderating effects of internationalization and firm size.

Measurements for the variables

Table 2 Measurement of study variables

Variables	Acronym	Measurement
Discretionary Accruals	ABSDA	The absolute value of discretionary accruals Modified Jones Model by Dechow et al. (1995)
Institutional Ownership	INS	The proportion of total shares held by institutional investors
Internationalization	INTER	The firm's foreign sales ratio is greater than 10%; the dummy variable is 1; otherwise, 0.
Firm Size	SIZE	The natural logarithm of the firm’s total assets
Leverage	LEV	The ratio of total debt divided by total assets
Market-to-book ratio	MB	The market value of equity is divided by the book value of equity at the end of the fiscal year.
Sale Growth	GROWTH	Net sales for the current period, removing net sales from the prior period, and dividing by net sales from the prior period
Industry	IN	Dummy = 1 if firm belongs to SET one-digit industry *i*; 0 otherwise
Year	Y	Dummy = 1 for fiscal year t (2017–2019); 0 otherwise

Model specifications

Hypothesis 1: There is a positive effect of institutional ownership on earnings quality, as proxied by discretionary accruals.

$$ABSDA = \beta_0 + \beta_1 INS + \beta_2 LEV + \beta_3 MB + \beta_4 GROWTH + \beta_j Industry + \beta_k Year + \varepsilon$$

Hypothesis 2: Internationalization moderates the relationship between institutional ownership and earnings quality, as proxied by discretionary accruals.

$$ABSDA = \beta_0 + \beta_1 INS + \beta_2 INTER + \beta_3 (INS \times INTER) + \beta_4 LEV + \beta_5 MB + \beta_6 GROWTH + \beta_j Industry + \beta_k Year + \varepsilon$$

Hypothesis 3: Firm size moderates the relationship between institutional ownership and earnings quality, as proxied by discretionary accruals.

$$ABSDA = \beta_0 + \beta_1 INS + \beta_2 SIZE + \beta_3 (INS \times SIZE) + \beta_4 LEV + \beta_5 MB + \beta_6 GROWTH + \beta_j Industry + \beta_k Year + \varepsilon$$

Hypothesis 4: Internationalization and Firm size moderate the relationship between institutional ownership and earnings quality, as proxied by discretionary accruals.

Model test by PROCESS for SPSS (model 2)

$$ABSDA = \beta_0 + \beta_1 INS + \beta_2 INTER + \beta_3 SIZE + \beta_4 (INS \times INTER) + \beta_5 (INS \times SIZE) + \beta_6 LEV + \beta_7 MB + \beta_8 GROWTH\ \beta_j Industry + \beta_k Year + \varepsilon$$

Research Results

Descriptive statistics

Table 3 Descriptive statistics of the variables from 2017 to 2019

Variables	Minimum	Maximum	Mean	Std.
ABSDA	0.0001	0.0998	0.0300	0.0217
INS	0.0100	0.3800	0.0797	0.0748
INTER	0	1	0.6000	0.4920
SIZE	5.6528	8.8021	6.8626	0.6072
LEV	0.0224	0.9245	0.3943	0.2240
MB	0.1300	6.9200	1.7268	1.3873
GROWTH	-0.7563	0.9864	0.0226	0.2280

Table 3 presents descriptive statistics. Discretionary accruals (ABSDA) range from 0.0001 to 0.0998, with a mean of 0.0300. Institutional ownership (INS) ranges from 0.0100 to 0.3800, averaging 0.0797. Internationalization (INTER) ranges from 0.000 to 1.000, with a mean of 0.6000. Firm size (SIZE), using logarithm transformation, ranges from 5.6528 to 8.8021, averaging 6.8626. The leverage ratio (LEV) ranges from 0.0224 to 0.9245, with a mean of 0.3943. The market-to-book ratio (MB) ranges from 0.1300 to 6.9200, averaging 1.7268. Sales growth (GROWTH) ranges from -0.7563 to 0.9864, with a mean of 0.0226.

Research results of hypothesis

Table 4 Pearson's correlations of variables

Variable	ABSDA	INS	INTER	SIZE	LEV	MB	GROWTH
ABSDA	1						
INS	-0.031	1					
INTER	0.077	0.048	1				
SIZE	-0.098	.240**	.135*	1			
LEV	0.018	0.014	-.139*	.348**	1		
MB	0.094	.258**	-0.088	.229**	.197**	1	
GROWTH	-0.107	-0.014	-0.088	0.084	0.034	.133*	1

Note: * significance at the .05 level, ** significance at the .01 level

Table 4 displays the correlation matrix encompassing all dependent, independent, moderator, and control variables. The highest correlation coefficient is 0.348, suggesting that the regression model for Hypothesis 1 has no significant multicollinearity problem. Meanwhile, for Hypotheses 2 and 3, interaction terms were mean centered to further reduce multicollinearity concerns during interaction analysis.

Table 5 Results from a regression analysis

Variable	Model I		Model II		Model III		Model IV	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
Constant	0.024*	0.000	0.022*	0.000	0.055*	0.000	0.022*	0.000
INS	-0.020	0.170	0.029	0.171	0.008	0.925	0.037	0.097

Table 5 Results from a regression analysis (Continued)

Variable	Model I		Model II		Model III		Model IV	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
INTER			0.007*	0.024			0.001	0.509
SIZE					-0.005*	0.024	-0.005*	0.019
INS x INTER			-0.079*	0.002			-0.082*	0.003
INS x SIZE					-0.006	0.951	-0.009	0.671
LEV	0.004	0.464	0.002	0.660	0.007	0.156	0.006	0.218
MB	0.001	0.440	0.001	0.512	0.001	0.350	0.001	0.405
GROWTH	-0.009	0.054	-0.011*	0.020	-0.008	0.071	-0.010*	0.032
Industry, Year Effect	yes		yes		yes		yes	
R^2 Adjusted	0.314		0.331		0.325		0.340	
VIF	1.067-2.603		1.088-2.665		1.091-2.624		1.114-2.876	
F-statistics	17.567*		15.601*		15.200*		13.933*	
Durbin-Watson	1.965		1.960		1.968		1.985	
Observations	326		326		326		326	

Note: * significance at the .05 level

Table 5 summarizes the regression analysis examining whether internationalization (INTER) and firm size (SIZE) moderate the relationship between institutional ownership (INS) and earnings quality (proxied by discretionary accruals, ABSDA). Overall, the model is acceptable, with $F = 13.933$ ($p < .05$), a Durbin-Watson statistic of 1.985, and an adjusted R^2 of 0.340.

To test Hypothesis 1, Model I focuses on the direct effect of INS on ABSDA. The coefficient for INS is -0.020 ($p > .05$), indicating no statistically significant relationship; therefore, institutional ownership does not predict earnings quality, and Hypothesis 1 is not supported.

Turning to Hypothesis 2, which proposes that internationalization strengthens the impact of INS on ABSDA, Model II shows a significant interaction term (INS × INTER) with a coefficient of -0.079 ($p < .05$). This result implies that the effect of institutional ownership on

earnings quality is more pronounced for firms engaged in international operations, offering support for Hypothesis 2.

For Hypothesis 3, the study hypothesizes that larger firms enhance the relationship between INS and ABSDA. However, Model III reveals an interaction coefficient of -0.006 ($p > .05$), indicating no moderating effect of firm size. Consequently, Hypothesis 3 receives no empirical support.

Lastly, Model IV incorporates both moderators simultaneously. The interaction of INS and INTER (INS × INTER) remains significant with a coefficient of -0.082 ($p < .05$), whereas the INS and SIZE interaction (INS × SIZE) shows no significance at -0.009 ($p > .05$). This result implies that the effect of institutional ownership on earnings quality is more pronounced for firms engaged in international operations. This result implies that the effect of institutional ownership on earnings quality is more pronounced for firms engaged in international operations, but firm size has no moderating effect.

Further analysis: Moderating the effect of both internationalization and firm size on the relationship between institutional ownership and discretionary accruals

According to the results for Model IV, the interaction between INS and INTER is significant at -0.082 ($p = .0028$), while the interaction between INS and SIZE is not significant at -0.009 ($p = .6712$). To further analyze how internationalization and firm size function as moderating variables that shape discretionary accruals, we will use PROCESS Model 2 (see Table 6). The combined influence of the two interaction terms contributes 1.85% to the variance in earnings quality ($F (2, 312) = 4.5729$, $p < .05$).

Table 6 Output from the PROCESS macro for the interaction effect of institutional ownership (INS), internationalization (INTER), and firm size (SIZE) on discretionary accruals (ABSDA)

Model Summary							
	R	R^2	MSE	F	df1	df2	p
	.6061	.3673	.0003	13.9335	13	312	.0000
Test(s) of highest order unconditional interaction (s):							
		R^2-change	F	df1	df2	p-value	
X x W		0.0184	9.0762	1	312	.0028	

Table 6 Output from the PROCESS macro for the interaction effect of institutional ownership (INS), internationalization (INTER), and firm size (SIZE) on discretionary accruals (ABSDA) (Continued)

Test(s) of highest order unconditional interaction (s):

	R^2-change	F	df1	df2	p-value
X x Z	0.0004	0.1805	1	312	.6712
BOTH	0.0185	4.5729	2	312	.0110

Focal predict: INS (X), Mod var: INTER (W), Mod var: SIZE (Z)

Conditional effects of the focal predictor at values of the moderator(s):

INTER	SIZE	Effect	SE	t-value	p-value	LLCI	ULCI
No	Small	0.0427	0.0286	1.4962	.1356	-0.0135	0.0989
No	Average	0.0373	0.0224	1.6667	.0966	-0.0067	0.0813
No	Large	0.0319	0.0226	1.4078	.1602	-0.0127	0.0764
Yes	Small	-0.0392	0.0250	-1.5633	.1190	-0.0884	0.0101
Yes	Average	-0.0446	0.0187	-2.3839	.0177*	-0.0814	-0.0078
Yes	Large	-0.0500	0.0200	-2.5049	.0128*	-0.0893	-0.0107

Table 6 presents the conditional impact of institutional ownership on earnings quality, considering different levels of internationalization and firm size. Notably, institutional ownership significantly affects earnings quality in two specific contexts: (1) among internationalized firms of average size (Effect = -0.0446, $p < 0.05$) and (2) among internationalized firms of larger size (Effect = -0.0500, $p < 0.05$). In contrast, when firms are not internationalized regardless of size (Effects = 0.0427, 0.0373, 0.0319, $p > 0.05$) or when they are internationalized but small (Effect = -0.0392, $p > 0.05$), the effect of institutional ownership on earnings quality is statistically insignificant.

Discussion

This study investigated the moderating effects of internationalization and firm size on the relationship between institutional ownership and earnings quality in the Thai corporate sector. The first hypothesis (H1) of a direct, positive association between institutional ownership and earnings quality was not validated. This conclusion contradicts earlier studies in other emerging markets, where institutional investors have been shown to effectively constrain earnings

management (Oyebamiji, 2021; Potharla et al., 2021). In support of Hypothesis 2, the study found that internationalization significantly modifies the relationship between institutional ownership and earnings quality. This finding is consistent with the agency theory perspective, which holds that international expansion increases operational complexity and information asymmetry, raising agency costs (Denis et al., 1999; Denis et al., 2002). In such situations, institutional investors' sophisticated monitoring and expertise become more crucial and, as the findings show, more effective in limiting opportunistic managerial conduct (Hussain et al., 2021). In contrast, Hypothesis 3, which postulated a moderating influence for company size, was not supported. The relationship between institutional ownership and firm size was insignificant. This finding is consistent with previous research that revealed no significant influence of firm size on earnings quality (Kristiawan, 2024), but it differs from other research that suggests larger organizations produce higher quality earnings (Purnamasari & Fachrurrozie, 2020). The result means that, in the context of this investigation, scalability does not increase or decrease institutional investors' monitoring effectiveness.

The most convincing findings came from the conditional process analysis (H4), which examined the cumulative moderating effects. The relationship between institutional ownership and greater earnings quality was shown to be significant only under specified conditions: in firms that are both internationalized and of average or large size. For non-internationalized enterprises (of any size) and tiny internationalized firms, the monitoring effect of institutional ownership was statistically insignificant. This unexpected discovery suggests a synergistic impact. Jensen and Meckling (1976) assert that increased agency risks resulting from internationalization necessitate strong monitoring. Institutional investors, on the other hand, can efficiently supervise larger firms due to their visibility, resources, and established governance processes(Mutunga & Owino, 2017; Watts & Zimmerman, 1978). In conclusion, institutional shareholders' monitoring capacity is most successful when agency problems are complex (international operations) and the governance platform is adequate for larger firms.

Conclusion

This study suggests that institutional ownership's usefulness as a corporate governance strategy for ensuring earnings quality is context-dependent, rather than universal. In the Thai

enterprises studied, there is no strong, direct association between institutional holdings and discretionary accruals. Instead, institutional investors' monitoring function is engaged, and it is most effective in large, internationally diverse enterprises. The study demonstrates how the interplay between a company's operational scope (internationalization) and structural scale (size) influences financial reporting outcomes. These findings suggest to investors and analysts that simply examining the level of institutional ownership is insufficient; its impact must be considered in conjunction with the firm's strategic and structural characteristics. This study emphasizes the importance of developing governance frameworks that consider the specific issues and complexities that large, globalizing organizations face.

Contribution

Theoretical Contribution: The study extends agency theory beyond simple, direct links. It indicates that the effectiveness of a major governance tool, institutional ownership, varies. By using a conditional process model, it shows that the way institutional ownership monitors are affected by having both internationalization and a large firm size at the same time. This study offers a more sophisticated and realistic model of corporate governance, illustrating that the impact of external monitors is contingent on a complex interplay of organizational factors that influence agency costs and monitoring efficiency (Denis et al., 2002; Jensen & Meckling, 1976).

Empirical Contribution: The core empirical finding is novel: institutional ownership significantly improves earnings quality only for firms that are both internationalized and large. Previous studies have frequently studied these factors in isolation (Choi, 2021; Githaiga et al., 2022). This study is among the first to demonstrate their combined, synergistic effect, providing a specific, data-driven answer to the question of when institutional investors are most effective.

Methodological Contribution: Using the Hayes (2017) PROCESS macro (Model 2) to examine a conditional moderation model about corporate governance in a developing market is a valuable addition to the research. This strong statistical method enables a clearer and more detailed look at complicated interactions compared to regular regression models, serving as a useful guide for future finance and accounting research.

Limitations and Future Research

This study's limitations present opportunities for future research. The sample was limited to four industries on the Stock Exchange of Thailand, potentially limiting generalizability to other sectors like banking or services with different regulatory environments. The years 2017 to 2019 were chosen to avoid the impact of COVID-19, but this limits how the findings can be applied during crises, indicating that future research could compare the effects of economic shocks on institutional ownership and earnings quality before, during, and after the pandemic. Furthermore, the way internationalization is measured (using a 10% foreign sales threshold) and the single approach to institutional ownership overlook significant differences. Future research could use more detailed internationalization measures and distinguish between types of institutional investors (such as domestic vs. foreign and long-term vs. short-term) to better understand their different levels of oversight and motivations.

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