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## ARTÍCULO

### Examining the Accuracy of Management Earnings Forecasts of Initial Public Offerings: Does Family Governance Matter?

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**Abstract:** This research aims to address a persistent challenge within the realm of initial public offerings (IPOs), namely, the asymmetry of information between IPO issuers and prospective investors regarding the future financial performance of companies. Specifically, the study investigates how various attributes of family governance, such as family monitoring, the presence of a family chairman, and the appointment of a family CEO, affect the accuracy of forecasted earnings. Employing the ordinary least squares (OLS) regression method, the research analyses data from 330 Malaysian IPOs listed between 2002 and January 2019. The findings suggest that forecasted earnings tend to be more precise for companies under family control compared to those without family involvement. Additionally, family control demonstrates a negative correlation with earnings forecast errors, indicating a positive association with the accuracy of earnings forecasts. Moreover, the examination of family governance variables indicates that family monitoring, the presence of a family chairman, and the appointment of a family CEO positively impact the accuracy of earnings forecasts. Notably, however, only the relationship with the presence of a family CEO is statistically significant. This study extends existing literature in the fields of accounting, finance, family business, and corporate governance. It particularly contributes by focusing on the context of a developing country, Malaysia. The implications of these findings are twofold: firstly, they inform policymakers about potential enhancements to regulations concerning the disclosure of forecasted earnings. Secondly, they offer insights for traders and investors to make more informed decisions. Furthermore, the study underscores the significance of family involvement as a control mechanism for companies in terms of governance monitoring.

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## Introduction

The transition of private companies into public ownership, known as the initial public offering (IPO), has garnered scholarly attention (Carbone et al., 2022). Despite this, there remains a gap in the research regarding the relationship between corporate governance mechanisms and forecasted earnings in IPO contexts (Sosnowski & Wawryszak-Misztal, 2019). Consequently, this study builds upon this line of inquiry by focusing on family governance dynamics and their influence on the precision of forecasted earnings within IPO management. Specifically, it assesses the accuracy of earnings forecasts in IPOs controlled by family entities in comparison to those without family control.

The importance of improving transparent, reliable, and principled financial reporting has become increasingly pronounced (Nguyen, Lien Le, & Anh Vu, 2021), particularly given the significance of earnings forecasts in anticipating company quality and mitigating unforeseen risks (Ong et al., 2023), especially in the context of IPOs, where information is often scarce. The process of transitioning to public ownership for such companies is perceived to involve a high degree of information asymmetry (Georgakopoulos et al., 2022). Consequently, stakeholders are placing greater emphasis on management earnings forecasts, anticipating potential benefits from the company.

A significant number of family-owned businesses are present both in developed and developing nations, prompting researchers to investigate the role of family involvement in governance, management, and ownership, and its impact on business outcomes and decision-making (Liu et al., 2017). Recent findings by Hashmi & Brahmana (2023) suggest that the presence of family members on the board leads to enhanced monitoring and governance. Moreover, when family members hold key positions such as chairperson or CEO, they actively contribute to the company's welfare (Murni et al., 2023).

Furthermore, given the prevalence of family-owned enterprises among publicly listed companies globally, assessing the quality of disclosed information within these firms is crucial (Ferramosca & Allegrini, 2018). However, existing literature predominantly focuses on publicly traded companies, offering limited insights into the impact of family ownership (FOWN). Compounding this issue, there is a lack of consensus regarding how controlling families influence the quality of financial reporting (Cascino et al., 2010). Moreover, studies exploring the determinants of earnings forecast accuracy in both family and non-family IPOs remain scarce. Hence, this study seeks to address this gap by addressing two primary research questions: (1) Are family-controlled IPO companies distinguishable from non-family-controlled IPO companies concerning the accuracy of earnings forecasts disclosed in IPO prospectuses? (2) How do family-controlled IPOs influence the accuracy of earnings forecasts, considering factors such as family monitoring, the presence of a family chairman, and the appointment of a family CEO?

This study employs agency theory to investigate how family involvement impacts the accuracy of management earnings forecasting in family and non-family-controlled IPOs listed on Bursa Malaysia. Both agency and stewardship theories are utilized to address various issues in family firms (Madison et al., 2016). Given the unique circumstances of family-owned organizations, characterized by multiple sources of agency costs that can disrupt performance, agency theory is considered a dominant perspective in family business research (Kallmuenzer, 2015). This study specifically adopts agency theory, which prioritizes cost

minimization compared to the humanistic approach of stewardship theory (Madison et al., 2016).

The anticipated contributions of this study are multifaceted. Firstly, while existing research predominantly examines the financial reporting quality of family-controlled companies, the conclusions remain inconclusive (Chen, Weng, & Fan, 2023). Furthermore, investigations into corporate governance mechanisms and their correlation with the quality of earnings forecasts issued by publicly listed companies are limited, with even fewer studies focusing on forecasts within IPO prospectuses (Sosnowski & Wawryszak-Misztal, 2019). Secondly, the study sheds light on the conflicting interests between controlling owners and minority shareholders within Malaysian family firms, where Type II agency problems are prevalent, thereby elucidating the distinctive institutional landscape in an Asian context. The findings support the notion that family governance can ameliorate agency problems related to earnings forecasts, indicating that family-owned and controlled IPOs provide more accurate earnings forecasts than their non-family counterparts. To the best of our knowledge, this study represents a pioneering effort in investigating the role of family governance characteristics as determinants of accurate earnings forecasts, thus bridging a gap in the existing literature.

The assumption that agency problems are unlikely to arise within family-owned firms due to unified ownership and management aligning interests (Madison et al., 2016) is challenged in this study, extending the discourse on agency theory and its relevance to IPO reporting. Additionally, the study presents evidence supporting agency theory in the context of family companies, suggesting that specific corporate governance practices in such firms may align with the principles of agency theory. This study also underscores the cost-minimization perspective of agency theory in enhancing performance compared to the stewardship theory perspective. Finally, given the similarities in business practices and institutional arrangements between Malaysia and other Southeast and East Asian countries, the study outcomes offer insights for regulatory bodies. Policymakers are cautioned against directly transplanting regulations or systems from Western countries, as they may not adequately address the nuances of Asian institutional settings. The findings also furnish valuable information for investors evaluating the impact of family governance on earnings quality in family-owned and controlled enterprises. The chapter is further structured into four sections: literature review, research methods, data analysis, and discussion, along with future limitations.

## Literature Review and Hypotheses Development

Various theoretical perspectives are available to analyse family firms, with stewardship theory being one such perspective commonly applied in examining issues within family enterprises. Similar to agency theory, stewardship theory delineates the relationship between two parties: the principal and the steward-manager. Unlike agency theory, stewardship theory's theoretical foundations are more deeply rooted in sociology and psychology, offering a humanistic approach. It posits that managers act as stewards for their owners, adhering to the desires of the firm, and are intrinsically motivated accordingly. In contrast, agency theory provides valuable insights for family businesses due to its emphasis on minimizing deviations from the firm's objectives (Madison et al., 2016). Consequently, agency theory serves as the predominant theoretical framework utilized in studies

comparing the levels of accounting quality between family-owned and non-family-owned companies (Paiva, Lourenço, & Dias Curto, 2019).

### Controlling Family and Management Earnings Forecast Accuracy

In family-controlled enterprises, the propensity for encountering Type II agency problems, characterized by conflicts of interest between major and minor shareholders, is notably higher compared to Type I agency problems, which involve conflicts between shareholders and managers (Paiva et al., 2019). Furthermore, research by Sundkvist & Stenheim (2023) and Rahman & Zheng (2023) suggests that accrual-based earnings management is not prevalent in family-owned firms. Moreover, the concentration of ownership serves to mitigate and confine practices of real earnings management, particularly when combined with the expertise of the CEO (Alhmood et al., 2023). This assumption is rooted in the belief that the governance structure within family firms may facilitate informed decision-making, thereby reducing information asymmetry, moral hazard, and inaccuracies in earnings forecasts through heightened external management oversight and enhanced alignment of incentives between minority and majority shareholders. Consequently, this study posits the following hypothesis,

**H1. Family-controlled IPOs are estimated to issue more accurate earnings forecasts than non-family-controlled IPOs.**

### Family Governance Features and Accuracy of Forecasted Earnings

Assessing the extent of family control within firms often involves examining the percentage of stock holdings owned by founding family members. However, this measure may not fully capture the impact of family involvement on the company (Kuo & Hung, 2012). In certain family-owned enterprises, even a small fraction of outstanding shares can confer majority ownership to family members, while in others, a substantial number of shares may be required to maintain control. Consequently, a holistic family governance model is essential to ascertain the influence of various family governance attributes on the level of accuracy of forecasted earnings in family-controlled IPOs.

### Family Monitoring and Accuracy of Forecasted Earnings

In accordance with Fama & Jensen (1983), familial ties among owners and managers create various opportunities for interaction, thereby fostering monitoring and disciplinary advantages that mitigate agency costs. Recent research by Paiva et al. (2019) elucidates that family members serving on the board of directors actively supervise managerial activities. Within such firms, family members engage dynamically in management due to their ownership stakes, consequently wielding considerable influence over managerial decisions (Setiawan et al., 2022) and control mechanisms (Murni et al., 2023). Previously, Leung, Srinidhi, & Lobo (2012) demonstrated a positive correlation between the presence of family members on the board and corporate disclosure practices. In the Malaysian context, Wan-Hussin (2009) indicated that organizations with a greater number of family-affiliated directors on their boards tend to disclose primary segment items more extensively. Therefore, heightened family involvement on the IPO board is posited to enhance management oversight, reduce information asymmetry, and ultimately improve the quality of earnings forecasts, leading to the formulation of the following hypothesis,

**H2. The fraction of family members on the board and the accuracy of forecasted management earnings in IPO prospectuses are significantly associated.**

### Family Chairman and Accuracy of Forecasted Earnings

According to the agency theory, the involvement of family directors in management roles substantially reduces the separation between owners and management, thereby fostering greater alignment in operational practices (Jiang, Cai, & Zheng, 2022). Jiang et al. (2022) further assert that companies with non-family directors serving as board chairpersons tend to exhibit inferior performance compared to those with family members in this role. These findings suggest that family control facilitates alignment and surpasses the influence of managerial entrenchment (Foong & Lim, 2023), thereby increasing the likelihood of accurate earnings forecasts. Family directors, particularly when serving as board chairpersons, intertwine family identity with company identity. Consequently, if the company engages in earnings manipulation, both the company's reputation and that of the family are jeopardized, given the familial leadership position (Jiang et al., 2022). Hence, family leadership enables direct oversight of managerial actions and decisions pertaining to information disclosure, potentially enhancing the quality of earnings forecasts. This study thus proposes the following hypothesis,

**H3. The appointment of family members as chairman of the board and the accuracy of forecasted management earnings in IPO prospectuses are significantly associated.**

### Family CEO and Accuracy of Forecasted Earnings

The CEO holds a pivotal and influential role within organizations, with the characteristics of this position significantly impacting corporate governance by shaping the organizational culture, values, and environment (Al-Begali & Phua, 2023). Debates among scholars and policymakers centre on whether the power dynamics of the CEO can either enhance or impede earnings quality (Arif, Mustapha, & Abdul Jalil, 2023). Family CEOs are motivated to effectively manage the company, curtail excessive perks, and bolster performance, given that their interests align with those of both family and non-family shareholders (Anderson & Reeb, 2003). Strong familial ties between family owners and family CEOs may mitigate information asymmetry issues in the shareholder-manager relationship, facilitating effective monitoring and disciplining of managerial officers. According to the alignment effect perspective, it is posited that family CEOs will issue accurate forecasts to uphold the reputation of both the family and the company. The identity of the family CEO serves as a significant determinant of conservatism; hence, stringent controls from family directors may not be necessary. Some studies have demonstrated that family CEOs can enhance organizational performance (Cai, Luo, & Wan, 2012). Therefore, this study proposes the following hypothesis,

**H4. The appointment of a family member as CEO and the accuracy of forecasted management earnings in IPO prospectuses are significantly associated.**

## Study Design

### Sample

The sample population for this study was drawn from Bursa Malaysia's Main Market and consisted of IPOs spanning from January 2002 to January 2019. The termination year was

chosen to preclude potential impacts of the COVID-19 pandemic on the earliest published annual report for the year 2020 (as the pandemic emerged in March 2020). This entailed the inclusion of 330 IPOs, encompassing both financial and non-financial sectors, listed on Bursa Malaysia until January 31, 2019. Excluded from the sample were real estate investment trust companies, closed-end fund companies, and financial companies, thereby eliminating 20 IPOs from real estate investment trusts, 2 from closed-end funds, and 7 from the financial sector. Additionally, IPOs that did not disclose their earnings forecasts were omitted from the analysis. This exclusion criterion led to the removal of 108 IPOs with undisclosed earnings forecasts and 32 IPOs with distinct governance practices. Consequently, the final sample comprised 190 IPO companies.

### Measuring the Accuracy of Forecasted Earnings

This study employed absolute forecast errors (AFERs) as the metric for assessing the accuracy of forecasted management earnings in IPOs, with the AFERs determined using the following equation:

$$AFER_{it} = \frac{|(AE_{it} - FE_{it})|}{|FE_{it}|} \quad (1)$$

In the previous equation,

“AFER<sub>it</sub>” denotes “absolute forecast error.”

“AE<sub>it</sub>” denotes “actual earnings” of company *i* for period *t*,

“FE<sub>it</sub>” denotes “forecasted earnings” of company *i* for period *t*.

In the preceding equation, a lower average value of AFER suggests minimal deviation from zero, signifying highly precise forecasts provided by IPO company management.

<b>AFER</b>	This formula calculates the relative error between the actual and forecasted earnings, accounting for the magnitude of the forecasted earnings.
<b>FAMILY</b>	A “dummy variable” that presents the organization’s category, represented by 1 in cases where there are two or more controlling family members as board of directors in IPO company (family-controlled IPO), and it takes the value of 0 otherwise (non-family-controlled IPO)
<b>FOWN</b>	The fraction of common stocks that are directly possessed by the IPO board members who have ties with the family owners
<b>BSIZE</b>	The whole board of directors on the date of IPO
<b>BIND</b>	This formula gives the ratio of independent non-executive members to the total number of board members, providing a measure of the independence of the board at the time of the initial public offering (IPO).
<b>MOWN</b>	The proportion of common stocks that are directly possessed by executive members of the board of the IPO company
<b>UNDERW</b>	“Ringgit value” of all stocks guaranteed by the underwriting banks, as scaled by the “total ringgit value” of the entire sample IPOs
<b>AUD</b>	Variable value “1” if the IPO auditor is from the Big 4 and “0” otherwise
<b>CSIZE</b>	A variable Ln of “overall assets” on the IPO prospectus date
<b>CAGE</b>	A variable Ln of (1+ total years from the date of founding till the IPO date)
<b>FHORIZON</b>	Total months passed between the issuance and end date of forecasted periods.
<b>LEV</b>	The proportion of all IPO company debt to all of its assets

The acceptance of the first hypothesis is contingent upon B1 exhibiting a negative coefficient, suggesting that earnings forecast errors are less prevalent among family-controlled IPOs, thus indicating a higher level of accuracy in earnings forecasts compared to IPOs not under family control. To mitigate the potential influence of the FAMILY variable on the accuracy of earnings forecasts, a set of control variables was introduced. Given the potential impact of corporate governance mechanisms on both the accuracy of forecasted earnings and family control, the study incorporated proxies for other governance mechanisms, including family ownership (FOWN), board size (BSIZE), board independence (BIND), and managerial ownership (MOWN).

The available empirical evidence regarding FOWN aligns with theoretical perspectives suggesting its association

The average AFER serves as a measure of the overall accuracy of forecasted earnings relative to their actual values.

### Study Models

The initial hypothesis can be assessed by identifying family-controlled IPO companies, which was operationalized in this study using the involvement approach, as outlined by [Chrisman, Chua, & Litz \(2004\)](#). In Malaysia, the average board typically consists of seven directors, with over 25% representing family interests, indicating significant familial influence. Consequently, out of the 190 Malaysian IPO samples, 134 IPO companies (constituting 70.53%) were categorized as family-controlled IPOs, while the remaining 56 (29.47%) were designated as non-family-controlled IPOs.

Furthermore, family-controlled IPOs were characterized using a binary variable, denoted as FAMILY, where the value is 1 if two or more controlling family members serve on the board of directors, and 0 otherwise. The relationship between the dependent variable, namely the accuracy of IPO forecasted earnings, and the primary test variable, FAMILY, as the independent variable of interest, was assessed using a linear multiple OLS regression model to examine the first hypothesis. This model was applied to the entire sample as follows:

$$AFER = B_0 + B_1 \text{ FAMILY} + B_2 \text{ FOWN} + B_3 \text{ BSIZE} + B_4 \text{ BIND} + B_5 \text{ MOWN} + B_6 \text{ UN-DERW} + B_7 \text{ AUD} + B_8 \text{ CSIZE} + B_9 \text{ CAGE} + B_{10} \text{ FHORIZON} + B_{11} \text{ LEV} + \epsilon \quad (2)$$

In the preceding model, the following variables are designated:

with both higher and lower quality earnings. According to the alignment hypothesis, FOWN is positively correlated with financial reporting quality, as it serves to mitigate agency conflicts (Type I) between executives and owners, thereby curbing management’s incentives to report accounting information that diverges from the company’s economic performance. Conversely, the entrenchment hypothesis contends that FOWN is inversely related to earnings quality, as concentrated ownership beyond a certain threshold exacerbates Type II agency costs.

In relation to BSIZE, [Abdul Rahman & Haneem Mohamed Ali \(2006\)](#) argue that larger boards may encounter challenges in harmonizing and addressing issues effectively, leading to suboptimal monitoring of management. With regard to BIND, prior studies ([Ajinkya, Bhojraj, & Sengupta, 2005](#)) have documented a positive association between BIND and



the quality of forecasted earnings. Independent directors are perceived as more effective monitors, enhancing the quality of the reporting process and reducing levels of information asymmetry, thereby enhancing earnings quality.

The second, third, and fourth hypotheses were evaluated using a regression model applied to a subset of family IPOs, structured as follows:

$$\text{AFER} = \beta_0 + \beta_1 \text{FNUMBER} + \beta_2 \text{F\_CHAIR} + \beta_3 \text{F\_CEO} + \beta_4 \text{FOWN} + \beta_5 \text{BSIZE} + \beta_6 \text{BIND} + \beta_7 \text{MOWN} + \beta_8 \text{UNDERW} + \beta_9 \text{AUD} + \beta_{10} \text{CSIZE} + \beta_{11} \text{CAGE} + \beta_{12} \text{FHORIZON} + \beta_{13} \text{LEV} + \varepsilon \quad (3)$$

In assessing family monitoring, quantified by the proportion of family directors on boards (FNUMBER), it was computed as the ratio of family members to the total number of board directors. This measurement provides a precise depiction of the influence exerted by family members on executives and the governing board, as it accounts for both the presence of family directors and the BSIZE.

Family chairman (F\_CHAIR) was also determined using a binary variable, denoted as "1" when the chair was occupied by a director from the controlling family and "0" otherwise (Chen et al., 2023). Additionally, consistent with prior research such as that conducted by Cai et al. (2012), the study employed a binary variable to capture family CEO (F\_CEO), which takes a value of "1" if the CEO is a member of the controlling family and "0" otherwise.

The validation of the second, third, and fourth hypotheses relies on negative coefficients ( $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ ), indicating that the presence of family-oriented characteristics, including family directors on the board, a family member serving as board chairman, and a family member acting as CEO, increases the likelihood of higher earnings forecast accuracy in family IPO companies compared to other family IPO firms.

## Findings and Discussion

### Descriptive and Correlation Analysis

The descriptive statistics for the dependent variable, AFER, were examined, as illustrated in Table 1, Panel A. The mean (median) of AFER was found to be 24.94% (9.37%). Utilizing sample t-tests and Mann-Whitney tests, the results indicated that both the mean and median of AFER were significantly higher than zero at the 1% significance level. In contrast, studies conducted in other contexts and countries have reported different mean values for AFER. For instance, Sosnowski & Wawryszak-Misztal (2019) observed a mean of 34.05% in Poland, while Georgakopoulos et al. (2022) reported a mean of 37.91% in Australia. In comparison to these countries, the accuracy levels of forecasted earnings for Malaysian IPOs appeared to be suboptimal, as the mean AFER should ideally exhibit a significant deviation from zero.

**Table 1:** Descriptive Statistics.

Panel A: Descriptive statistics of the forecasted earnings errors									
Dependent Variable	Mean	Median	Std. Dev.	Min.	Max.	T-test		Mann-Whitney test	
AFER	24.94	9.37	48.54	0.13	525.45	t-value	p-value	z-value	p-value
						7.080	0.000	4.200	0.000
Panel B: AFER Distribution									
AFER Distribution (%)	IPOs Number			Aggregate Percentage					
>100	6			3.16					
(50-100)	16			11.58					
(20-50)	37			31.05					
(10-20)	27			45.26					
(0-10)	104			100					
Total	190								
Panel C: AFER by Industry Sector									
	Properties	Plantation	Industrial	Products	Construction	Consumer	Product	Trading/Services	
Mean	18.12	11.73	21.62	28.40	37.34	20.52			
Median	9.28	5.09	9.38	13.19	9.09	10.85			
Std. Dev	16.20	14.52	29.76	31.26	86.24	26.77			

**Note:** Definitions of all variables are presented in Section 3.3.

Further insights into the earnings forecast errors are detailed in Panel B of Table 1, where the distribution of AFER frequencies is depicted. Remarkably, approximately 54.74% of IPOs exhibited AFER values falling within the range of 0%-10%, representing the most prevalent concentration among Malaysian IPOs in the market. Consequently, the majority of Malaysian IPOs accurately predicted their earnings, with forecasted earnings closely aligning with actual earnings as disclosed in their prospectuses.

The data presented in Panel C of Table 1 elucidate the level of accuracy in forecasted earnings across the entire sample of IPOs. The findings indicate that IPOs within the plantation industry exhibited notably accurate earnings forecasts, with an AFER of 11.73%. Similarly, IPOs within the properties sector demonstrated a high degree of accuracy, with an AFER of 18.12%. Conversely, the consumer products industry reported significantly higher IPO earnings forecast errors, reaching 37.34%. Such discrepancies may potentially jeopardize industrial investments, as they could mislead investors.

Table 2 presents the descriptive statistics for the variables in both the total sample (Panel A) and the subset of family-controlled IPO companies (Panel B). In Panel B, it is evident that family-controlled IPOs accounted for 70.53% of the total number of IPOs, totalling 134 companies. Furthermore, under FNUMBER, the average percentage of board positions held by family members at the time of the IPO was 42.98%, with approximately 64 IPOs, constituting 47.76% of the sample, having family members as chairpersons (F\_CHAIR), and 18 IPOs, constituting 13.43%, having family members as CEOs (F\_CEOs) at the time of the IPO.

It is noteworthy that in the entire sample, FOWN stood at 15.68% at the time of the IPO, whereas for the subset of family-controlled IPOs, it was slightly higher at 20.23%.

Regarding the control variables in both the full and sub-samples, starting with BSIZE, the number was consistent across both samples—7 for the entire sample and 8 for the family-controlled sample—similar to figures reported in prior research (Abdul Rahman & Haneem Mohamed Ali, 2006), with a mean BSIZE of 8 directors. The BIND reflected an absence of

a majority of independent directors, with an average of 37.57% across all samples. In the family-controlled sample, this average was slightly lower at 36.04%. Notably, IPO companies in the sample adhered to the recommended guidelines outlined by the Malaysian Code on Corporate Governance (MCCG), stipulating that, at a minimum, one-third of board members should be independent. However, the mean of 37.57% in the full sample and 36.04% in the family-controlled sample of independent board members suggests that insiders predominantly control the board structure of Malaysian IPO companies.

Regarding MOWN, the mean values observed were 11.76% for the entire sample and 13.14% for the family-controlled subset. As for underwriter reputation (UNDERW), the mean value for the entire sample was 19.05%, while for the family-controlled subset, it stood at 18.26%, approximated

by the underwriter's market share.

In terms of auditor quality (AUD), a majority of IPOs in both the entire sample (54.74%) and the family-controlled subset (54.48%) were audited by Big 4 auditors. The average size of IPO companies (CSIZE), determined by the natural logarithm of total assets, was RM350.11 million for the entire sample and RM11.61 million for the family-controlled subset. The operating history of IPO companies (CAGE) averaged 6 years for the entire sample and 1.5 years for the family-controlled subset at the time of going public. Regarding the forecast horizon variable (FHORIZON), the average forecast horizon was 7.71 months for the entire sample and 7.72 months for the family-controlled subset. Lastly, the mean financial leverage (LEV) was 51.04% for the entire sample and 48.94% for the family-controlled subset.

**Table 2: Descriptive Statistics.**

Panel A: All IPOs (N = 190)					
Variables	Mean	Median	Std. Dev.	Mini.	Max.
FOWN	15.68	5.52	19.37	0.00	66.13
BSIZE	7.37	7.00	1.76	4.00	16.00
BIND	37.57	33.33	8.38	22.22	75.00
MOWN	11.76	4.15	15.58	0.00	66.94
UNDERW	19.05	10.45	19.18	0.13	49.11
CSIZE	350.11	101.19	1402.58	35.12	17073.86
CAGE	5.53	2.25	6.95	0.17	32.67
FHORIZON	7.71	7.00	3.01	3.00	14.00
LEV	51.04	47.83	23.89	3.86	150.48
Dichotomous Variables			0	1	
FAMILY		134 (70.53%)		56 (29.47%)	
AUD		86 (45.26%)		104 (54.74%)	
Panel B: Family-Controlled IPOs (N = 134)					
Variables	Mean	Median	Std. Dev.	Mini.	Max.
FOWN	20.23	13.37	19.93	0.00	66.13
FNUMBER	42.98	42.86	14.06	20.00	83.33
BSIZE	7.58	7.00	1.75	4.00	16.00
BIND	36.04	33.33	6.49	22.22	66.67
MOWN	13.14	6.59	15.37	0.00	66.94
UNDERW	18.26	10.45	19.02	0.13	49.11
CSIZE	11.61	11.50	0.68	10.47	15.34
CAGE	1.45	1.18	0.80	0.08	3.49
FHORIZON	7.72	7.00	3.08	3.00	14.00
LEV	48.94	46.22	20.83	8	1.00
Dichotomous Variables			0	1	
F_CHAIR		70(52.24)		64(47.76)	
F_CEO		116(86.57)		18(13.43)	
AUD		61(45.52)		73(54.48)	

**Note:** Definitions of all variables are presented in Section 3.3.

Tables 3 and 4 present the Pearson correlation matrices for the entire sample. Specifically, Table 3 reveals that family-controlled IPOs (FAMILY) tend to exhibit higher ownership, with a correlation coefficient of 0.364 at  $p < 0.05$ . Furthermore, family-controlled IPOs typically feature a larger board size, indicated by a correlation coefficient of -0.171 at  $p < 0.10$ . Moreover, family-controlled IPOs demonstrate a lower proportion of independent directors, as evidenced by a correlation coefficient of -0.283 at  $p < 0.05$ . This finding supports the notion that controlling families are inclined to exclude external individuals as top executives or major shareholders in their companies, aiming to uphold their long-term position and control. In Table 4, a positive correlation is observed between family monitoring and family CEO, with a correlation coefficient of 0.177 at  $p < 0.10$ , suggesting that a higher presence of family members on the board facilitates the appointment of a family member as CEO. However, the remaining correlations lack sufficient robustness to yield meaningful interpretations.

### Univariate Analysis

In this study, a univariate analysis was conducted, and the outcomes are presented in Table 5. It is evident from the table that family-controlled IPOs exhibit a greater propensity to issue fewer earnings forecast errors compared to their non-family-controlled counterparts, with percentages of 24.37% and 26.28%, respectively, at  $p < 0.10$ , as indicated by the Mann-Whitney test. This finding suggests that family owners typically have longer-term investment horizons relative to other shareholders, leading to more precise disclosures aimed at maximizing benefits. This observation is consistent with findings reported by Wang (2006). Overall, the results of the univariate test support the first hypothesis, which posits that family-controlled IPOs are more inclined to provide more accurate earnings forecasts than non-family IPOs. However, a rigorous examination of the first hypothesis was conducted through the utilization of multivariate regression analysis.

**Table 5: Univariate Analysis.**

Type of IPOs	AFER				T-test		Mann-Whitney test	
	N	Mean	Median	Std. Dev.	t-value	p-value	z-value	p-value
Family-controlled IPOs	134	24.37	8.94	53.52				
Non-family-controlled IPOs	56	26.28	15.17	34.18	-0.247	0.721	-1.756	0.079
Total	190							

**Table 3: Pearson Correlation Coefficients for Model 1.**

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1 AFER	1											
2 FAMILY	-0.018	1										
3 FOWN	0.128	0.364**	1									
4 BSIZE	-0.044	0.171*	-0.058	1								
5 BIND	-0.093	-0.283**	-0.009	-0.288**	1							
6 MOWN	0.126	0.137	0.579**	-0.060	-0.037	1						
7 UNDERW	-0.107	-0.064	-0.081	0.073	0.089	-0.090	1					
8 AUD	-0.077	-0.041	-0.097	-0.004	0.041	-0.132	0.128	1				
9 CSIZE	-0.010	-0.307**	-0.294**	0.072	0.122	-0.300**	0.265**	0.255**	1			
10 CAGE	-0.041	-0.041	-0.045	0.171*	-0.039	-0.086	0.029	0.126	0.145*	1		
11 FHORIZON	0.100	0.010	-0.001	-0.047	-0.099	0.058	0.038	-0.041	0.023	0.077	1	
12 LEV	-0.077	-0.136	-0.010	0.039	0.070	0.027	-0.038	-0.128	0.107	-0.062	-0.164*	1

**Table 4: Pearson correlation coefficients for Model 2.**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 AFER	1													
2 FOWN	0.161	1												
3 FNUMBER	-0.006	0.046	1											
4 F_CHAIR	-0.015	-0.008	0.160	1										
5 F_CEO	0.089	0.005	0.177*	0.061	1									
6 BSIZE	-0.051	-0.127	-0.299**	-0.020	0.135	1								
7 BIND	-0.122	0.211*	0.023	-0.040	0.003	-0.229**	1							
8 MOWN	0.216*	0.773**	-0.045	0.157	0.110	-0.052	0.057	1						
9 UNDERW	-0.153	-0.016	-0.054	-0.073	0.024	0.026	0.019	-0.026	1					
10 AUD	-0.132	-0.080	0.016	0.064	0.052	-0.046	-0.031	-0.121	0.086	1				
11 CSIZE	-0.100	-0.234**	-0.048	-0.054	0.057	0.151	-0.055	-0.276**	0.129	0.151	1			
12 CAGE	-0.099	-0.021	0.058	-0.061	0.106	0.054	0.036	-0.091	0.013	0.197*	0.237**	1		
13 FHORIZON	0.070	0.022	-0.085	-0.045	-0.100	-0.098	-0.073	0.032	-0.004	-0.058	0.021	-0.024	1	
14 LEV	-0.161	0.034	0.067	0.063	0.007	0.200*	0.084	0.032	-0.108	-0.180*	0.228**	0.014	-0.140	1

### Regression Results

The results of Model 1 (as represented by Equation 2) and Model 2 (as represented by Equation 3) estimations are delineated in Tables 6 and 7, respectively. Initially, the assessment aimed to identify any multicollinearity concerns among the variables in both models. Tables 3 and 4 display the Pearson Correlation outcomes for Equations 2 and 3, respectively. Based on these findings, it is evident that multicollinearity is not a prevailing issue, as none of the variables exhibit pairwise correlations exceeding 0.80. This indicates an acceptable level of multicollinearity (Hair et al., 2010). Furthermore, in Tables 6 and 7, the Variance Inflation Factor (VIF) values for the independent variables in Equations 2 and 3 consistently remained below 10. This signifies that multicollinearity is negligible. Hence, the interpretation of the regression analysis can be undertaken with a high degree of confidence.

### Hypothesis 1—Multivariate Regression Findings

In Table 6, the results of the multiple regression model indicated a significant F value of 1.79 at  $p < 0.05$ , accompanied by an adjusted R<sup>2</sup> of 4.49%. Additionally, the coefficient for FAMILY is negative and statistically significant (-1.69 at  $p < 0.10$ ) when regressed against AFER. This finding suggests that family-controlled IPOs are less

prone to experiencing average earnings forecast errors compared to their non-family-controlled counterparts, thus providing support for Hypothesis 1. This result aligns with prior findings reported by Sundkvist & Stenheim (2023) and Rahman & Zheng (2023), who demonstrated that accrual-based earnings management behaviour is less prevalent in companies with familial affiliations.

The impact of control variables pertaining to corporate governance and company-specific characteristics merits attention. Initially, the coefficient for FOWN was found to be significant and positive at 0.285 ( $p < 0.01$ ), indicating a higher prevalence of average earnings forecast errors in IPO companies characterized by concentrated ownership. Increased FOWN suggests diminished monitoring by controlling shareholders, thereby heightening incentives to present inaccurate earnings forecasts for personal gain. This finding corroborates the outcomes of the study conducted by Chin et al. (2006).

Regarding BSIZE, although a positive relationship was observed, it did not attain statistical significance. This suggests that larger boards may lack proactiveness in evaluating management activities, potentially due to reduced creativity and consistency, consequently leading to sluggish decision-making processes (Larmou & Vafeas, 2010), ultimately impacting earnings forecast accuracy. Similarly, BIND exhibited an insignificant correlation, implying that the presence of independent directors may

primarily serve as a compliance measure with MCCC requirements, which mandate one-third of the board to be independent, rather than serving as a mechanism for management oversight, given the dominance of familial influence.

Concerning MOWN, a negative directional trend with marginal significance ( $-1.70$ ,  $p < 0.10$ ) was observed, suggesting that higher management ownership is associated with reduced errors in forecasted earnings.

The relationship with underwriter's reputation (UNDERW) yielded a significant negative result ( $-2.44$ ,  $p < 0.01$ ), possibly reflecting underwriters' efforts to safeguard their reputations by affiliating with more accurate earnings forecasts.

As for the remaining control variables (CAGE, FHORIZON, and LEV), no significant relationships with forecast accuracy were discerned, albeit their directions aligned with expectations.

**Table 6:** Regression Analysis for Model 1.

	Expected sign	Coeff.	t-stat	VIF
<b>Experimental Variable</b>				
FAMILY	-	-7.021	-1.69*	1.39
<b>Control variables</b>				
FOWN	-	0.284	2.60***	1.73
BSIZE	+	0.400	0.40	1.19
BIND	-	-0.184	-0.88	1.22
MOWN	-	-0.221	-1.70*	1.56
UNDERW	-	-0.214	-2.44***	1.08
AUD	-	-1.222	-0.36	1.12
CSIZE	-	1.567	0.80	1.33
CAGE	-	-3.108	-1.59	1.06
FHORIZON	+	0.900	1.61	1.07
LEV	+	5.344	0.74	1.11
Constant		7.197	0.28	
N	185			
R <sup>2</sup>	10.20			
Adjusted R <sup>2</sup>	4.49			
F	1.79**			

**Note:** \*, \*\*, and \*\*\* denote significance at the 10%, 5%, or 1% level, respectively.

### Hypotheses 2, 3 and 4—Multivariate Results

The regression outcomes for the second model, delineated by Equation 3, are elucidated in Table 7. This analysis was conducted on the subset of family-controlled IPO entities, aiming to ascertain whether specific family governance characteristics—namely family monitoring, family chairman, and family CEO—exhibited associations with the precision of forecasted management earnings disclosed in their IPO prospectuses. Notably, the multiple regression model revealed a significant F value of 2.25 at  $p < 0.01$ , with an adjusted R<sup>2</sup> of 11.79%.

Initially, the primary independent variable (FNUMBER), positing a positive association with the precision of forecasted earnings, was discovered to be statistically insignificant. Thus, Hypothesis 2, postulating that IPO firms characterized by a larger proportion of family-affiliated board members are more prone to achieve precise earnings forecasts, received partial validation. The lack of significance may be attributed, in part, to the assertion by Murni et al. (2023) that heightened family engagement in managerial roles tends to diminish board independence, thereby resulting in familial dominance that might incline towards a reluctance in issuing accurate earnings forecasts.

For the family chairman (F\_CHAIR) variable, the outcome offered partial support for Hypothesis 3, albeit statistically insignificant. This suggests that having a family member as chairman of the board may positively influence the accuracy of forecasted earnings in IPO prospectuses. Regarding the family CEO (F\_CEO) variable, a negative and statistically significant coefficient ( $-2.45$  at  $p < 0.01$ ) was observed, aligning with Hypothesis 4. This indicates that efforts to enhance earnings forecast accuracy are heightened when a family member assumes the CEO role. Similar findings were reported by Yahaya (2022).

Regarding the control variables (FOWN, BSIZE, BIND, and MOWN) and their association with corporate governance, the findings mirrored those presented in Model 1 (Equation 2), except for FOWN and MOWN, which were found to be insignificant. Similarly, the outcomes for the remaining control variables (UNDERW, AUD, CAGE, and FHORIZON) were consistent with those presented in Model 1 (Equation 2). Additionally, CSIZE exhibited a significant association with AFER (3.27,  $p < 0.01$ ), while LEV displayed a marginally significant negative effect ( $-1.73$ ,  $p < 0.10$ ).

**Table 7:** Regression Analysis for Model 2.

	Expected sign	Coeff.	t-stat	VIF
<b>Experimental Variables</b>				
FNUMBER	-	-0.013	-0.13	1.36
F_CHAIR	-	-2.862	-1.02	1.17
F_CEO	-	-10.673	-2.45***	1.21
<b>Control variables</b>				
FOWN	-	0.121	1.06	2.99
BSIZE	+	0.417	0.47	1.45
BIND	-	-0.152	-0.70	1.20
MOWN	-	0.022	0.14	3.10
UNDERW	-	-0.149	-2.18**	1.06
AUD	-	-3.790	-1.35	1.17
CSIZE	-	6.858	3.27***	1.28
CAGE	-	-1.370	-0.82	1.13
FHORIZON	+	0.317	0.71	1.11
LEV	+	-12.066	-1.73*	1.27
Constant		-52.095	-1.89*	
N		123		
R <sup>2</sup>		21.19		
Adjusted R <sup>2</sup>		11.79		
F		2.25***		

**Note:** \*, \*\*, and \*\*\* denote significance at the 10%, 5%, or 1% levels, respectively.

### Robustness Tests

The study conducted sensitivity tests to verify the robustness of the results. Both sub-samples yielded consistent outcomes with the initial Model 2 analysis, indicating stability regardless of the FOWN definition. Even at a 5% threshold, FOWN positively impacted earnings forecast accuracy, with partial significance. Experimental variables FNUMBER, F\_CHAIR, and F\_CEO maintained their significance levels, except for FNUMBER, which reached significance at the 10% level. Similar findings were observed at a 20% FOWN threshold, affirming the previous conclusions and the results' robustness to family control definition. Thus, the entrenchment of insiders due to FOWN contributes to information asymmetry issues, necessitating accurate earnings forecasts to mitigate such disparities for investors.



**Table 8:** Robustness Tests on The Impact of FOWN Concentration At 5% And 20% Cut-Offs on IPO Forecasted Earnings Accuracy.

	Expected sign	FOWN_5% cut-off		FOWN_20% cut-off	
		Coeff.	t-stat	Coeff.	t-stat
<b>Experimental Variables</b>					
FOWN	-	5.351	1.952**	1.787	0.738
FNUMBER	-	-0.120	-1.801*	-0.081	-1.537
F_CHAIR	-	-0.386	-0.154	-0.026	-0.013
F_CEO	-	-6.023	-1.720*	-5.321	-1.775*
<b>Control variables</b>					
BFSIZE	+	-0.611	-0.904	-0.640	-1.150
BIND	-	-0.080	-0.566	-0.106	-0.884
MOWN	-	-0.102	-1.244	-0.088	-1.226
UNDERW	-	-0.153	-2.630***	-0.103	-2.135**
AUD	-	-2.576	-1.116	0.650	0.331
CSIZE	-	2.110	1.635	1.393	1.309
CAGE	-	-0.612	-0.460	-1.300	-1.181
FHORIZON	+	0.384	1.003	0.336	1.044
LEV	+	5.599	1.191	5.927	1.507
constant		-0.133	-0.008	6.442	0.441
N		173		163	
R <sup>2</sup>		%15		14.8%	
Adjusted R <sup>2</sup>		8.1%		7.3%	
F		2.162**		1.985**	

Note: \*, \*\*, and \*\*\* denote significance at the 10%, 5%, or 1% levels, respectively.

## Conclusions

The study's findings suggest a reduced likelihood of earnings forecast errors in family-controlled IPOs compared to non-family-controlled ones. This aligns with the notion that family governance structures may enhance decision-making effectiveness, mitigate information asymmetry and moral hazard, and consequently reduce errors in earnings forecasts through increased external management monitoring and alignment between minority and majority shareholders. Specifically, the analysis of family governance attributes and earnings forecast accuracy indicates a significant positive influence of a family member CEO on accurate IPO earnings forecasts. This implies that when a family director assumes the CEO role in an IPO, they are more inclined to discourage management from issuing inaccurate forecasts in prospectuses. However, the relationships between family chairman, monitoring (represented by numbers), and forecast accuracy, although expected, were found to be insignificant.

## Implications

This study contributes to the literature by examining the impact of family governance on the accuracy of earnings forecasts in Malaysian IPOs, an area underexplored in finance and accounting literature, especially in Southeast Asia. Given Malaysia's status as a prominent financial hub, where accurate earnings information is crucial for investors, the findings hold practical implications. Policymakers can utilize these results to recognize the role of family governance in earnings forecast accuracy, shaping regulations accordingly. These implications extend beyond Malaysia, as similar family governance structures exist globally, particularly in Southeast Asian countries, making the study's findings relevant to policymakers in comparable institutional settings.

Moreover, within the final sample, a considerable number of IPO firms opted not to disclose their earnings forecasts. Consequently, these findings serve as a reminder to regulators that some issuers may exploit the discretion granted in 2008 to conceal their firms' low quality. However, others may omit earnings forecasts from their prospectuses to save costs associated with engaging high-

quality auditors, who play a crucial role in ensuring accurate earnings forecasts. This non-disclosure could potentially mislead investors in assessing company quality. Additionally, investors may find the study results valuable in understanding how management forecasts in IPO firms are influenced by family governance structures in highly concentrated ownership environments. Lastly, analysts could benefit from the findings in their assessment of the reliability of reported accounting figures, particularly in their initial risk assessment, where the accuracy of earnings forecasts is among the variables considered.

## Limitations and Future Directions

In summary, there remains ample scope for exploration as certain inquiries remain unanswered. Hence, it is recommended that subsequent research delve into the associations between corporate governance attributes and the precision of forecasted earnings. For instance, future investigations could assess whether other influential stakeholders, such as block holders, exhibit varying propensities towards issuing earnings forecast errors. Furthermore, forthcoming studies may explore the impact of family involvement in the leadership of IPO firms and its implications for the accuracy of earnings forecasts. Additionally, research could yield insights by examining cross-national variations in earnings forecasts between family and non-family enterprises. These are intriguing inquiries necessitating further examination in subsequent research endeavours.

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