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The moderating role of internationalization in the relationship between family ownership and earnings quality: Empirical evidence from Thailand



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ABSTRACT

This study investigates how internationalization influences the relationship between family ownership and earnings quality. The analysis is based on 537 firm-year observations from 179 companies listed in Thailand, covering the Agricultural and Food, Consumer Products, Industrials, and Technology sectors during 2017-2019. The study employs firm-fixed-effects panel regression models with cluster-robust standard errors. Earnings quality is measured by the absolute value of discretionary accruals, while internationalization is captured by the foreign-sales-to-total-sales ratio (FSTS). The main findings indicate that family ownership alone does not have a significant impact on earnings quality. However, a higher level of foreign sales is weakly associated with increased abnormal accruals. Importantly, the results show that when foreign sales exceed about 25% of total revenue, family ownership is linked to lower discretionary accruals, suggesting improved earnings quality. Additionally, the advantages of strong governance practices appear to grow as foreign sales increase. This research adds to the literature on corporate governance and international business by showing that the influence of family ownership on financial reporting depends on the firm's international exposure. In practice, investors may perceive internationally active family firms as having lower reporting risk, while regulators may need to focus more on domestic family-owned firms.

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1. Introduction

High-quality financial reporting is a cornerstone of well-functioning capital markets since it allows investors to evaluate performance, allocate capital and discipline underperforming efficiently, managers. Yet the credibility of reported earnings is constantly challenged by the latitude managers enjoy under accrual accounting. This tension is especially visible in emerging markets, where ownership tends to be concentrated in founding families and firms are rapidly expanding across borders. Thailand provides a vivid example: two-thirds of companies listed on the Stock Exchange of Thailand (SET) are familycontrolled, and the share engaged in outward foreign direct investment has risen from 13 percent in 2006 2019. Whether percent in multinationals deliver higher or lower earnings

quality is therefore immediately relevant to investors and regulators alike. Agency theory presents conflicting hypotheses. The alignment view argues that large family owners with a long-term perspective possess both the incentive and the ability to mitigate managerial opportunism, thereby enhancing the quality of earnings. This stewardship role is supported by empirical data from Thailand (Boonlert-U-Thai and Sen, 2019) and the United States (Wang, 2006). Conversely, the entrenchment perspective cautions that concentrated control can insulate the dominant family from outside discipline, thereby allowing the extraction of private benefits and the masking of actual performance under aggressive accruals (Fan and Wong, 2002).

Internationalization introduces additional landscape. complexity to this **Expanding** internationally can link companies to more global disciplined reporting rules, sophisticated investors, and stricter foreign regulators forces which should magnify the alignment effect. Conversely, the geographic dispersion accounting complexity of multinational companies increase information asymmetry and create new opportunities for income manipulation, thereby

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reinforcing entrenchment. Previous studies produce contradictory results: some show reduced discretionary accruals in more international companies (Hussain et al., 2021; Mazzioni and Klann, 2018), while others find the opposite (Chin et al., 2009; Han and Wu, 2023).

Against this background, the present study examines whether family ownership enhances or diminishes earnings quality in Thai listed companies, and whether the degree of internationalization moderates this relationship. Discretionary accruals, estimated using the Modified Jones Model, serve as the inverse proxy for earnings quality. The analysis is based on 537 firm-year observations from 2017 to 2019. Internationalization is measured by the ratio of foreign to total sales, capturing both the firm's market reach and the extent of external scrutiny.

2. Literature review

2.1. Theoretical background

Agency theory explains the relationship between managers (agents) and shareholders (principals), in which shareholders assign power to managers to handle company resources and make decisions on their behalf. Agency problems resulting from this division of ownership and control can especially arise when managers pursue personal interests at the expense of shareholders. Within the framework of financial reporting, this behavior typically manifests as earnings management, especially through discretionary accruals that lower earnings quality (Dechow et al., 2010). Agency conflicts can be either reduced or exacerbated largely by ownership structure. Two opposing effects are noted in familyowned companies. Large family owners, according to the alignment effect, have strong incentives to monitor management and ensure honest reporting because of their long-term financial and reputational interests (Anderson and Reeb, 2003). Through concentrated ownership, the entrenchment effect suggests that controlling families may dominate decision-making and conceal self-serving activities, including related-party transactions and earnings manipulation (Fan and Wong, 2002). Thus, the impact of family ownership on earnings quality, defined as the degree to which earnings reflect the actual performance of a company, is theoretically ambiguous and context-dependent (Wang, 2006).

One important moderate factor internationalization since businesses are expanding into foreign markets. It can be argued that internationalization exposes companies to global investors, stricter regulatory environments, and reputational scrutiny, thereby improving governance. This pressure on family companies to provide more transparent financial reporting can help strengthen the alignment effect (Hussain et al., 2021; Mazzioni and Klann, 2018). Conversely, the complexity and opacity associated multinational operations can increase information asymmetry and create more opportunities for earnings manipulation, thereby strengthening the entrenchment effect (Chin et al., 2009). Thus, it remains an empirical question whether internationalization enhances or diminishes quality earnings in family companies.

This study uses discretionary accruals, estimated using the Modified Jones Model (Dechow et al., 1995), to capture dynamics in earnings quality. This model isolates the abnormal component of total accruals, those not explained by a company's operational activities, as a proxy for earnings management. Discretionary accruals serve as a reliable inverse indicator of earnings quality since their absolute value reflects the degree of accounting discretion exercised by managers. They provide a widely accepted metric for assessing the moderating effect of internationalization on the relationship between family ownership and earnings quality, given their theoretical basis in agency-related opportunism and their empirical robustness in both developed and emerging markets (Kothari et al., 2005).

2.2. Earnings quality

Earnings quality has been defined in multiple, partly overlapping ways, ranging from the degree to which the reported income maps onto underlying cash flows (Schipper and Vincent, 2003) to its usefulness for forecasting future performance (Dechow et al., 2010). Across this diverse literature, two themes emerge: (i) earnings management is the primary threat to quality, and (ii) accruals are managers' most flexible instrument for such manipulation. Since accrual accounting requires judgment in areas such as revenue recognition and expense matching, abnormal use of accruals provides a direct window into managerial discretion. Consequently, the absolute magnitude discretionary accruals (DA), typically isolated using the Modified Jones Model (Dechow et al., 1995), has become the most widely accepted and scalable proxy for low earnings quality (Kothari et al., 2005). Analyses show that DA explains more variation in subsequent restatements and enforcement actions than alternative measures such as earnings persistence or value relevance (Francis et al., 2004), underscoring its empirical power. This study examines Thai listed firms, in internationalization, measured by the extent of foreign sales, moderates the effect of family ownership on earnings quality. Using DA as the earnings quality metric is particularly appropriate here for two reasons.

Regarding mechanism visibility, international expansion exposes firms to various GAAP environments and allows for profit-shifting through transfer pricing and the timing of intercompany transactions (Chin et al., 2009). These behaviors manifest first in accruals rather than in cash flow; DA therefore capture the precise mechanism through which internationalized firms might alter earnings. In terms of governance sensitivity, the "bonding"

view argues that operating in jurisdictions with strong investor protection curtails earnings manipulation (Mazzioni and Klann, 2018), whereas the "complexity" view contends that multinational structures raise information asymmetry and facilitate accrual-based management (Han and Wu, 2023). Both theories predict changes in accrual discretion, making DA the most theoretically aligned outcome variable for testing an interaction with internationalization intensity.

2.3. Hypothesis development

2.3.1. Family ownership

Family ownership is widespread globally, with founding families or close relatives holding significant stakes in businesses. Publicly listed family-run firms are particularly prevalent in Asia. According to Claessens et al. (2000), families hold most controlling shares in East Asian companies, including those in Thailand. Two competing theories explain the impact of family ownership: the entrenchment effect and the alignment effect. The alignment theory posits that, due to their long-term commitment and substantial ownership, family owners monitor management and align their interests with those of minority shareholders, thereby enhancing firm performance. Families are often motivated to sustain the business because they derive socioemotional, financial, and reputational benefits from it, which can lead to higher earnings quality.

Wang (2006) discovered that family-founded S&P 500 companies exhibit more consistent earnings and fewer abnormal accruals compared to non-family firms. This suggests that aggressive accounting is constrained by the long-term goals and reputational concerns of family owners, resulting in more credible profit reports. Similarly, Boonlert-U-Thai and Sen (2019) showed that family-owned businesses in Thailand, particularly those run by founding family members, outperform other firms in terms of earnings quality. Their study found higher accrual quality and earnings persistence among Thai family businesses, consistent with their focus on transparent financial reporting to protect business value and reputation. These findings support the alignment hypothesis, which argues that controlling families act as corporate stewards by preventing earnings manipulation and improving earnings quality.

Wan Mohammad and Wasiuzzaman (2020) validated the alignment effect by showing that family ownership in Malaysia reduces earnings management. Their sample family firms engaged in less accrual manipulation, as opportunistic behavior is deterred by reputational capital and family norms. Additionally, Ghaleb et al. (2020) found a negative correlation between family ownership concentration and earnings management, indicating that familyowned firms produce more stable earnings. They interpret this as evidence that families are capable of

self-governance and avoid opportunistic actions that would harm minority shareholders.

However, the entrenchment hypothesis suggests that concentrated family control may reduce earnings quality because dominant families can extract private benefits while minority shareholders have limited protection. Controlling households may be emboldened by weak law enforcement. Financial reporting may then be used to conceal poor performance or expropriation. Fan and Wong (2002) provide novel evidence from East Asia showing that accounting earnings are less informative when voting power is concentrated within a family. Financial statements may be manipulated by family insiders for their own benefit, reducing transparency as entrenched owners distort earnings to hide resource diversion or maintain control. Instead of providing objective reporting, controlling owners craft financial statements to serve their interests (Fan and Wong, 2002). This conflict between minority owners and the controlling family represents a core agency problem. Families may engage in earnings management, such as relatedparty transactions or earnings smoothing, to strengthen their position and limit external intervention.

Tessema et al. (2018) noted in their reviews that family firm earnings quality can vary depending on whether aligning interests or defending control dominates. The entrenchment effect may encourage earnings manipulation in societies with weak investor protection. Thus, the relationship between family ownership and earnings quality is complex. Despite warnings that vested interests and opaque disclosures would harm reporting quality, recent research, including studies from Thailand and other Asian countries, often finds that family-controlled firms exhibit higher earnings quality. To protect their reputation and legacy, long-term family owners may limit opportunistic financial reporting. Boonlert-U-Thai and Sen (2019) found that familyrun businesses in Thailand produce more stable earnings, suggesting that the benefits of family entrenchment may outweigh the drawbacks. Family ownership can undermine quality when power is abused, but can also enhance it through careful stewardship and aligned interests. The outcome depends on governance mechanisms, management practices, and legal protections.

This study establishes the framework to examine how family ownership and other factors, such as internationalization, influence earnings quality. Based on the arguments presented, the following hypothesis is proposed:

H1: Family ownership has a positive effect on earnings quality.

2.3.2. Internationalization

Internationalizing corporate operations across national borders can take various forms, including exporting, establishing overseas subsidiaries, engaging in global mergers and acquisitions, or cross-listing on foreign stock exchanges (Hitt et al., 2006). According to Sullivan (1994), several indicators can be used to measure a company's level of internationalization, such as the percentage of foreign sales to total sales, the percentage of foreign assets to total assets, and the number of overseas subsidiaries or geographic divisions. A highly internationalized firm generates a significant portion of its income abroad and operates multiple foreign entities.

In Thailand, publicly listed companies have increasingly embraced globalization in recent years. Many Thai firms have evolved into regional or global players, making overseas investments to pursue growth opportunities. Data from the SET show that the proportion of Thai-listed companies engaged in outward foreign direct investment (OFDI) rose sharply from 13% in 2006 to 42% in 2019. A notable example is the large Thai agribusiness Charoen Pokphand Foods (CPF), which operates in 17 countries, with approximately 27% of its \$17 billion in sales generated domestically and over 73% from foreign markets. These figures illustrate the significant globalization of leading Thai family businesses.

Greater engagement in foreign markets exposes Thai firms to foreign regulators, international standards, and global investors, accounting potentially influencing their financial reporting policies. Therefore, understanding the effects of internationalization on earnings quality earnings management is critical. Mazzioni and Klann (2018) argued that internationalization reduces agency conflicts and information asymmetry by "bonding" firms to stricter regulatory regimes and the expectations of international investors. Hussain et al. (2021) analyzed firms in Pakistan, India, Hong Kong, and Japan and found that increased internationalization improves earnings quality by enhancing accrual quality and reducing accrual errors. The authors attribute these improvements to stronger governance and greater pressure for accurate reporting in multinational firms.

Many studies find that multinational corporations tend to disclose information more transparently, correlating with improved earnings quality and a lower cost of equity. For instance, Masud et al. (2017) showed that business diversification, including international diversification, is negatively correlated with earnings management, suggesting that diversification enhances earnings quality by reducing manipulation. Similarly, El Mehdi and Seboui (2011) found that firms with greater diversification demonstrate better earnings quality, reflecting a lower propensity for earnings management. These findings suggest that diversification and global reach can impose discipline or reduce earnings volatility, thereby improving reporting quality.

In contrast, internationalization may deteriorate earnings quality due to increased operational complexity and opacity, consistent with agency cost theories. Managing operations across multiple countries complicates consolidation processes, introduces differences in accounting standards that remain only partially harmonized, and increases opportunities for profit shifting across borders. The information environment of a highly diversified multinational may be less transparent to investors, as it becomes difficult to distinguish performance by region or segment. Chin et al. (2009) argued that the positive association between discretionary accruals and global diversification indicates heightened earnings management among firms with extensive international operations.

Some studies support this negative view. For example, Chin et al. (2009) and Lim et al. (2008) found a positive correlation between the degree of international diversification and discretionary accruals, implying that multinational firms may engage in greater earnings manipulation in their foreign operations. Han and Wu (2023) provided evidence from China showing internationalization increases accrual-based earnings management in multinationals from emerging economies.

The context is crucial. Depending on corporate governance, host country regulations, and the degree of international involvement, internationalization can affect earnings quality in different ways. Firms from countries with strong domestic governance may benefit more from the bonding effect as they expand internationally, while those operating in countries with weaker governance might initially exploit complexity to manage earnings. Research on international expansion indicates that companies often experience greater earnings volatility and inconsistent disclosure early on, which can reduce earnings quality. However, as firms become more established internationally and strengthen their controls, earnings quality tends to improve. Li and Tongkong (2024) investigated similar dynamics in Thailand. Given these mixed findings, influenced by institutional and firm-specific factors, it is important to identify the variables shaping the impact of internationalization Thai family-owned on businesses. Based on the arguments presented, the following hypothesis is proposed:

H2: Internationalization has a positive effect on earnings quality.

2.3.3. Moderating role of internationalization

Based on the prior discussion, internationalization may play a moderating role by influencing how family control affects earnings quality. It is proposed that internationalization could amplify the positive (alignment) effect of family ownership on earnings quality or, conversely, mitigate the negative (entrenchment) tendencies of family firms. This proposition draws on studies linking family ownership and internationalization to earnings quality, aiming to explain not only their direct impact but also how these two key aspects of a

company's structure interact. For example, a family firm operating primarily in a domestic setting with weak oversight may exhibit entrenched behavior that reduces earnings quality. However, once the company expands internationally by entering jurisdictions with stronger investor protection or engaging with diverse stakeholders, the controlling family may be forced to increase transparency and comply with stricter reporting standards. The increased scrutiny and external pressures associated with internationalization can restrain opportunistic behavior among family insiders. Family businesses generally place a high value on accurate reporting. Based on these arguments, the following hypothesis is proposed:

H3: Internationalization moderates the relationship between family ownership and earnings quality.

From the above hypothesis, the conceptual framework of this study is illustrated in Fig. 1.

3. Research methodology

3.1. Sample and data collection

This study examines 537 firm-year observations from companies listed on the SET during 2017–2019. The sample includes four sectors: Agricultural and Food, Consumer Products, Industrials, and Technology, chosen for their relatively high proportions of foreign sales as a share of total revenue. All financial and operational data were sourced from secondary materials, including firms' annual reports and the SET Market Analysis and Reporting Tool.

3.2. Variables and measurement

Table 1 provides detailed information on the measurement of the study variables, along with references to prior research that utilized these measures.

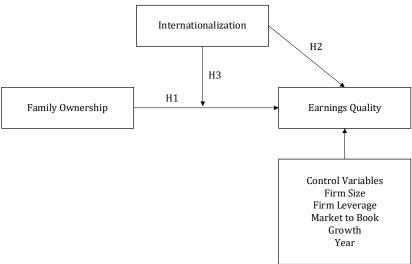


Fig. 1: Conceptual framework

Table 1: Variables and measurement

Variables	Measurement	Previous studies			
Dependent variables					
Earnings quality	The absolute value of discretionary accruals is represented by the Modified Jones Model proposed by Dechow et al. (1995).	Li and Tongkong (2024)			
	Independent variables				
Family ownership	The proportion of a firm's shares is held directly by families and indirectly through group-affiliated firms.	Boonlert-U-Thai and Sen (2019)			
Internationalization	The proportion of foreign sales by total sales.	Li and Tongkong (2024); Kongkaew et al. (2021) and Choi (2021)			
Control variables					
Firm size	The natural logarithm of the firm's total assets.	Wan Mohammad and Wasiuzzaman (2020) and Boonlert-U-Thai and Sen (2019)			
Firm leverage	The ratio of total debt is divided by total assets.	Boonlert-U-Thai and Sen (2019) and Lazzem and Jilani (2018)			
Market-to-book ratio	The market value of equity is divided by the book value of equity at the end of the fiscal year.	Wan Mohammad and Wasiuzzaman (2020)			
Sale growth	Net sales for the current period, removing net sales from the prior	Boonlert-U-Thai and Sen (2019) and Ilmas			
5410 810 1111	period, and dividing by net sales from the prior period	et al. (2018)			

3.3. Model specification and robustness checks

To achieve the study's objectives, the analysis is specified by the following equation to find Absolute value of discretionary accruals (ABSDA):

ABSDA = $\beta_0 + \beta_1$ FAM+ β_2 FSTS+ β_3 (FAM × FSTS) + β_4 SIZE + β_5 LEV + β_6 MB + β_7 GROWTH + β_1 Year + ε

where, FAM is family ownership, FSTS is Foreign-sales-to-total-sales ratio, SIZE is firm size, LEV is firm leverage, MB is Market-to-book ratio, and GROWTH is sales growth.

Panel regression combines cross-sectional and time-series data by observing the same units over multiple periods. This study conducted two tests to select the most appropriate model: the Breusch-Pagan Lagrangian Multiplier Test (LM Test) (Breusch and Pagan, 1980) and the Hausman Test (Hausman, 1978). The Breusch-Pagan LM test was used to determine whether a simple pooled OLS model or a panel model with random effects (RE) better fits the data. The Hausman test then assessed whether a fixed effects or random effects model was more appropriate. Based on these tests, the study employs the fixed effects model.

4. Research results

Table 2 presents descriptive statistics for the key variables. Discretionary accruals range from a minimum of 0.0001 to a maximum of 0.1085, with a mean of 0.00296 (SD = 0.0230). FAM varies from 0.000 to 0.9100, with a mean of 0.3875 (SD = 0.2626). The sample includes 54% internationalized firms and 46% non-internationalized firms. When using the logarithm transformation, firm size (SIZE) ranges from 5.6009 to 8.8021, with a mean of 6.6712 (SD = 0.5846). The leverage ratio (LEV) ranges from 0.0084 to 0.9245, with a mean of 0.3748 (SD = 0.2190). Market-to-book ratio (MB) spans 0.1300 to 0.9200, with a mean of 0.4796 (SD = 0.2386). Sales growth (GROWTH) varies between 0.8770 and 0.9864, with a mean of 0.0129 (SD = 0.2386).

Table 3 displays Pearson correlation coefficients among the study variables, with statistically significant correlations at the p < 0.05 level. Most coefficients fall below 0.35, suggesting no serious multicollinearity issues, as values below 0.80 are generally considered acceptable.

Table 2: Descriptive statistics

Variables	Minimum	Maximum	Mean	SD
ABSDA	0.0001	0.1085	0.0296	0.0230
FAM	0.0000	0.9100	0.3875	0.2626
FSTS	0.0000	1.0000	0.5400	0.4989
SIZE	5.6009	8.8021	6.6712	0.5846
LEV	0.0084	0.9245	0.3748	0.2190
MB	0.1300	6.9200	1.4796	1.2354
GROWTH	- 0.8770	0.9864	0.0129	0.2386

4.1. Regression analysis

Table 4 presents the moderating effect of internationalization on the relationship between family ownership and earnings quality. A Breusch-Pagan Lagrangian-Multiplier test (χ^2 (1) = 212.65, p<0.001) rejects the null hypothesis of no panel effect, favoring a random-effects model over pooled OLS. However, the Hausman test (χ^2 (7) = 30.94, p<0.001) rejects the null of coefficient homogeneity, indicating that the fixed-effects estimator is consistent and preferred over random effects. Diagnostic tests reveal within-firm AR (1) correlation (F (1,356) = 115.73, p<0.001) and groupwise heteroskedasticity (χ^2 (179) = 92 518.21, p<0.001). Consequently, a fixed-effects model is

estimated with standard errors clustered at the firm level, providing robustness against arbitrary serial correlation and heteroskedasticity within firms, while maintaining the assumption of independence across firms (Cameron and Miller, 2015; Petersen, 2008). Year fixed effects control for economy-wide shocks, and firm fixed effects account for time-invariant unobserved heterogeneity.

Table 4 reports the baseline fixed-effects estimates with cluster-robust standard errors. The primary variable of interest is FAM, with internationalization examined as a potential moderator of its effect on discretionary accruals. The direct effect of FAM is statistically equivalent to zero $(\beta = 0.002, t = 0.16)$.

This finding implies that, once firm-specific fixed effects are eliminated, family ownership alone does not systematically influence earnings quality. In contrast, at the 5 percent level, the interaction term FAM × FSTS is significant and negative (β = -0.068, t = -2.09). According to the coefficient, the marginal impact of family ownership on earnings quality improves with a firm's level of internationalization. Among the control variables, rapid sales growth is significantly associated with lower levels of discretionary accruals ($\beta = -0.020$, t = -3.68), indicating that expanding firms engage in less earnings manipulation. Other controls, including firm size, leverage, and market-to-book ratio, lose statistical significance once fixed effects are accounted for.

4.2. Marginal-effects analysis

Table 5 presents the effects of FAM across varying levels of internationalization, measured by foreign sales intensity (FSTS). Average marginal effects of FAM were computed at five benchmark values of FSTS: 0, 0.25, 0.50, 0.75, and 1. For firms operating entirely within domestic markets (FSTS = 0), the marginal effect of FAM is essentially zero and statistically insignificant (dv/dx = 0.0017, p = 0.869). However, once a firm derives at least 25% of its revenue from foreign markets (FSTS = 0.25), the effect of family ownership turns negative (dy/dx = -0.0154) and becomes marginally significant at the 5% level. The influence of family control becomes progressively stronger as the internationalization increases. At the median level of foreign sales (FSTS = 0.50), family ownership is associated with a 3.2 percentage point reduction in discretionary accruals (p = 0.022). The magnitude grows to 4.9 points when three-quarters of revenue is foreign (FSTS = 0.75, p = 0.019) and to 6.7 points for firms that are fully internationalized (FSTS = 1, p = 0.021).

Thus, foreign operations do not merely moderate but rather amplify the stewardship benefits of family control as family firms become more globally engaged; the reduction in abnormal accruals becomes larger in magnitude and more statistically robust.

Table 3: Pearson correlations of variables

Variables	ABSDA	FAM	FSTS	SIZE	LEV	MB	GROWTH
ABSDA	1						
FAM	0.062	1					
FSTS	0.096*	-0.134*	1				
SIZE	-0.093*	-0.201*	0.211*	1			
LEV	0.009	0.152*	-0.065	0.348*	1		
MB	0.058	0.064	-0.075	0.239*	0.190*	1	
GROWTH	-0.125*	-0.020	-0.078	0.084	0.078	0.121*	1

*: Significance at the .05 level

Table 4: Estimated results of the model by using Pooled OLS, random effect, and fixed effect methods

Variables	Pooled OLS	Random effect with robust SE	Fixed effect with cluster SE	
FAM	-0.0114* (p = 0.024)	-0.0071 (p = 0.235)	0.0017 (p = 0.870)	
FSTS	-0.0051 (p = 0.417)	0.0091 (p = 0.385)	0.0401 (p = 0.078)	
FAM x FSTS	0.0449*(p = 0.000)	0.0111 (p = 0.561)	-0.0682* (p = 0.038)	
SIZE	-0.0061*(p = 0.002)	-0.0055*(p = 0.091)	0.0191 (p = 0.291)	
LEV	0.0041 (p = 0.398)	0.0101 (p = 0.103)	0.0201 (p = 0.155)	
MB	-0.0022*(p = 0.004)	0.0009 (p = 0.312)	-0.0005 (p = 0.689)	
GROWTH	-0.0117* (p = 0.004)	-0.0163*(p = 0.003)	-0.01990* (p =0.000)	
Constant	0.0670	0.0611	-0.1075	
R-squared		0.1340		
Number of observations 537				

*: Significance at the .05 level

Table 5: Marginal effect of family ownership on earnings quality at alternative levels of internationalization

FSTS (level)	dy/dx	Robust SE	Z	p-value	95 % CI (lower)	95 % CI (upper)
0.00	0.0017	0.0103	0.16	0.869	-0.0185	0.0219
0.25	-0.0154	0.0093	-1.65	0.098	-0.0336	0.0028
0.50	-0.0324	0.0141	-2.29	0.022*	-0.0601	-0.0047
0.75	-0.0495	0.0211	-2.34	0.019*	-0.0909	-0.0080
1.00	-0.0665	0.0288	-2.31	0.021*	-0.1229	-0.0101

*: Significance at the .05 level

5. Discussion

The findings indicate an intriguing association between family ownership and earnings quality in Thai listed firms. Specifically, the direct effect of FAM on earnings quality, as measured by ABSDA, is statistically insignificant. This result implies that family control, in isolation, does not consistently influence earnings quality once firm-specific fixed effects are controlled for. Such a finding aligns with prior literature highlighting the duality of the entrenchment and alignment hypotheses, where opposing incentives may offset one another.

In the aspect of the moderating effect of internationalization, the most compelling result of this study lies in the interaction between family ownership and internationalization. It is obvious that we find that family ownership is associated with improved earnings quality as firms become more other internationally engaged. In internationalization transforms an otherwise neutral domestic relationship into a significantly positive one. The marginal effects analysis illustrates this dynamic in detail: in purely domestic firms (FSTS = 0), family ownership has virtually no impact on discretionary accruals. However, as the proportion of foreign sales increases to 25%, 50%, 75%, and eventually 100%, the negative and statistically significant effect on discretionary accruals becomes progressively stronger, indicating enhanced earnings quality.

These results support Mazzioni and Klann's (2018) "bonding" theory, which suggests that international expansion subjects firms to more stringent regulatory environments and elevated

expectations from global investors, thereby reducing agency conflicts and improving information transparency. Moreover, the results of this study support the findings of Hussain et al. (2021), who found that the higher levels of internationalization enhance accrual quality, fostering more accurate financial reporting in multinational enterprises.

Importantly, the findings suggest international exposure does not merely moderate but significantly amplifies the stewardship benefits associated with family control. The alignment effect theorized by Anderson and Reeb (2003) appears strongest. The evidence suggests that disciplinary mechanisms of international operations, such as exposure to diverse regulatory environments, sophisticated foreign investors, and heightened reputational concerns, significantly enhance the benefits of family governance while potentially reducing entrenchment tendencies.

6. Concussion

This study investigates the relationships among family ownership, internationalization, and earnings quality in Thai listed companies, offering meaningful contributions to the literature on corporate governance, earnings quality, and international business. First, the findings indicate that the relationship between family ownership and earnings quality is not uniform but depends on the extent of a firm's internationalization. While family ownership has minimal influence on earnings quality in domestic firms, its positive effect becomes more pronounced as firms expand internationally. This contextual insight helps reconcile inconsistencies in

prior research (Fan and Wong, 2002; Wang, 2006) by illustrating how international operations reshape family governance dynamics.

Second, in contrast to the "complexity" hypothesis (Chin et al., 2009), the results provide strong support for the "bonding" hypothesis (Mazzioni and Klann, 2018). Rather than enabling opacity and manipulation, international expansion appears to expose family firms to external disciplinary forces that enhance transparency and reduce management earnings. This has important implications for understanding the impact of globalization on corporate governance and financial reporting quality.

Third, the evidence suggests that as firms expand globally, the alignment effect of family ownership (Anderson and Reeb, 2003) becomes more dominant than the entrenchment concerns highlighted by Fan and Wong (2002). This indicates that in international contexts, the benefits of family governance, such as stewardship, reputational sensitivity, and long-term orientation, are most effectively realized.

The findings suggest that, from a practical perspective, investors may benefit from favoring family ownership in firms with substantial international operations. Regulatory bodies might infer that domestically focused family businesses warrant closer oversight compared to their internationally engaged counterparts. For family business owners, the results may serve as evidence that international expansion not only offers growth opportunities but also has the potential to enhance governance, quality, and reputation.

7. Limitations and future research

These insights should be interpreted considering four interrelated limitations. First, the sample consists of Thai listed firms from only four industries during the period 2017 to 2019. As a result, the findings may not generalize to periods of major governance reform, to other sectors, or to emerging and developed markets with ownership structures that differ from Thailand's highly concentrated family control.

Second, internationalization is measured only by foreign-sales intensity, excluding other dimensions such as the geographic dispersion of assets, subsidiary networks, cross-listing status, and the international experience of top executives. Including these factors could offer a more nuanced understanding of how foreign activity moderates governance effects.

Third, while discretionary accruals derived from the Modified Jones Model remain a widely accepted proxy for earnings quality, they capture only one form of managerial discretion. Future research could expand this scope by incorporating alternative measures such as real activity manipulation, earnings persistence, or restatement data to provide a more comprehensive assessment of reporting quality.

Finally, this study does not explicitly account for contextual or strategic motivations behind internationalization, such as market-seeking versus risk-diversifying objectives, which could influence the observed effects of family ownership. Embedding strategic intent and cross-country comparisons in future research could enhance both external validity and theoretical depth.

List of abbreviations

ABSDA Absolute value of discretionary accruals AR(1) First-order autoregressive correlation

β (Beta) Regression coefficient
 CI Confidence interval
 CPF Charoen Pokphand Foods
 DA Discretionary accruals
 dy/dx Marginal effect
 FAM Family ownership

FSTS Foreign-sales-to-total-sales ratio

GROWTH Sales growth
IPO Initial public offering

LEV Firm leverage (ratio of total debt to total

assets)

LM Test Breusch-Pagan Lagrangian Multiplier test

MB Market-to-book ratio
OLS Ordinary least squares

OFDI Outward foreign direct investment

RE Random effects
SD Standard deviation
SE Standard errors

SET Stock Exchange of Thailand

SIZE Firm size (natural logarithm of total assets)

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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