

Founding Family Ownership, Earnings Management, and Voluntary Disclosure: The Socioemotional Wealth Perspective

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Received: January 18, 2024; After 2 rounds of review, Accepted: October 10, 2024

Abstract

This study empirically tests the framework developed by Gómez-Mejía, Cruz, and Imperatore (2014) for family firms' financial reporting decisions (i.e., earnings management and voluntary disclosure). We posit that control (identity)-focused family firms give priority to the 'Family Control' ('Family Identity') dimension. Using data for Taiwanese listed firms in 2005-2022, we show that control-focused family firms engage more in earnings management (voluntary disclosure), and identity-focused family firms engage less in earnings management (voluntary disclosure). In addition, given the discretion that characterizes family firms' financial reporting decisions, control-focused family firms (identity-focused family firms) engage more in accrual-based earnings management than real earnings management, and engage more (less) in forward-looking disclosure than historical information disclosure. Our findings align with the model proposed by Gómez-Mejía et al. (2014), and indicate that families may use family socioemotional wealth as a benchmark for their financial reporting choices.

Keywords: Control-focused family firms, Identity-focused family firms, Financial reporting decisions, Socioemotional emotion wealth

The authors acknowledge the helpful comments of the field editor and two anonymous reviewers, and take sole responsibility for their views. The authors also acknowledge the financial support from National Science and Technology Council of Taiwan (MOST 109-2410-H-153-033).

Data availability: Data used in this study are available from public sources identified in the study.



1. Introduction

Previous research has argued that the ownership and organizational structure of a company affects its financial reporting quality (Fan and Wong 2002). A common thread among previous studies examining the financial reporting strategies of family firms is mainly based on the agency framework, which argues that family firms are concerned with economic aspects of the business. Prior research appears inconclusive regarding the effect of family ownership on financial reporting strategies, using the agency framework.¹ Nonetheless, family owners are concerned not only with economic aspects, but also with noneconomic aspects of the business, which have been collectively referred to as socioemotional wealth (hereafter SEW). Gómez-Mejía, Cruz, and Imperatore (2014) went beyond traditional agency explanations and built on the socioemotional wealth framework to examine the impact of family ownership on a firm's financial reporting strategies (earnings management and voluntary disclosure). They argued that 'Family Control' and 'Family Identity' are the key contingencies affecting financial reporting decisions. Further, given the discretion that characterizes a firm's financial reporting strategies, the final choices of family principals with respect to the type of earning management (accrual-based or real-based), and regarding the level, content, and credibility of financial disclosure, would depend on the SEW dimensions that family owners are trying to preserve (control vs. identity). However, Gómez-Mejía et al.'s (2014) framework is still hypothetical and has not been empirically tested. Therefore, using Taiwan's listed firms, we directly measure the two dimensions (Family Control and Family Identity), and directly validate Gómez-Mejía et al.'s (2014) framework that explains how the differences in accounting strategies could occur both between family and non-family firms, and among family firms themselves.

Our initial focus is on investigating the connection between family ownership and earnings management. We propose that the impact of Family Control is more significant when family firms utilize control-enhancing mechanisms. We posit and find that control-focused family firms are more likely to engage in earnings management than non-control-focused family firms and non-family firms. Managers can manipulate earnings by engaging in accrual earnings management (hereafter AM) and real earnings management (hereafter RM).² RM is perceived to generate strong negative reactions from non-family shareholders, potentially leading them to challenge the prevailing position of the family. Accordingly, we posit and find that, relative to non-family firms and non-control-focused family firms, control-focused family firms engage more in AM than in RM, to maintain control and influence over the firm. Referring to the Family 'Identity dimension'

¹ Consistent with the alignment effect of family ownership, existing studies in the U.S. largely show that family firms tend to practice less earnings management than non-family firms (Wang 2006; Tong 2007; Paiva, Lourenço, and Branco 2016); however, consistent with the entrenchment effect of family ownership, existing studies in Asian countries find that family firms engage more in earnings management than non-family firms (Gopalan and Jayaraman 2012; Razzaque, Ali, and Mather 2016).

² Zang (2012) finds that managers use accrual earnings management and real earnings management as substitutes.

of SEW, it is argued that family owners of created firms should exhibit greater identification with the firm than family owners of acquired firms (Pazzaglia, Mengoli, and Sapienza 2013). We posit and find that identity-focused family firms engage in less earnings management than non-identity-focused family firms and non-family firms.³ In addition, in comparison to RM, AM is perceived as easily detectable by outsiders, auditors, and regulators; thus, its implementation would damage the reputation of identity-focused family firms. We posit and find that identity-focused family firms engage in less AM than RM, as compared to non-identity-focused family firms and non-family firms.⁴

In addition, we also explore the relation between family ownership and voluntary disclosure. It is expected that family firms that prioritize control would opt to provide less voluntary disclosure than non-family firms, as increased disclosure could potentially weaken family control. Our findings suggest that, in contrast to both non-family firms and non-control-focused family firms, control-focused family firms are less inclined to engage in voluntary disclosure. Disclosing more verifiable and credible information enhances the visibility of the firm; this allows outsiders to verify the information provided, and perhaps to challenge the family's decisions and choices, thereby eroding their control over the firm. We posit and find that control-focused family firms engage more in less credible and forward-looking disclosure, relative to non-family firms and non-control-focused family firms. Regarding the relation between the Family Identity dimension of SEW and voluntary disclosure, we posit and find that, due to the reputational advantages linked with voluntary disclosure, identity-focused family firms are more inclined toward voluntary disclosure, compared to both non-identity-focused family firms and non-family firms. Furthermore, identity-focused family firms will avoid the greater risks associated with disclosing less uncertain information, so as to avoid blame or challenges to guaranteed accuracy. Consequently, we posit and find that identity-focused family firms are more disposed to reveal more reliable and historical information, compared to both non-identity-focused family firms and non-family firms. It is worth noting that a significant number of Taiwan's listed firms choose to disclose their monthly earnings on a voluntary basis, as monthly earnings are commonly viewed as a form of credible and historical information. Accordingly, our findings indicate that identity-focused family firms are more inclined to disclose monthly earnings, in comparison to both non-family firms and non-identity-focused family firms.

This research makes several contributions to the current literature on family firms, earnings management, and voluntary disclosure. First, although it is widely acknowledged in the family

³ Gómez-Mejía et al. (2014) indicate that ensuring the quality of financial reporting is crucial for identity-focused family owners to satisfy their desire to preserve the family's image and reputation.

⁴ To further validate this finding, the SEW of family firms is an important reference point for their strategic decisions. We further measure the dimensions of Family Control and Family Identity by alternative proxies, and empirically test Gómez-Mejía et al.'s (2014) model using these alternative proxies. Specifically, we suggest that family firms with a family CEO give more priority to the Family Control dimension of SEW, while first-generation family firms give more priority to the Family Identity dimension of SEW. Our results are similar when using these alternative proxies.

business field that socioemotional wealth and non-financial objectives play an important role in understanding decision-making behavior in family firms (e.g., Sharma 2004; Gómez-Mejía, Haynes, Nunez-Nickel, Jacobson, and Moyano-Fuentes 2007; Basco and Pérez Rodríguez 2009; Distelberg and Sorenson 2009), little empirical evidence exists supporting this position, especially in an accounting context. Empirically, this study directly tackles one of the most significant challenges that the SEW model encounters: namely, the operationalization of SEW. This study proposes a set of items to capture the SEW dimensions of Family 'Control' and 'Identity', and also discusses some alternative methods (e.g., family status of CEO and the generation stage) for measuring them. Second, this study validates Gómez-Mejía et al.'s (2014) framework by directly measuring the extent of Family Control and Family Identity; it empirically tests how family owners choose the financial reporting strategies that will least damage the operant SEW dimension, and thus satisfy family principals' interests. We empirically support Gómez-Mejía et al.'s (2014) arguments that financial reporting decisions in family firms are more complex than an 'either/or' question on whether family firms are more or less likely to manipulate earnings and/or voluntarily disclose information. Our results would explain why prior research appears quite inconclusive with regard to family firms' financial reporting strategies based on the agency framework. Third, whereas prior studies have primarily emphasized the variations in behaviors between family and non-family firms, this study pays greater attention to the heterogeneity of family firms, and focuses on the differences in family control and family identity that are likely to lead to variance in the behavior of different family firms.

We emphasize and compare our findings with two extant studies that examine the relationship between family firms, earnings management, and the tools of earnings management, using socioemotional wealth as a theoretical framework (Achleitner, Günther, Kaserer, and Siciliano 2014; Martin, Campbell, and Gómez-Mejía 2016). Martin et al. (2016) suggest that the potential reputational consequences of earnings management lead family principals to engage in this practice less frequently than non-family firms, and that founder family firms are less likely than non-founder family firms to use earnings management. Achleitner et al. (2014) find that family firms engage less in RM and exhibit more earnings-decreasing accrual-based earnings management (ABEM) policies compared to non-family firms, which reflects the implications for family firms' transgenerational sustainability.

Based on the SEW framework, we also find that family firms' SEW influences their financial reporting decisions, including earnings management and voluntary disclosure. However, our findings differ from the aforementioned studies in several ways. First, while the previous studies treat family firms as homogeneous, we recognize that family firms and their SEW are driven by diverse motives among family owners, which can be synthesized into the preservation of different aspects of SEW. We consider heterogeneity to be among the most salient dimensions of SEW (i.e., control-focused vs. identity-focused) to infer family owners' evaluation of the benefits and costs of accounting strategies, leading to their diverse accounting disclosure policies. Second,

while the aforementioned studies focus on how family SEW influences earnings management, we develop an integrated framework for financial reporting decisions in family-controlled firms, including earnings management and corporate voluntary disclosure policies. In particular, the aforementioned studies compare earnings management between family and non-family firms, assuming that family principals prioritize the Family Identity dimension of SEW. Our study, however, takes into account the heterogeneity among family firms and focuses on the two most salient dimensions of SEW: control-focused and identity-focused. We find that the motivation to manage reported earnings and disclose voluntary information varies depending on whether family owners prioritize the Family Control and Influence dimension of SEW over the Family Identity dimension. Contrary to the aforementioned studies that suggest family firms engage in less earnings management and RM, we find that control-focused family firms engage more in earnings management to enhance family control, while identity-focused family firms engage in less earnings management to preserve their family reputation. Third, the aforementioned studies do not explore the tools (i.e., RM vs. AM) that family firms employ to achieve earnings goals, although Achleitner et al. (2014) find that family firms engage in less RM for fear of deteriorating firm value. In contrast, we further explore cases when family firms decide to engage in earnings management or voluntary disclosure—given that the discretion that characterizes these practices, family principals' final choices regarding the type of earnings management (accrual-based or real-based), and the level, content, and credibility of financial disclosure, depend on the SEW dimensions that family owners are trying to preserve (control vs. identity). Specifically, we observe that, compared to non-family firms and the other family firms, control-focused family firms prefer AM rather than RM, while identity-focused family firms favor RM. Regarding corporate disclosure, we find that, compared to non-family firms and the other family firms, control-focused family firms prefer forward-looking disclosure, while identity-focused family firms favor historical information disclosure.

The rest of the paper is organized as follows. Section 2 discusses the theoretical framework of the family SEW perspective. Section 3 discusses our hypotheses development; then, section 4 discusses the measurement of the main variables and sample selection. Our empirical results are discussed in section 5, and section 6 presents our additional tests and robustness checks. Finally, section 7 concludes.

2. Theoretical Framework and Literature Review

2.1 Theoretical Framework

Focusing on the economic incentive for family owners, based on the agency framework, may lead to oversimplification of the forces that motivate the owners (Prencipe, Bar-Yosef, and Dekker 2014). According to the SEW model, controlling family owners prioritize the utility

derived from non-economic factors related to the firm (Gómez-Mejía et al. 2007; Gómez-Mejía, Cruz, Berrone, and De Castro 2011; Berrone, Cruz, and Gómez-Mejía 2012). This perspective argues that the SEW is a unique reference point that directs family owners' strategic decisions (Gómez-Mejía et al. 2007). Family owners will make decisions that enhance or protect those non-economic benefits in order to fulfill the family's affective needs. However, the SEW framework includes several aspects related to the non-financial utilities that family owners derive from owning the firm. Depending on the reference points used for certain aspects of SEW, family firms could have different responses in making strategic decisions.⁵ Berrone et al. (2012) disaggregated the SEW model into five dimensions, comprising: family control, family identity, binding social ties, emotional attachment, and renewal of family bonds to the firm through dynastic succession (referred to as the FIBER model). Gómez-Mejía et al. (2014) proposed that family firm owners considered the costs and benefits of financial reporting decisions in relation to their focal SEW dimensions; in particular, Family Control versus Family Identity. Disentangling the effects of these two particular dimensions is relevant, since each of them reflects differences in the preferences of the owning family, and consequently in the underlying rationale for justifying the exercise of discretion in financial reporting decisions. Thus, it is expected that family owners' evaluation of the benefits and costs of financial reporting decisions (i.e., manipulating earnings and voluntary disclosure) is dependent upon which dimension of the SEW receives priority.

2.2 Family SEW and Earnings Management Policies

Firms may engage in earnings management, hoping for financial gains while avoiding detection. This practice can offer significant benefits, but it risks deceiving stakeholders and damaging the firm's reputation if discovered (Becker, Defond, Jiambalvo, and Subramanyam 1998). Firms manage earnings more before stock issues, to attract investors and boost stock demand (Dechow, Sloan, and Sweeney 1996; Teoh, Welch, and Wong 1998; Rangan 1998). When earnings are poor, firms use earnings management to hide their true financial position and prevent stock price declines (Leuz, Nanda, and Wysocki 2003; Haw, Hu, Hwang, and Wu 2004). However, if detected, earnings management can lead to fines, damaged reputation, and perceived unethical behavior (Becker et al. 1998; Elias, Cavana, and Jackson 2002). This deception can erode the customer base (Roychowdhury 2006) and negatively affect reputation (Fombrun and Shanley 1990). As such, earnings management is a gamble, with short-term benefits but potential long-term reputational harm. Studying this issue in family firms, which highly value their reputation, could be particularly interesting.

In addition to the financial consequences, family owners are also subject to a unique direct

⁵ The original conceptualization of the SEW model considers SEW to be a unique reference point that guides the family owner's strategic decisions (Gómez-Mejía et al. 2007). This view has been recently challenged by a more nuanced conceptualization.

socioemotional effect due to the stigma of earnings management, which non-family owners do not experience. Dominant family owners rarely enjoy anonymity and are often inextricably linked to the firm in the long run (Reiss and Oliveri 1983). Because of its unethical connotations, negative publicity associated with earnings management could lead to significant reputational, and hence immediate socioemotional wealth losses for family members, because it tarnishes the family's name (Dyer and Whetten 2006). Thus, despite any short-term financial benefit that family owners may derive from taking this gamble, the long-term socioemotional downside of earnings management looms as a significant potential loss at a very deep and personal level. It follows that family principals will give stronger consideration—relative to non-family principals—to the potential for long-term reputation loss that may result from taking the earnings management gamble. However, previous empirical research shows contradictory results for earnings management in relation to family firm SEW.

Martin et al. (2016) analysed the S&P 500 listed firms in the U.S., and found that family firms in which the founder was still involved manipulated less, in terms of discretionary accruals, than firms with later generations of family owners. One explanation for this finding might be that family founders tend to avoid the unethical use of earnings management, as they are more concerned with the reputational consequences of their decisions. Achleitner et al. (2014) investigated the earnings management of 402 family firms, in comparison with a sample of non-family businesses. The results indicated that family firms engaged less frequently in real earnings management and preferred using accrual-based earnings management to help retain transgenerational control, in order to protect the family welfare for the following generations.

On the contrary, Stockmans, Lybaert, and Voordeckers (2010) found that first-generation and founder-led private family firms have incentives to use greater earnings management than later generations and non-founder-led family firms. These results showed evidence that first-generation and founder-led firms should be more concerned about preserving the usefulness they derive from family control over the firm, and managing earnings to prevent monitoring by creditors. The findings also provided evidence that generational knowledge accumulation has a positive effect on reducing family firm opaqueness. However, the power dimension increases in terms of future generational involvement: the founder will have fewer incentives to maintain opportunistic behaviour by avoiding moral hazards, hold-ups, adverse selection problems, and reducing self-control costs (Lubatkin, Schulze, Ling, and Dino 2005). For this reason, future generations will not use earnings management practices and evasive reporting decisions to protect their status and family wealth against the other family members.

2.3 Family SEW and Corporate Disclosure Policies

A firm's ownership structure significantly influences its tendency to voluntarily disclose non-mandatory information (Chen, Chen, and Cheng 2008; Shi, Magnan, and Kim 2012). Voluntary disclosure, which reveals private information, reduces owners' discretion; this

particularly affects firms with concentrated ownership and high private benefits of control (Shleifer and Vishny 1997; Shi et al. 2012).

Voluntary disclosure stems from agency problems, specifically information asymmetries between insiders (e.g., majority and minority shareholders) or between insiders and outsiders (Shleifer and Vishny 1997; Hermalin and Weisbach 2012). Information asymmetries are not problematic if stakeholders have aligned goals (Chrisman, Chua, and Litz 2004). However, divergent goals among parties turn these asymmetries into operational risks.

A key difference between family and non-family firms is the former's pursuit of non-economic goals (Gómez-Mejía et al. 2007), which makes family firms with non-family minority shareholders particularly susceptible to information asymmetries (Patelli and Prencipe 2007). From the socioemotional wealth perspective, maintaining control is crucial for family firms (Gómez-Mejía et al. 2007; Zellweger, Kellermanns, Chrisman, and Chua 2012), and complicates their decision to disclose private information (Cascino, Pugliese, Mussolino, and Sansone 2010). Minority shareholders and potential investors worry that family owners may extract private benefits; this prompts demands for risk premiums or strong corporate governance (Shleifer and Vishny 1997; Bertrand and Schoar 2006; Miller, Le Breton-Miller, and Lester 2013).

Around the world, a common ownership structure consists of family members who hold executive positions and thus have a large influence in the firm (Isakov and Weisskopf 2014). The distinctive characteristics that separate the governance in family firms from non-family firms may have an incremental impact on their disclosure practices. Specifically, compared to other controlling owners, founders have a 'personal' interest in the firm, and wish to pass on the business to their next generation (Anderson and Reeb 2004). Thus, family firms may be more concerned about protecting their reputation and avoiding public scrutiny; they may have a greater commitment to openness, accountability, and integrity, thereby enhancing trust and credibility. They may be more concerned with differentiation from other businesses, competitive advantage in the marketplace, and strengthening their brand identity; this leads to family firms' greater willingness to make voluntary disclosures.

Another feature of family firms is the high presence of family members at the top management level, and their personal ties to other executives in the firm (Hope, Langli, and Thomas 2012). Family members thus have access to inside corporate information, which enables them to directly monitor the manager through private channels without being heavily dependent on public information (Chen et al. 2008; Chau and Gray 2010). As such, these family firms avoid the leakage of costly proprietary information to competitors; they opt to keep certain information confidential, to safeguard the family's interests and maintain their control over the business. In addition, family firms may worry that disclosing too much information voluntarily could invite interference or influence from external parties, and potentially dilute the family's control over the business. This leads to the lesser willingness of family firms to make voluntary disclosures.

3. Hypotheses Development

3.1 Family Ownership and Earnings Management

3.1.1 The 'Family Control' Dimension of SEW and Earnings Management

As suggested by Gómez-Mejía et al. (2014) and prior literature, control-focused family firms engage more in earnings management than other family firms and non-family firms. First, these types of family owners are subject to greater pressure to meet earnings expectations, because any failure to do so might be taken as the firms having uncertain or poor future prospects (Brown and Caylor 2009). Such a failure to meet earnings expectations may lead outside investors to question the family's competence in managing the firm, or to attempt hostile takeovers (Graham, Harvey, and Rajgopal 2006); this potentially leads to the family losing control and influence. By manipulating earnings, they can influence financial statements to align with their strategic objectives of retaining control. Second, control-focused family firms could manipulate earnings to influence other stakeholders, such as customers, suppliers, and employees (Dichev, Graham, Harvey, and Rajgopal 2013). Furthermore, any debt covenant constraints that are triggered might potentially yield family owners' control and influence to the debt-holders (Dichev and Skinner 2002). Therefore, family owners who prioritize the Family Control dimension of SEW have stronger motivations to undertake earnings management activities in order to meet debt covenants. Third, control-focused family firms may use earnings management to ensure they have the resources and flexibility to make decisions that align with their long-term goals (Martin et al. 2016). By presenting favorable financial results, they can secure better financing terms, attract investors, or manage stakeholders' perceptions, thereby retaining their decision-making power. Fourth, control-focused family firms may use earnings management to maintain strategic flexibility (Ma and Ma 2024). By smoothing earnings and avoiding large fluctuations in reported income, they can create a perception of steady performance, which can be advantageous in strategic planning and execution. This perceived stability can be crucial in negotiating with stakeholders and making long-term strategic decisions.

In summary, control-focused family firms are more likely to engage in earnings management because it helps them to maintain control and influence, improve how they are perceived by other stakeholders, minimize external interference, and maintain strategic flexibility. This line of reasoning leads to the following hypothesis:

H1A: *Control-focused family firms are more likely to engage in earnings management than other family firms and non-family firms.*

Prior literature argues that RM has a negative impact on future performance (Tabassum, Kaleem, and Nazir 2015; Vorst 2016). If detected, this practice is likely to trigger strong negative reactions from non-family shareholders, which could potentially lead to challenges to the

family's dominant position within the company. As suggested by Gómez-Mejía et al. (2014), to protect their financial interests, these stakeholders may pressure family firms to add independent directors to the board, try to gain a seat on the board themselves (Fiegener, Brown, Dreux, and Dennis 2000; Chrisman et al. 2004), or include restrictive stipulations in the loan contract (Prencipe, Markarian, and Pozza 2008) if RM is detected. Such actions could threaten the socioemotional wealth of family shareholders, as the potential loss of control over the firm could have a significant impact on the family's emotional attachment to the business. Given the high costs associated with RM, family principals who prioritize the control dimension of SEW will prefer other types of earnings management that are less likely to mask the firm's true financial worth. Such methods include engaging in AM without cash-flow consequences.

On the other hand, control-focused family firms may engage in less accrual-based earnings management, due to its greater regulatory risk and reduced ability to maintain authority. First, accrual-based management involves adjusting accounting entries, which can be easily detected by auditors and regulatory bodies. This increases the risk of legal and financial repercussions, and potentially threatens the family's control over the firm. Real earnings management, on the other hand, involves operational decisions that are less likely to be scrutinized and can be justified as business strategy. By avoiding accrual manipulations that could be flagged as unethical or fraudulent, family firms maintain their authority and control.

The preceding arguments suggest, *ex ante*, that it is unclear whether control-focused family firms disclose more than non-control-focused family firms and non-family firms, or less. Therefore, our hypothesis is nondirectional and we address this issue empirically:

H1B: *When control-focused family firms decide to engage in earnings management, they may prefer either real earnings management or accrual-based earnings management.*

3.1.2 The 'Family Identity' Dimension of SEW and Earnings Management

Family owners emphasizing the Family Identity dimension of the SEW engage in less earnings management because of their overriding concern to preserve the family's image and reputation. First, identity-focused family firms with a strong family identity prioritize long-term sustainability over short-term gains. Such family owners are less likely to be concerned with a failure to meet short-term earnings expectations, because any negative publicity related to the subsequent unraveling of earnings management would be considered a threat to their identity, and to the existence of the family itself (Gómez-Mejía et al. 2014; Dyer and Whetten 2006). Second, due to the long-term nature of the family investment, any reputational damage arising from the unraveling of earnings management is likely to be long-lasting, since family owners cannot easily sell their shares. Third, these firms often seek to build and maintain a long-lasting legacy. Earnings management, if discovered, can damage this legacy, affecting not only the current generation, but also future generations of the family. As stakeholders are likely to deal with

the same group of family owners over an extended period, family owners tend to avoid actions that damage the family image, because this would hinder long-term relationships with external stakeholders (Zellweger, Nason, Nordqvist, and Brush 2011). Fourth, a strong family identity often comes with a commitment to high ethical standards and integrity. Earnings management is generally viewed as unethical and deceptive, conflicting with the values upheld by these firms (Poretti, Jérôme, and Brousseau 2023). Finally, engaging in earnings management can lead to legal problems and regulatory scrutiny. Identity-focused family firms, which value their clean record and ethical standing, prefer to avoid these risks (Sageder, Mitter, and Feldbauer-Durstmüller 2018). The preceding arguments suggest the following hypothesis:

H2A: *Identity-focused family firms engage in less earnings management than other family firms and non-family firms.*

As illustrated earlier, relative to RM, AM is more easily detected by regulators and auditors (Zang 2012). Identity-focused family owners have concerns that the occurrence of AM will lower the reliability of the family owners as perceived by the financial market and stakeholders, and ultimately cause value-destroying effects to their SEW. Thus, identity-focused family owners will favor real earnings management, which is less visible and less easily detected by outside investors.

On the other hand, accrual-based earnings management techniques often involve manipulating accounting entries to smooth out earnings or shift income between periods, without necessarily altering the underlying business operations (Enomoto, Kimura, and Yamaguchi 2015). This approach can be less conspicuous than real earnings management, which involves actual changes in business activities and diminishes long-term firm value. For family firms concerned about their reputation, the subtlety of accrual-based manipulation may be preferable, as it reduces the risk of negative perceptions from stakeholders. The preceding arguments suggest, *ex ante*, that it is unclear whether identity-focused family firms engage in more or less AM/RM than other family firms and non-family firms, when they decide to engage in earnings management. Therefore, our hypothesis is nondirectional and we address this issue empirically:

H2B: *When identity-focused family firms decide to engage in earnings management, they may prefer either real earnings management or accrual-based earnings management.*

3.2 Founding Family Ownership and Voluntary Disclosure

3.2.1 The 'Family Control' Dimension of SEW and Voluntary Disclosure

As suggested by Gómez-Mejía et al. (2014), control-focused families are reluctant to engage in voluntary disclosure. First, family-controlled firms often value autonomy and independence in decision-making. They may view voluntary disclosure as relinquishing some control over their business affairs to external stakeholders, such as investors, regulators, or the public.

Consequently, they may be hesitant to disclose information voluntarily, in order to maintain their autonomy and preserve the family's control over the business (Ali, Chen, and Radhakrishnan 2007). Second, family-controlled firms prioritize protecting the interests of the controlling family members. They may perceive voluntary disclosure as potentially exposing sensitive information about the family's ownership structure, succession plans, or personal wealth, which could be exploited by competitors, adversaries, or other stakeholders. Therefore, they may opt to keep certain information confidential, to safeguard the family's interests and maintain control (Golden and Kohlbeck 2017; Engel, Hack, Stanley, and Kellermanns 2019). Third, voluntary disclosure could lead to increased scrutiny from external stakeholders, including investors, analysts, or the media. Family-controlled firms may worry that disclosing too much information voluntarily could invite interference or influence from external parties, thus potentially diluting the family's control over the business (Golden and Kohlbeck 2017; Engel et al. 2019). Consequently, they may be inclined to limit the extent of voluntary disclosure to preserve their control and autonomy. Finally, as stated in Hypothesis 1A, control-focused family firms engage more in earnings management, which would enable them to use opaqueness in disclosure to conceal private rents arising from earnings management. This line of reasoning leads to the following hypothesis:

H3A: *Control-focused family firms engage in less voluntary disclosure than other family firms and non-family firms.*

Hypothesis 3A posits that control-focused family firms engage in less voluntary disclosure. As suggested by Gómez-Mejía et al. (2014), however, if they do so, they disclose more forward-looking rather than historical and verifiable information. First, disclosing information about future prospects is beneficial for attracting outside investors and boosting their confidence in the firm. This, in turn, can increase the control and influence of family owners who prioritize control in the company. Second, control-focused family firms typically have a long-term orientation and prioritize preserving the family's legacy and continuity over short-term financial performance. Forward-looking information aligns more closely with their long-term objectives by highlighting future opportunities, challenges, and strategies for sustainable growth (Tao, Deokar, and Deshmukh 2018; Mio, Marchini, and Mediolì 2020). By emphasizing their commitment to long-term value creation, family firms can reinforce their control over the business and maintain stakeholders' trust and support (De Massis, Wang, and Chua 2019). Third, control-focused family firms may seek to differentiate themselves from other firms in the market by highlighting their unique strengths, capabilities, and competitive advantages (Ramadani, Chang, Palalić, and Memili 2024). Forward-looking information allows family firms to showcase their vision, innovation, and strategic foresight, thereby positioning themselves as industry leaders and reinforcing their control over the business (Huang and Kang 2019). By focusing on future-oriented disclosures, family firms can distinguish themselves from competitors and strengthen their control of the firm's narrative. Finally, the majority of forward-looking data is subjective instead of objective, and it is challenging to authenticate the reliability of such qualitative

information. To avoid any challenge to their control rights by external investors, control-focused family firms tend to disclose forward-looking information that cannot be later verified by outside investors. The preceding arguments suggest the following hypothesis:

H3B: *Control-focused family firms engage in more forward-looking voluntary disclosure than other family firms and non-family firms when they decide to engage in voluntary corporate disclosure.*

3.2.2 The 'Family Identity' Dimension of SEW and Voluntary Disclosure

Gómez-Mejía et al. (2014) suggest that identity-focused family firms provide more voluntary disclosure. First, identity-focused family firms recognize the importance of building trust and transparency with stakeholders, including customers, employees, investors, and the local community (Gu, Wang, and Bai 2024). Voluntary disclosure allows them to demonstrate their commitment to openness, accountability, and integrity, thereby enhancing trust and credibility (Bodoff and Hirsch 2023). By sharing information about their business practices, performance, and decision-making processes, identity-focused family firms can establish themselves as trustworthy and reliable partners; this strengthens their relationships with stakeholders and reinforces their identity as a reputable family business. Second, identity-focused family firms may use voluntary disclosure as a means of differentiation and competitive advantage in the marketplace (Golden and Kohlbeck 2017). By sharing information about their unique family culture, values, and governance practices, identity-focused family firms can distinguish themselves from other businesses and strengthen their brand identity. Voluntary disclosure allows them to showcase their family heritage, long-term perspective, and commitment to social responsibility; this attracts customers, employees, and investors who align with their values, and reinforces their identity as a distinctive family business. Third, identity-focused family firms recognize the importance of managing their reputation and perceptions in the eyes of stakeholders and the broader public. Voluntary disclosure allows them to proactively shape the narrative surrounding their business, through addressing misconceptions, dispelling rumors, and highlighting their contributions to the community. By sharing information about their ethical practices, corporate citizenship, and social impact initiatives, identity-focused family firms can enhance their reputation, mitigate reputational risks, and reinforce their identity as a responsible and trusted family business. Finally, Skinner (1994) posits and finds that firms may incur legal liabilities and reputational costs if they fail to provide earnings warnings prior to an earnings report that contains bad news. Identity-focused family owners may prioritize the avoidance of legal liabilities and reputational costs, making them more likely to opt for greater disclosure. The preceding arguments suggest the following hypothesis:

H4A: *Identity-focused family firms engage in more voluntary disclosure than other family firms and non-family firms.*

As proposed in Hypothesis 4A, family firms that prioritize their identity disclose more information to external investors as a means of safeguarding their company's reputation. In this context, identity-focused family firms recognize the importance of building trust and credibility with stakeholders, including customers, employees, investors, and the local community. Historically focused voluntary disclosure allows them to demonstrate their track record of success, resilience, and integrity over time, thereby enhancing trust and confidence in the family and the business (Lundholm 1999; Lim, Matolcsy, and Chow 2007; Rezaee and Tuo 2017). By sharing historical performance data, key achievements, and lessons learned from past challenges, identity-focused family firms can establish themselves as trustworthy and reliable partners, which reinforces their identity as a reputable family business. Second, identity-focused family firms often emphasize stability and continuity as key pillars of their identity and culture (Kammerlander 2022; Ramadani, Chang, Palalić, and Memili 2024). Historically focused voluntary disclosure allows them to highlight their enduring presence in the marketplace, spanning multiple generations and economic cycles. By sharing information about their long-standing commitment to customers, employees, and communities, identity-focused family firms can reassure stakeholders of their stability and resilience, and thus boost their reputation as a reliable and enduring business partner. Third, identity-focused family firms value tradition and heritage as core elements of their identity and culture (Ramadani et al. 2024). Historically focused voluntary disclosure allows them to celebrate their family's contributions, achievements, and values passed down through generations. By sharing stories and artifacts from the past, identity-focused family firms can honor their ancestors and ancestors' legacies, thereby strengthening their identity as a family-centric business rooted in tradition and heritage.

In contrast, forward-looking disclosure involves projecting future performance, strategies, and goals, which inherently carries uncertainty and risk. Family firms may be hesitant to make forward-looking statements that could potentially deviate from historical performance or fail to materialize as expected, as they fear the repercussions of disappointing stakeholders or damaging their reputation. Furthermore, identity-focused family firms often value privacy and discretion, particularly regarding internal family matters or strategic plans (Williams, Pieper, Kellermanns, and Astrachan 2018; Ramadani, Memili, Palalić, and Chang 2020; Schweiger, Matzler, and Hautz 2023). Forward-looking disclosure may require revealing sensitive information about future business strategies, succession plans, or investment decisions (Liu 2015; Li, Yan, Liu, Wan, Xu, and Lin 2023); family firms may prefer to keep these confidential, to maintain their competitive advantage or protect the family's interests. The preceding arguments suggest the following hypothesis:

H4B: *Identity-focused family firms engage in more historically focused voluntary disclosure than other family firms and non-family firms.*

4. Measurement of The Main Variables and Sample Selection

4.1 Sample Selection

Our sample consists of publicly listed firms on the Taiwan Stock Exchange from 2005 to 2022. We chose to start our sample in 2005 because in that year, the Taiwanese Securities and Future Institute began to publish listed firms' degree of disclosure transparency. Regulated industries, such as utility and financial industries, may have specific regulations that affect a firm's ownership structure and financial reporting decisions; therefore, we excluded such firms from our sample. Variables were determined based upon data from the *Taiwan Economics Journal* database. We also manually collected data on family attributes and forward-looking disclosures from company prospectuses, annual reports, and the Business Group in Taiwan.

In column (1) of Table 1, financial and utility firms are excluded from the sample. We eliminated firm years with insufficient data when computing earnings management. We also eliminated firm years with insufficient data, to identify 'voluntary disclosure' and 'family firm'. Finally, firms without a complete set of corporate governance and financial data were excluded from our sample. This selection process resulted in a sample of 16,741 firm years. For testing the process of whether the family firms decide to engage in earnings management, we removed the non-suspect sample of 6,234 observations and obtained the suspect sample of 10,507 observations. For testing the process of whether the family firms decide to engage in voluntary monthly earnings disclosure, we removed the non-monthly earnings disclosure sample (8,371 observations) and obtained the voluntary monthly earnings disclosure sample of 8,370 observations.

Column (2) of Table 1 presents the distribution of observations by year. The average percentage of family firms in Taiwan is 63.48% across all sample years. Our analysis reveals that family firms are not evenly spread across industries (this data is untabulated). The results imply that it is crucial to consider industry affiliation as a control variable in our empirical analysis.

4.2 Measurement of the Main Variables

4.2.1 Family Firms

Firms are classified as family firms when the founder or a member of his/her family (by either blood or marriage) serve as directors in the management and/or supervisory board, or act as a blockholder, either individually or as a group (Villalonga and Amit 2006; Weiss 2014; Bardhan, Lin, and Wu 2015; Ma, Ma, and Tian 2017). In order to account for more concentrated ownership, studies related to Taiwan's capital market set the threshold for a family blockholding at 10% of voting rights (La Porta, Florencio Lopez-de-Silanes, and Shleifer 1999; Claessens, Djankov, and Lang 2000; Faccio and Lang 2002). The two dimensions of SEW are measured as follows.

Table 1 Sample selection and distribution

Panel A: Sample composition				
Firm-years available in TEJ for the fiscal years 2005-2022				19,962
Delete banks and financial institutions data				(1,029)
Delete firm-years with insufficient data to compute earnings management				(624)
Delete firm-years with insufficient data to identify family firm				(374)
Delete firm-years with insufficient data to identify voluntary disclosure				(232)
Delete observations with missing data				(962)
Total sample				16,741
Data sets			Earnings management	Voluntary disclosure
Total sample			16,741	16,741
Delete non-suspicious sample (non-monthly earnings disclosure sample)			(6,234)	(8,371)
Suspicious sample (voluntary monthly earnings disclosure sample)			10,507	8,370
Panel B: Observations distribution across years				
Year	All firms (<i>n</i>)	Family firms (<i>n</i>)	Nonfamily firms (<i>n</i>)	Family firms (%)
2005	773	502	271	64.94%
2006	851	548	303	64.39%
2007	890	572	318	64.27%
2008	828	534	294	64.49%
2009	804	501	303	62.31%
2010	819	518	301	63.25%
2011	865	536	329	61.97%
2012	880	544	336	61.82%
2013	930	597	333	64.19%
2014	957	619	338	64.68%
2015	969	594	375	61.30%
2016	1,017	642	375	63.13%
2017	1,021	649	372	63.57%
2018	1,058	674	384	63.71%
2019	1,047	667	380	63.71%
2020	1,005	640	365	63.68%
2021	994	648	346	65.19%
2022	1,013	660	353	65.15%
Total	16,741	10,665	6,067	63.71%

4.2.2 The 'Family Control' Dimension of SEW

As discussed earlier, the Family Control dimension is considered more salient for family owners if there are control-enhancing mechanisms in place.⁶ The family firm dummy variable, *FAM_NDIV* (*FAM_DIV*), is associated with control-enhancing mechanisms; it is equal to 1 if the family firm does not have cash-vote divergence, and 0 otherwise (Kuo 2017).

4.2.3 The 'Family Identity' Dimension of SEW

The binary variable for identity-focused family firms, *FAM_NACQ*, is defined as 1 (and 0 otherwise) if a firm has been created or inherited by current family owners; whereas the binary variable for non-identity-focused family firms, *FAM_ACQ*, is defined as 1 (and 0 otherwise) if family owners acquire the firm by purchase.

4.2.4 Binary Variable for Suspect Earnings Management

Previous research has indicated that companies that are close to or just above earnings benchmarks engage more in earnings management to meet these crucial benchmarks (e.g., Bartov, Givoly, and Hayn 2002). Graham et al. (2005) provided survey evidence that CFOs find the following earnings benchmarks the most important: analyst consensus forecast, zero earnings, and previous quarter/yearly earnings per share (EPS). Accordingly, we define suspect earnings management as firm-years with earnings that just beat/meet the prior year's earnings, zero earnings, and analyst consensus forecasts.⁷ Specifically, the dependent binary variable for suspect earnings management, *Suspect*, is equal to 1 if a firm just beats/meets one of the earnings benchmarks discussed above, and 0 otherwise.

4.2.5 Real Earnings Management

As discussed by Roychowdhury (2006), firms can utilize three real activities-manipulation methods to avoid earnings disappointments: sales manipulation through accelerating the timing of sales, increased price discounts, or more lenient credit terms; reducing the reported cost of goods sold, through overproduction; and decreasing operating expenses through reduction of discretionary expenditures. First, sales management activities lead to lower current-period

⁶ Control-enhancing mechanisms, including dual-class shares, crossholdings, and pyramids, are used to obtain control of voting rights in excess of cash flow rights (Claessens et al. 2000; Faccio and Lang 2002; Villalonga and Amit 2006).

⁷ For the prior year's earnings benchmark, we follow Burgstahler and Dichev (1997) and Dechow, Richardson, and Tuna (2003), and define suspect firm-years as those for which the difference between the current year and prior year's net income, scaled by beginning of the prior year's market value, is between 0 and 0.01. For the zero earnings benchmark, we define suspect firm-years as those where the current year's net income, scaled by beginning-of-year market value, is between 0 and 0.02, and 0 otherwise. For the analyst consensus, we define suspect firm-years as the difference between the actual earnings per share and the average of all analysts' latest forecasts made within a $[-180, -4]$ day window prior to the earnings announcement date, rounded to the nearest cent. We define firms that are suspected of engaging in earnings management as those that meet or beat expectations by two cents or less (Caskey and Ozel 2017).

cash flows from operations, and higher production costs than is normal, given the sales level. Second, when a company engages in overproduction, it produces more goods than it can sell, resulting in excess inventory. This excess inventory leads to higher production costs relative to sales, which can result in lower cash flow from operations due to decreased sales revenue and increased expenses. Third, apart from decreasing operating expenses, curtailing discretionary expenditures also has a positive effect on abnormal CFO from operations. Since sales manipulation and overproduction have opposite effects on current-period cash flows compared to reducing discretionary expenditures, the net effect on abnormal cash flow from the three real activities-manipulation methods is unclear. Therefore, following Zang (2012), we measure real earnings management using only overproduction and discretionary expenses variables, excluding abnormal cash flows to avoid confounding effects. The overall real management (RM) measure also excludes abnormal cash flows.

Specifically, similarly to Roychowdhury (2006), we estimate the following cross-sectional regressions for each industry and year:

$$\frac{DISEXP_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{i,t-1}} \right) + \alpha_2 \left(\frac{S_{i,t-1}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \quad (1)$$

$$\frac{PROD_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{A_{i,t-1}} \right) + \alpha_2 \left(\frac{S_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left(\frac{\Delta S_{i,t}}{A_{i,t-1}} \right) + \alpha_4 \left(\frac{\Delta S_{i,t-1}}{\Delta A_{i,t-1}} \right) + \varepsilon_{i,t} \quad (2)$$

The residuals, $\varepsilon_{i,t}$, in equation (1) are used as the proxy for abnormal discretionary expenditures (*ABExp*); and the residuals, $\varepsilon_{i,t}$, in equation (2) are used as the proxy for abnormal production (*ABProd*). In these equations, *A* is total assets; *S* is sales; ΔS is change in sales from *t*–1 to *t*; *DISEXP* is the sum of *R&D* expenses, advertising expenses, and selling, general, and administrative (*SG&A*) expenses; *PROD* is the sum of *COGS* and change in inventory. We multiply *ABExp* by –1 to ensure that the two variables represent real management in a consistent fashion (the more positive the number, the higher the real manipulation). The aggregated RM (*Total_RM*) is equal to the addition of *ABExp* and *ABProd*.

4.2.6 Accrual-Based Earnings Management

We use discretionary accruals to measure the extent of accrual-based earnings management. In addition, we use a variant of the modified Jones model, which is similar to that used by Ashbaugh, Lafond, and Mayhew (2003), to explicitly control for lagged returns on assets (*LagROA*), so as to mitigate the effect of firm performance on measured discretionary accruals. Specifically, total accruals by industry are modeled by:

$$ACC_{i,t} = \alpha_0 + \alpha_1(\Delta REV_{i,t} - \Delta AR_{i,t}) + \alpha_2 PPE_{i,t} + \alpha_3 LagROA_{i,t} + \varepsilon_{i,t} \quad (3)$$

where ΔREV is the change in revenue; ΔAR is change in accounts receivable; and PPE indicates property, plants, and equipment; the variables are deflated by total assets at the beginning of the year; $LagROA$ is the return on total assets for the previous year.

The predicted values from equation (4) are used to measure nondiscretionary accruals ($NACC$):

$$NACC_{i,t} = \alpha_0 + \alpha_1(\Delta REV_{i,t} - \Delta AR_{i,t}) + \alpha_2 PPE_{i,t} + \alpha_3 LagROA_{i,t} + \varepsilon_{i,t} \quad (4)$$

By definition, discretionary accruals ($DACC$) are the difference between total accruals (ACC) and the predicted value from model (3) (i.e., nondiscretionary accruals, $NACC$). The $DACC$ variable is hereafter abbreviated as AM .

4.2.7 Voluntary Disclosure Score

We measure firms' voluntary disclosure score ($DISC$) by their rank in the Information Disclosure and Transparency Ranking System (IDTRS) announced by the Taiwanese Securities and Future Institute (SFI). Since 2005, SFI has disclosed the ranking results of all listed firms, which are sorted into five ranks (A+, A, B, C, C-) on the basis of their degree of disclosure transparency. In order to employ the ordered probit regression associated with Hypothesis 3A and Hypothesis 4A, specifically, firms ranked as A+ are denoted as 5, A as 4, B as 3, C as 2, and C- as 1.

4.2.8 Forward-Looking Disclosures

The identification of forward-looking disclosures follows the method of Muslu, Radhakrishnan, Subramanyam, and Lim (2015), which analyzes the text of annual reports at the sentence level. To refine this method, the study excludes tables, figures, and boilerplate language, such as Safe Harbor statements. Forward-looking sentences are defined as MD&A sentences that contain specific phrases, forward-looking expressions, future verb conjugations, numerical references to future years, and forward-looking modal verbs, based on computer-science-based linguistics for identifying future-related sentences (Wang and Lin 2004). In empirical tests, forward-looking disclosures (FLD) are measured as the number of forward-looking sentences divided by the total number of sentences in the MD&A section. Details on the identification of forward-looking sentences are provided in Appendix B.

4.2.9 Historical and Credible Disclosure (Monthly Earnings Disclosure Variable)

Monthly earnings disclosure frequency (MED) during the year is equal to the number of monthly earnings disclosures provided by a firm during the year.

4.3 Model Specification of Family SEW and Earnings Management

For testing Hypothesis 1A, we estimate the following probit regression:

$$\text{Prob}(\text{Suspect}_{i,t} = 1) = \alpha_0 + \alpha_1 \text{FAM_DIV}_{i,t} + \alpha_2 \text{FAM_NDIV}_{i,t} + \text{Controls} + D_Year_t + D_Industry_t + \varepsilon_{i,t} \quad (5)$$

For Hypothesis 2A, we estimate the following equation:

$$\text{Prob}(\text{Suspect}_{i,t} = 1) = \alpha_0 + \alpha_1 \text{FAM_NACQ}_{i,t} + \alpha_2 \text{FAM_ACQ}_{i,t} + \text{Controls} + D_Year_t + D_Industry_t + \varepsilon_{i,t} \quad (6)$$

Variable definitions were provided earlier in the paper. Similar to Bergstresser and Philippon (2006), Roychowdhury (2006) and Zang (2012), the control variables include beating/meeting analysts' forecast consensus (*BEATER*), shares outstanding (*SHARE*), analysts following (*ANALYST*), the average bonus compensation (*BONUS*), firm profitability (*ROA*), firm size (*SIZE*), firm growth opportunities (*MB*), firm leverage (*LEV*), the goal of managing earnings upward (*EARN*), year indicators, and the industry indicators.⁸

If the family firms decide to engage in earnings management, Hypothesis H1B and Hypothesis 2B further examine the mechanisms through which control-focused family firms and identity-focused family firms manage earnings. Using the suspect sample as illustrated above, we further test Hypothesis 1B and Hypothesis 2B by employing Zang's recursive simultaneous equation system, after controlling for potential self-selection bias; this captures the sequentiality of RM and AM. Zang (2012) found that managers use accrual manipulation and real earnings management as substitutes when managing earnings, and managers determine real manipulation before accrual manipulation (i.e., RM and AM are determined sequentially, rather than simultaneously).⁹ Specifically, we estimate the following equations:

$$\begin{aligned} RM_{i,t} = & \alpha_0 + \alpha_1 \text{FAM_DIV}_{i,t} + \alpha_2 \text{FAM_NDIV}_{i,t} + \sum_k \alpha_{3,k} (\text{Cost of RM})_{k,i,t} + \\ & \sum_m \alpha_{4,m} (\text{Cost of AM})_{m,i,t} + \sum_n \alpha_{5,n} (\text{Controls})_{n,i,t} + \alpha_6 \text{INVS_MILLS1}_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (7)$$

⁸ *BEATER* is the frequency of meeting/beating analysts' earnings forecasts in the past four quarters; *SHARE* is the natural logarithm of the number of shares outstanding; *ANALYST* is the natural logarithm of the number of analysts covering the firm; *BONUS* is the average bonus compensation as a proportion of total compensation received by the CEO and the CFO of a firm; *ROA* is the ratio of earnings before interests and tax to total assets; *SIZE* is the natural logarithm of total assets; *MB* is the market-to-book ratio; *LEV* is the ratio of long-term debt to total assets; *EARN* is the earnings before extraordinary items minus discretionary accruals and production costs, plus discretionary expenditures.

⁹ In this recursive equation system, RM is predetermined by the costs of RM and AM. On the other hand, the AM equation in equation system (8) and (10) has RM as an independent variable. Under the assumption of sequentiality, when managers determine the level of AM, they observe the realized RM. Hence, the RM variable in the AM equation is exogenous.

$$\begin{aligned}
 AM_{i,t} = & \alpha_0 + \alpha_1 FAM_DIV_{i,t} + \alpha_2 FAM_NDIV_{i,t} + \alpha_3 UnexpectedRM_{i,t} + \\
 & \sum_k \alpha_{4,k} (Cost\ of\ RM)_{k,j,t} + \sum_m \alpha_{5,m} (Cost\ of\ AM)_{m,j,t} + \\
 & \sum_n \alpha_{6,n} (Controls)_{n,j,t} + \alpha_7 INVS_MILLS2_{j,t} + \varepsilon_{i,t}
 \end{aligned} \tag{8}$$

$$\begin{aligned}
 RM_{i,t} = & \alpha_0 + \alpha_1 FAM_NACQ_{i,t} + \alpha_2 FAM_ACQ_{i,t} + \sum_k \alpha_{3,k} (Cost\ of\ RM)_{k,i,t} + \\
 & \sum_m \alpha_{4,m} (Cost\ of\ AM)_{m,i,t} + \sum_n \alpha_{5,n} (Controls)_{n,i,t} + \alpha_6 INVS_MILLS2_{i,t} + \varepsilon_{i,t}
 \end{aligned} \tag{9}$$

$$\begin{aligned}
 AM_{i,t} = & \alpha_0 + \alpha_1 FAM_NACQ_{i,t} + \alpha_2 FAM_ACQ_{i,t} + \alpha_3 UnexpectedRM_{i,t} + \\
 & \sum_k \alpha_{4,k} (Cost\ of\ RM)_{k,i,t} + \sum_m \alpha_{5,m} (Cost\ of\ AM)_{m,i,t} + \sum_n \alpha_{6,n} (Controls)_{n,i,t} + \\
 & \alpha_7 INVS_MILLS1_{i,t} + \varepsilon_{i,t}
 \end{aligned} \tag{10}$$

We further estimate equations (7) and (8) to test Hypothesis H1B, regarding control-focused family firms' earnings management methods. Equations (9) and (10) test Hypothesis H2B, on identity-focused family firms' earnings management. *INVS_MILLS1* and *INVS_MILLS2* represent the inverse Mills ratio estimated from equations (5) and (6). We employ Zang's (2012) method to define various RM cost variables, AM cost variables, and the other control variables. The definitions of the various control variables, including AM and RM cost variables, are presented in a footnote.¹⁰

¹⁰ Following Zang (2012), we include *TAX*, *MARKET*, *ZSCORE*, and *INST* to control for the costs associated with RM; *BIG4*, *TENURE*, *CYCLE*, and *NOA* to control for the costs associated with AM. *TAX* is the marginal tax rate; *MARKET* is the percentage of the firm's sales to the total sales of its industry; *ZSCORE* is computed based on Altman's model; *INST* is the percentage of institutional ownership; *BIG4* is a dummy variable equal to 1 if the firm is audited by one of the Big 4 CPA firms, and 0 otherwise; *TENURE* is a dummy variable that equals 1 if the number of years the auditor has audited the client is above the sample median of six years, and 0 otherwise; *CYCLE* is days receivable plus days inventory less days payable; *NOA* is a dummy variable equal to 1 if net operating assets at the beginning of the year divided by lagged sales is above the median of the corresponding industry-year, and 0 otherwise. Finally, we include nine control variables, *SHARE*, *ANALYST*, *BONUS*, *ROA*, *SIZE*, *MB*, *LEV*, *EARN*, and *Pred_RM* in the regression models (Cohen and Zarowin 2010; Zang 2012). *SHARE* is the natural logarithm of the number of shares outstanding; *ANALYST* is the natural logarithm of the number of analysts covering the firm; *BONUS* is the average bonus compensation as a proportion of total compensation received by the CEO and the CFO of a firm; *ROA* is the ratio of earnings before interests and tax to total assets; *SIZE* is the natural logarithm of total assets; *MB* is the market-to-book ratio; *LEV* is the ratio of long-term debt to total assets; *EARN* is the earnings before extraordinary items minus discretionary accruals and production costs, plus discretionary expenditures; *Pred_RM* is the predicted values of equations (7) and (9).

4.4 Model Specification of Family SEW and Voluntary Disclosure

We perform the following Poisson regressions to test Hypothesis H3A and Hypothesis H4A:

$$DISC_{i,t} = \alpha_0 + \alpha_1 FAM_DIV_{i,t} + \alpha_2 FAM_NDIV_{i,t} + Controls + D_Year_t + D_Industry_t + \varepsilon_{i,t} \quad (11)$$

$$DISC_{i,t} = \alpha_0 + \alpha_1 FAM_NACQ_{i,t} + \alpha_2 FAM_ACQ_{i,t} + Controls + D_Year_t + D_Industry_t + \varepsilon_{i,t} \quad (12)$$

where *DISC* is the overall corporate disclosure level as defined above; the set of control variables is based on previous studies.¹¹

A company's decision to disclose is not independent of external factors. Furthermore, we utilize Heckman's two-stage model to examine the validity of Hypothesis H3B and Hypothesis 4B. Specifically, we first model a firm's decision to voluntarily disclose as the following (13) and (14) probit models:

$$Prob(DISC_{i,t} = 1) = \alpha_0 + \alpha_1 FAM_DIV_{i,t} + \alpha_2 FAM_NDIV_{i,t} + Controls + D_Year_t + D_Industry_t + \varepsilon_{i,t} \quad (13)$$

$$Prob(DISC_{i,t} = 1) = \alpha_0 + \alpha_1 FAM_NACQ_{i,t} + \alpha_2 FAM_ACQ_{i,t} + Controls + D_Year_t + D_Industry_t + \varepsilon_{i,t} \quad (14)$$

where *Prob* (*DISC* = 1) is a dummy variable equal to 1 if *DISC* is above the industry-year median, and 0 otherwise; the control variables are defined as per equations (11) and (12). Based on this definition, 8,370 firm-years among the full sample can be classified as suspect firm-years preferring more disclosures. In the second stage, we use the 8,370 firm-year observations with more disclosure incentives to estimate the following equations (15) to (18), and test Hypothesis 3B and Hypothesis 4B:

$$FLD_{i,t} = \alpha_0 + \alpha_1 FAM_DIV_{i,t} + \alpha_2 FAM_NDIV_{i,t} + Controls + D_Year_t + D_Industry_t + INVS_MILLS + \varepsilon_{i,t} \quad (15)$$

$$FLD_{i,t} = \alpha_0 + \alpha_1 FAM_NACQ_{i,t} + \alpha_2 FAM_ACQ_{i,t} + Controls + D_Year_t + D_Industry_t + INVS_MILLS + \varepsilon_{i,t} \quad (16)$$

¹¹ Following Chen et al. (2008), this study controls for the percentage of institutional ownership (*INST*); return volatility (*STDREV*), measured as the standard deviation of daily stock returns in year *t*; a high litigation risk indicator (*LIT*), coded as 1 for industries with high litigation risk; firm size (*SIZE*), measured as the natural log of total assets for year *t*; market-to-book ratio (*MB*); and return on assets (*ROA*), measured as the earnings before interests and tax to total assets.

$$MED_{i,t} = \alpha_0 + \alpha_1 FAM_DIV_{i,t} + \alpha_2 FAM_NDIV_{i,t} + Controls + D_Year_t + D_Industry_t + INVS_MILLS + \varepsilon_{i,t} \quad (17)$$

$$MED_{i,t} = \alpha_0 + \alpha_1 FAM_NACQ_{i,t} + \alpha_2 FAM_ACQ_{i,t} + Controls + D_Year_t + D_Industry_t + INVS_MILLS + \varepsilon_{i,t} \quad (18)$$

where *FLD* is the frequency of forward-looking information as defined previously; *MED* is the frequency of monthly earnings disclosures as defined above; the control variables are defined as per equations (11) and (12). We use OLS regression to estimate equations (15) and (16), and Poisson regression for equations (17) and (18).

5. Empirical Findings

5.1 Descriptive Statistics

Table 2 presents a summary of the main variables used in this study. Panel A indicates ownership and control characteristics of the family firms. On average, family ownership constitutes 35.02% of the total ownership, while family owners hold 40.18% of the voting rights. Further analysis shows that 50.26% of family firms in Taiwan have control-enhancing mechanisms. Among family firms, 60.18% of CEOs are founders or descendants, and 39.82% are outsiders.

Our hypotheses do not directly compare the extent of earnings management and corporate disclosure between family and non-family firms. Instead, we focus on the heterogeneity within family firms, recognizing that they are not homogeneous. Whether family firms engage more in earnings management and corporate disclosure depends on their SEW attributes. Control-focused family firms are expected to be more likely to engage in earnings management, while identity-focused family firms are less likely. Conversely, identity-focused family firms engage more in corporate disclosure, whereas control-focused family firms are less likely to do so. We argue that the use of earnings management tools (such as accrual-based management and real earnings management), and the type of corporate disclosure in these firms (such as forward-looking disclosure and historical and credible disclosure), are driven by the diverse motives of family owners, who aim to preserve different aspects of their SEW.

Consistent with our Hypothesis H1A and Hypothesis 2A, in Panel B we observe that control-focused family firms exhibit greater *Prob (Suspect = 1)* relative to the other family firms and non-family firms, while identity-focused family firms exhibit less *Prob (Suspect = 1)* than other family firms and non-family firms. However, in Panel C we observe that family firms exhibit less *Prob (Suspect = 1)* compared to non-family firms. These results suggest that the identity dimension of family SEW outweighs the control dimension in determining family firms' earnings management.

Table 2 Descriptive Statistics

Panel A: Ownership and Control Characteristics of Family Firms (Number of Observations =10,665)									
	1. Average percentage of ownership owned by family members	35.02%	4. Percentage of family firms with founder CEO	27.63%					
	2. Average percentage of voting rights controlled by family members	40.18%	5. Percentage of family firms with descendent CEO	32.55%					
	3. Percentage of family firms with voting-cash flow rights divergence	50.26%	6. Percentage of family firms with hired professional CEO	39.82%					
Panel B: Comparisons of Main Variables between Control-focus, Non-control-focus Family Firms and Non-family Firms									
Variables	Control-focus family firms (A) (N = 5,360)	Non-control-focus family firms (B) (N = 5,305)	Non-family firms (C) (N = 6,067)	Difference in					
		Mean	(A)-(B)	(A)-(C)	(B)-(C)				
<i>Prob (Suspect =1)</i>	0.504	0.212	0.471	0.292***	(2.616)	0.033*	(1.887)	-0.259***	(-3.637)
<i>ABExp</i>	0.022	0.040	0.054	-0.018*	(-1.925)	-0.032*	(-1.716)	-0.014	(-1.321)
<i>ABProd</i>	-0.106	-0.050	-0.032	-0.056**	(-2.083)	-0.074**	(-2.018)	-0.018	(-1.065)
<i>Total_RM</i>	-0.071	-0.023	0.022	-0.048**	(-1.981)	-0.093***	(-3.248)	-0.045**	(-2.208)
<i>AM</i>	0.021	-0.005	0.018	0.026***	(3.655)	0.003	(1.407)	-0.023*	(-1.827)
<i>DISC</i>	4.251	4.470	4.149	-0.219***	(-2.662)	0.102***	(2.911)	0.321***	(4.182)
<i>FLD</i>	0.144	0.086	0.078	0.058**	(2.478)	0.066**	(2.107)	0.008	(1.112)
<i>MED</i>	1.646	1.869	1.151	-0.223***	(-3.755)	0.495***	(4.478)	0.718***	(4.008)
Panel C: Comparisons of Main Variables between Identity-focus, Non-identity-focus Family Firms and Non-family Firms									
Variables	Identity-focus family firms (A) (N = 6,421)	Non-identity-focus family firms (B) (N = 4,244)	Non-family firms (C) (N = 6,067)	Difference in					
		Mean	(A)-(B)	(A)-(C)	(B)-(C)				
<i>Prob (Suspect = 1)</i>	0.248	0.527	0.471	-0.279***	(-3.030)	-0.223***	(-3.003)	0.056*	(1.922)
<i>ABExp</i>	0.044	0.011	0.054	0.033***	(2.781)	-0.010	(-1.239)	-0.043*	(-1.813)
<i>ABProd</i>	-0.05	-0.120	-0.032	0.070***	(2.724)	-0.018*	(-1.783)	-0.088**	(-2.058)
<i>Total_RM</i>	-0.028	-0.076	0.022	0.048**	(2.181)	-0.050**	(-2.281)	-0.098***	(-2.711)
<i>AM</i>	0.003	0.016	0.018	-0.013*	(-1.746)	-0.015*	(-1.802)	-0.002	(-1.248)
<i>DISC</i>	4.551	4.071	4.149	0.480***	(4.091)	0.402***	(4.353)	-0.078**	(-2.392)
<i>FLD</i>	0.087	0.157	0.078	-0.070**	(-2.469)	0.009	(1.041)	0.079**	(2.014)
<i>MED</i>	2.035	1.336	1.151	0.699***	(4.553)	0.884***	(5.584)	0.185***	(2.818)

Table 2 Descriptive Statistics (Continue)

Variables	Panel D: Comparisons of Control Variables between Family Firms and Non-family Firms			Difference in (A)-(B)
	Family firms (A) (N = 10,665)	Non-family firms (B) (N = 6,067)	Mean	
<i>TAX</i>	0.219	0.208	0.011	(1.574)
<i>MARKET</i>	0.078	0.012	0.066 ^{**}	(2.129)
<i>ZSCORE</i>	6.448	5.403	1.045 ^{***}	(3.554)
<i>INST</i>	0.491	0.409	0.082 ^{**}	(2.248)
<i>BIG4</i>	0.764	0.843	-0.079 ^{**}	(-2.003)
<i>TENURE</i>	0.615	0.553	0.062	(1.501)
<i>CYCLE</i>	145.232	130.707	14.525 ^{***}	(3.359)
<i>NOA</i>	0.568	0.465	0.103 ^{***}	(2.851)
<i>BEAT</i>	2.133	2.258	-0.125 ^{**}	(-2.239)
<i>SHARE</i>	3.711	2.654	1.057 ^{***}	(3.148)
<i>ANALYST</i>	3.688	3.319	0.369 ^{***}	(2.966)
<i>BONUS</i>	0.008	0.014	-0.006 ^{**}	(-2.152)
<i>ROA</i>	0.293	0.145	0.148 ^{***}	(2.866)
<i>SIZE</i>	21.761	18.496	3.265 ^{***}	(3.565)
<i>MB</i>	1.349	1.375	-0.026 ^{**}	(-2.175)
<i>LEV</i>	0.075	0.085	-0.010	(-1.547)
<i>EARN</i>	0.054	0.046	0.008 ^{**}	(2.307)

Notes: ^{*} $p < .10$, ^{**} $p < .05$, ^{***} $p < .01$.

Consistent with our Hypothesis H3A and Hypothesis 4A, in Panel B we observe that control-focused family firms exhibit less *DISC* relative to the other family firms and non-family firms, while identity-focused family firms exhibit greater *DISC* than other family firms and non-family firms. However, in Panel C we observe that family firms exhibit greater *DISC* compared to non-family firms. These results also suggest that the identity dimension of family SEW outweighs the control dimension in determining family firms' disclosure policies.

Panel B and Panel C also indicate significant differences in earnings management tools (accrual earnings management and real earnings management) and voluntary disclosure tools (forward-looking disclosure and monthly earnings disclosure) across family firms and non-family firms. It is documented that the earnings management (*ABExp*, *ABProd*, *Total_RM*, and *AM*) of the family firms is significantly lower than that of the non-family firms ($p < 0.05$; untabulated). In addition, the voluntary disclosure (*FLD* and *MED*) of family firms is significantly higher than that of non-family firms ($p < 0.05$; untabulated). These results further corroborate that the reputational dimension of family SEW outweighs the control dimension of family SEW in determining family firms' earnings management and disclosure tools.

Table 3 presents the Pearson correlations between all the dependent and independent variables. *FAM_DIV* exhibits positive relationships with *Suspect*, *AM*, and *FLD*, while it has negative correlations with *ABExp*, *ABProd*, *Total_RM*, *DISC*, and *MED*; this suggests that control-focused family firms practice more accrual earnings management and forward-looking disclosure (instead of real earnings management and backward-looking disclosure). *FAM_NACQ* exhibits negative associations with *Suspect*, *AM*, and *FLD*, and positive associations with *ABExp*, *ABProd*, *Total_RM*, *DISC*, and *MED*; this indicates that identity-focused family firms practice more real earnings management and backward-looking disclosure (instead of accrual earnings management and forward-looking disclosure). The signs of the correlations between earnings management and voluntary disclosure and other control variables are, in general, in line with previous studies.

5.2 Family SEW and Earnings Management

Table 4 displays the results of equations (5) and (6). In column (1), we find that the coefficient of *FAM_DIV* is significantly greater than zero ($\beta_1 = 0.376$, $p < 0.01$). Consistent with Hypothesis H1A, this result suggests that control-focused family firms are more likely to take actions to achieve various earnings targets, relative to non-family firms. In Table 4, *DIFFERENCE* indicates the difference between the coefficient of *FAM_DIV* and that of *FAM_NDIV*. We find that the coefficient of *Diff* ($(\beta_1) - (\beta_2)$) is significantly greater than zero ($F\text{-value} = 9.791$, $p < 0.01$); this suggests that control-focused family firms are more likely to take actions to engage in earnings management, compared to non-control-focused family firms.

Overall, the findings in Table 4 suggest that control-focused family firms are more likely

Table 3 Pearson Correlation Matrix

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.
1.Prob(Suspect =1)	1																												
2.ABExp	0.042	1																											
3.ABProd	0.064	0.094	1																										
4.Total_RM	0.097	0.108	0.102	1																									
5.AM	0.099	-0.065	-0.106	-0.091	1																								
6.DISC	-0.116	-0.079	-0.119	-0.123	-0.085	1																							
7.FLD	0.052	0.056	0.083	0.109	0.065	0.086	1																						
8.MED	-0.055	-0.088	-0.090	-0.057	-0.081	0.045	0.064	1																					
9.FAM_DIV	0.126	-0.152	-0.168	-0.141	0.101	-0.122	0.128	-0.159	1																				
10.FAM_NDIV	0.051	0.072	-0.076	-0.061	-0.069	-0.029	0.033	-0.046	0.080	1																			
11.FAM_NACQ	-0.103	0.169	0.144	0.155	-0.128	0.152	-0.146	0.165	0.108	0.135	1																		
12.FAM_ACQ	-0.035	-0.038	0.035	0.060	0.055	0.099	-0.063	0.071	0.154	0.119	0.108	1																	
13.TAX	0.088	0.093	-0.101	-0.073	-0.046	-0.111	-0.080	-0.085	0.096	0.076	0.081	0.069	1																
14.MARKET	0.073	-0.077	0.089	0.041	0.027	-0.076	-0.056	-0.062	-0.059	0.035	0.028	-0.030	0.026	1															
15.ZSCORE	0.139	-0.171	0.161	0.172	0.145	-0.164	-0.178	-0.116	0.133	-0.118	-0.127	0.139	0.134	0.197	1														
16.INST	0.121	0.158	-0.110	-0.153	-0.132	0.101	-0.144	-0.081	-0.090	0.074	0.099	-0.083	0.125	0.178	0.139	1													
17.BIG4	-0.077	-0.166	0.117	0.123	0.100	0.089	0.049	0.054	-0.070	0.041	0.042	-0.035	0.028	0.044	0.059	0.036	1												
18.TENURE	0.063	-0.083	0.104	0.118	0.107	0.076	0.027	0.022	0.032	-0.013	-0.021	0.019	0.065	0.111	0.043	0.050	0.034	1											
19.CYCLE	-0.153	0.135	-0.141	-0.165	-0.146	0.128	0.158	0.163	0.171	0.154	0.147	0.159	0.119	0.128	0.107	0.126	0.129	0.117	1										
20.NOA	-0.134	-0.107	0.116	0.100	0.119	0.105	0.113	0.125	-0.130	0.127	0.106	-0.095	0.121	0.104	0.098	0.144	0.184	0.125	0.090	1									
21.BEAT	0.018	0.070	0.061	0.046	0.028	0.029	-0.034	0.023	-0.032	0.065	0.077	-0.003	-0.011	-0.037	0.091	0.019	0.031	0.109	-0.082	-0.003	1								
22.SHARE	0.009	0.032	-0.053	-0.048	-0.068	0.022	-0.020	0.027	-0.041	0.057	0.061	-0.018	-0.005	-0.022	-0.023	-0.002	-0.011	0.025	0.028	-0.131	0.023	1							
23.ANALYST	-0.070	-0.086	0.046	0.028	0.036	0.031	-0.039	0.042	-0.034	0.052	0.068	-0.006	0.075	0.096	0.047	0.113	0.134	0.035	-0.002	0.039	0.041	0.024	1						
24.BONUS	0.083	0.069	-0.012	-0.022	-0.027	0.026	0.019	0.021	-0.025	0.034	0.042	-0.041	0.032	0.075	-0.02	-0.030	0.043	-0.005	-0.020	-0.043	-0.076	0.089	0.029	1					
25.ROA	0.053	-0.078	0.033	0.048	0.039	0.021	0.030	0.034	-0.024	0.023	0.021	-0.018	-0.012	-0.045	0.023	-0.038	-0.006	0.031	0.057	0.058	0.082	0.061	-0.086	0.078	1				
26.SIZE	0.027	-0.028	0.009	0.011	0.015	0.014	0.022	0.019	0.022	0.030	0.028	0.007	-0.011	0.037	0.024	0.032	0.037	0.027	-0.086	-0.034	-0.032	0.012	0.067	-0.054	-0.069	1			
27.MB	-0.035	0.032	-0.107	-0.096	-0.089	0.105	0.117	0.100	-0.118	0.109	0.121	-0.006	0.031	0.038	0.006	0.077	0.029	0.010	-0.018	-0.011	-0.027	0.058	0.049	-0.031	-0.023	0.080	1		
28.LEV	0.034	0.052	-0.036	-0.028	-0.026	0.020	0.029	-0.035	0.027	-0.039	-0.035	0.018	0.001	0.010	-0.093	0.062	-0.035	-0.039	0.010	0.021	0.042	-0.096	-0.011	0.022	0.057	-0.041	0.054	1	
29.EAR	0.054	0.023	-0.047	-0.038	0.044	-0.026	0.033	-0.027	-0.023	0.038	0.042	-0.001	0.017	0.034	-0.066	0.096	0.076	0.071	-0.015	-0.017	-0.047	0.064	0.013	-0.087	-0.074	-0.046	0.019	0.089	1

Notes: Coefficients in bold indicate that the correlations are significant at the 5% level or better, respectively (two-tailed test).

Table 4 'Family Control' and 'Family Identity' Dimensions of SEW and Earnings Management

Variables	Prob (Suspect = 1)			
	(1)		(2)	
Constant	-1.323**		-1.461**	
	(-2.178)		(-2.441)	
FAM_DIV (β_1)	0.376***			
	(3.183)			
FAM_NDIV (β_2)	0.093			
	(1.115)			
FAM_NACQ (β_3)			-0.454***	
			(-2.963)	
FAM_ACQ (β_4)			-0.105	
			(-1.321)	
BEATER	1.048**		1.045**	
	(2.172)		(2.111)	
SHARE	1.024		1.025	
	(1.370)		(1.402)	
ANALYST	-2.505***		-2.496***	
	(-2.994)		(-2.873)	
BONUS	0.127**		0.133**	
	(2.132)		(2.207)	
ROA	0.525***		0.523***	
	(2.864)		(2.631)	
SIZE	2.023		2.037	
	(1.487)		(1.389)	
MB	-3.008		-2.997	
	(-1.170)		(-1.124)	
LEV	1.003**		1.015**	
	(2.404)		(2.495)	
EARN	0.559***		0.515***	
	(2.834)		(2.872)	
Year & year controls	Included		Included	
Log likelihood	69.815***		70.223***	
Pseudo R ²	0.366		0.372	
No. of observations	16,741		16,741	
F-Test:	Diff.	F-stat.	Diff.	F-stat.
(β_1)-(β_2)	0.283***	9.791	N/A	
(β_3)-(β_4)	N/A		-0.349***	13.601

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

to take actions to achieve various earnings targets, relative to non-focused family firms and non-family firms. Consistent with the argument in Hypothesis H1A, these results suggest that control-focused family owners face pressures to meet earnings expectations, in order to avoid outside investors questioning their competence and reducing their control (Graham et al. 2006). They may manipulate earnings to influence stakeholders such as customers, suppliers, and employees (Dichev et al. 2013), to enhance their control. Additionally, earnings management can secure resources and flexibility for long-term goals, attract investors, and maintain favorable financing terms. Finally, by smoothing earnings, these firms create a perception of steady performance, which assists in strategic planning and negotiations.

Consistent with Hypothesis H2A, in column (2) of Table 4, we observe that the coefficient of *FAM_NACQ* is significantly less than zero ($\beta_3 = -0.454, p < 0.01$), suggesting that identity-focused family firms take actions less to achieve various earnings targets, relative to non-family firms. In addition, we observe that the coefficient of *FAM_NACQ* is significantly less than that of *FAM_ACQ* ($F\text{-value} = 13.601, p < 0.01$), suggesting that identity-focused family firms take actions less to achieve various earnings targets, compared to non-identity-focused family firms. For the control variables, the results are consistent with prior research.

Overall, consistent with Hypothesis H2A, our results suggest that identity-focused family firms are less worried about missing short-term earnings expectations because negative publicity from unraveling earnings management will threaten their identity and existence (Dyer and Whetten 2006; Gómez-Mejía et al. 2014). The long-term nature of family investments for identity-focused family firms means that any reputational damage is enduring, as family owners cannot easily sell their shares. Such firms aim to build a lasting legacy; and earnings management, if discovered, can harm this legacy, affecting both current and future generations (Zellweger et al. 2011). Additionally, a strong family identity often includes a commitment to high ethical standards. Earnings management is seen as unethical and deceptive, conflicting with these values. Finally, it can lead to legal issues and regulatory scrutiny—risks that these firms, valuing their clean record and ethical standing, prefer to avoid.

The results of equations (7) to (10) are presented in Table 5 to Table 6. We present the results of real transactions management in columns (1) to (3) of Table 5 and Table 6. In column (1) to column (3) we use *ABExp*, *ABProd*, and *Total_RM* as dependent variables, respectively. In column (4) of Table 5 and Table 6, we use signed discretionary accruals (*AM*). We further partition the 10,507 firm-year observations into two groups based on the sign of discretionary accruals. In column (5) and column (6), we use negative discretionary accruals ($AM < 0$) and positive discretionary accruals ($AM > 0$) respectively.

We observe from column (1) to column (3) of Table 5 that the coefficients of *FAM_DIV* are significantly negative ($\beta_1 = -0.583, p < 0.01$; $\beta_1 = -0.489, p < 0.05$; $\beta_1 = -0.637, p < 0.01$), and significantly less than those of *FAM_NDIV*. These findings support Hypothesis 1B, indicating that

Table 5 'Family Control' Dimension of SEW and the MIX of Earnings Management

Variables	<i>ABExp</i>	<i>ABProd</i>	<i>Total_RM</i>	<i>AM</i>	<i>AM < 0</i>	<i>AM > 0</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Constant</i>	0.817** (2.118)	1.218*** (2.976)	1.265** (2.359)	1.679* (1.741)	-1.518 (-1.379)	2.433** (2.263)
<i>FAM_DIV</i> (β_1)	-0.583*** (-3.979)	-0.489** (-2.176)	-0.637*** (-4.401)	0.269*** (3.225)	0.072 (1.437)	0.415*** (2.997)
<i>FAM_NDIV</i> (β_2)	-0.064 (-1.486)	-0.032 (-1.398)	-0.057 (-1.565)	0.038 (1.294)	0.025 (1.303)	0.052 (1.423)
<i>Unexpected_RM</i>				-1.168*** (-2.967)	-1.171*** (-3.237)	-1.162*** (-3.467)
Costs Associated with Real Activities Manipulation						
<i>TAX</i>	-0.620** (-2.126)	-0.916*** (-3.106)	-0.755*** (-3.057)	0.021*** (3.169)	0.024*** (3.277)	0.031*** (4.753)
<i>MARKET</i>	0.538** (2.167)	0.440** (2.173)	0.450** (2.419)	-0.108*** (-2.889)	-0.086*** (-2.848)	-0.132*** (-4.333)
<i>ZSCORE</i>	0.463* (1.735)	0.688 (1.402)	0.549** (2.022)	-2.134** (-2.355)	-1.907** (-2.215)	-3.201*** (-3.532)
<i>INST</i>	-0.288 (-1.063)	-0.255** (-1.964)	-0.269* (-1.667)	1.769 (1.574)	1.344 (1.435)	2.203 (1.361)
Costs Associated with Accrual-Based Earnings Management						
<i>BIG4</i>	1.024** (2.254)	1.021** (2.301)	1.259** (2.536)	-1.521 (-1.537)	-1.478 (-1.495)	-2.281 (-1.305)
<i>TENURE</i>	0.955 (1.507)	0.950 (1.062)	0.944 (1.270)	-2.621** (-2.314)	-2.183** (-2.500)	-3.031*** (-3.471)
<i>CYCLE</i>	-0.373* (-1.891)	-0.384* (-1.871)	-0.518** (-2.411)	0.085*** (3.546)	0.066*** (3.554)	0.097*** (3.319)
<i>NOA</i>	0.958*** (3.053)	0.960*** (3.172)	0.955*** (2.666)	-0.020*** (-2.801)	-0.015*** (-2.789)	-0.024*** (-3.201)
Control Variables						
<i>SHARE</i>	-0.274** (-2.149)	-0.282* (-1.903)	-0.337*** (-3.079)	0.106*** (3.568)	0.078*** (3.504)	0.159*** (5.352)
<i>ANALYST</i>	0.148*** (2.661)	0.162*** (2.741)	0.157*** (2.682)	-1.376*** (-3.171)	-1.088*** (-3.045)	-1.614*** (-4.756)
<i>BONUS</i>	-0.079 (-1.351)	-0.084 (-1.022)	-0.090 (-1.341)	1.206 (1.249)	1.013 (1.012)	1.509 (1.473)
<i>ROA</i>	1.056** (2.081)	1.161** (2.115)	1.102** (1.992)	-0.703*** (-3.236)	-0.408*** (-3.288)	-1.055*** (-3.293)
<i>SIZE</i>	1.027*** (3.208)	1.136*** (3.444)	1.130*** (3.429)	-0.660* (-1.915)	-0.286** (-2.168)	-1.033** (-2.222)
<i>MB</i>	-2.000 (-1.279)	-2.229 (-1.095)	-2.206 (-1.072)	0.470 (1.523)	0.423 (1.401)	0.526 (1.514)
<i>LEV</i>	-0.699*** (-2.988)	-0.780*** (-2.611)	-0.769*** (-2.627)	0.604*** (2.856)	0.415*** (2.926)	0.709*** (2.774)

Table 5 ‘Family Control’ Dimension of SEW and the MIX of Earnings Management (Continue)

Variables	<i>ABExp</i>	<i>ABProd</i>	<i>Total_RM</i>	<i>AM</i>	<i>AM < 0</i>	<i>AM > 0</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EARN</i>	-0.451*** (-0.754)	-0.579*** (-2.797)	-0.506*** (-2.929)			
<i>Pred_RM</i>				0.181*** (3.372)	0.166*** (3.439)	0.202*** (3.600)
<i>INVS_MILLSI</i>	0.117 (1.392)	0.100 (1.199)	0.110 (1.286)	-0.096 (-1.233)	-0.069 (-1.359)	-0.118 (-1.488)
Year & year controls	Included	Included	Included	Included	Included	Included
<i>F</i> -statistics	17.603***	17.776***	17.542***	17.301***	17.533***	17.445***
Adj. <i>R</i> ²	0.580	0.578	0.580	0.546	0.547	0.548
No. of observations	10,507	10,507	10,507	10,507	2,626	7,881
<i>F</i> -Test:	Diff. <i>F</i> -stat.	Diff. <i>F</i> -stat.	Diff. <i>F</i> -stat.	Diff. <i>F</i> -stat.	Diff. <i>F</i> -stat.	Diff. <i>F</i> -stat.
(β_1)-(β_2)	-0.519*** 9.766	-0.457*** 10.407	-0.580*** 10.693	0.231*** 10.151	0.047 1.839	0.363*** 9.157

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 6 ‘Family Identity’ Dimension of SEW and the MIX of Earnings Management

Variables	<i>ABExp</i>	<i>ABProd</i>	<i>Total_RM</i>	<i>AM</i>	<i>AM < 0</i>	<i>AM > 0</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Constant</i>	0.853** (2.194)	1.326*** (3.000)	1.196** (2.172)	1.685* (1.665)	-1.537 (-1.431)	2.144* (1.831)
<i>FAM_NACQ</i> (β_1)	0.548** (2.061)	0.482*** (3.537)	0.608** (2.335)	-0.317** (-2.306)	-0.136 (-1.342)	-0.546*** (-2.993)
<i>FAM_ACQ</i> (β_2)	0.071 (1.309)	0.052 (1.406)	0.076 (1.391)	-0.080 (-1.339)	-0.072 (-1.472)	-0.099 (-1.461)
<i>Unexpected_RM</i>				-1.159*** (-3.026)	-1.161*** (-4.080)	-1.169*** (-3.301)
Costs Associated with Real Activities Manipulation						
<i>TAX</i>	-0.637** (-2.232)	-0.925** (-2.309)	-0.762** (-2.261)	0.025*** (3.803)	0.029*** (3.932)	0.037*** (3.704)
<i>MARKET</i>	0.565*** (3.798)	0.391*** (2.752)	0.462*** (2.862)	-0.106*** (-3.467)	-0.103*** (-3.418)	-0.158*** (-3.200)
<i>ZSCORE</i>	0.486 (1.522)	0.528 (1.454)	0.722 (1.472)	-2.561*** (-2.826)	-2.288*** (-2.658)	-3.841*** (-3.238)
<i>INST</i>	-0.302*** (-3.116)	-0.425*** (-3.451)	-0.358*** (-3.062)	2.076** (2.189)	1.613** (2.072)	2.644** (2.333)
Costs Associated with Accrual-Based Earnings Management						
<i>BIG4</i>	1.075** (2.367)	1.072** (2.416)	1.267** (2.313)	-2.258*** (-3.440)	-1.774* (-1.794)	-2.737*** (-2.766)
<i>TENURE</i>	1.003 (1.582)	0.998 (1.115)	0.991 (1.334)	-2.925*** (-2.777)	-2.620*** (-3.000)	-3.637*** (-3.165)

Table 6 ‘Family Identity’ Dimension of SEW and the MIX of Earnings Management (Continue)

Variables	<i>ABExp</i>	<i>ABProd</i>	<i>Total_RM</i>	<i>AM</i>	<i>AM < 0</i>	<i>AM > 0</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>CYCLE</i>	-0.392** (-1.986)	-0.403** (-1.965)	-0.665** (-2.532)	0.100*** (3.255)	0.079*** (3.265)	0.116*** (3.383)
<i>NOA</i>	1.006*** (3.206)	1.008*** (3.331)	1.104*** (3.274)	-0.019*** (-3.361)	-0.018*** (-3.347)	-0.029*** (-3.041)
Control Variables						
<i>SHARE</i>	-0.288** (-2.256)	-0.296** (-1.998)	-0.349*** (-3.233)	0.127*** (3.282)	0.094*** (3.205)	0.191*** (3.422)
<i>ANALYST</i>	0.155*** (2.794)	0.170*** (2.878)	0.165*** (2.816)	-1.291*** (-3.805)	-1.306*** (-3.654)	-1.937*** (-3.707)
<i>BONUS</i>	-0.083 (-1.419)	-0.088 (-1.073)	-0.081 (-1.408)	1.507 (1.499)	1.216 (1.214)	1.811 (1.568)
<i>ROA</i>	1.109** (2.027)	1.219** (2.221)	1.220** (2.092)	-0.723*** (-2.878)	-0.428*** (-2.869)	-1.108*** (-3.019)
<i>SIZE</i>	1.078** (2.318)	1.193** (2.566)	1.187** (2.550)	-0.738** (-2.011)	-0.300** (-2.276)	-1.085** (-2.333)
<i>MB</i>	-2.105*** (-2.933)	-2.340*** (-3.250)	-2.216*** (-3.226)	0.431* (1.914)	0.444* (1.891)	0.512** (2.055)
<i>LEV</i>	-0.734*** (-3.507)	-0.807*** (-2.742)	-0.819*** (-2.958)	0.542*** (3.138)	0.436*** (3.072)	0.744*** (3.493)
<i>EARN</i>	-0.474** (-2.184)	-0.608** (-2.388)	-0.521** (-2.025)			
<i>Pred_RM</i>				0.159*** (3.541)	0.174*** (3.611)	0.212*** (3.780)
<i>INVS_MILLS2</i>	0.110 (1.462)	0.105 (1.358)	0.108 (1.266)	-0.100 (-1.295)	-0.072 (-1.427)	-0.124 (-1.362)
Year & year controls	Included	Included	Included	Included	Included	Included
<i>F</i> -statistics	17.476***	17.328***	17.386***	17.440***	17.542***	17.531***
Adj. <i>R</i> ²	0.582	0.586	0.579	0.532	0.536	0.541
No. of observations	10,507	10,507	10,507	10,507	2,626	7,881
<i>F</i> -Test:	Diff.	<i>F</i> -stat.	Diff.	<i>F</i> -stat.	Diff.	<i>F</i> -stat.
(β_1)-(β_2)	0.477***	9.036	0.430***	10.465	0.532***	10.221
	-0.237**	4.473	-0.064	2.375	-0.447***	11.337

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

control-focused family firms engage in less real earnings management compared to non-family firms and other family firms, when managing earnings. In column (4) of Table 5, we observe that the coefficient of *FAM_DIV* is positively significant ($\beta_1 = 0.269$, $p < 0.01$). In addition, in column (4) of Table 5, the coefficients of *FAM_DIV* are significantly greater than those of *FAM_NDIV* (F -value = 10.151, $p < 0.01$).

These results indicate that control-focused family firms engage more in accrual management if they decide to conduct earnings management, relative to the other family firms. Specifically, we find that the coefficient of *FAM_DIV* is significant in the positive discretionary accruals group, rather than in negative discretionary accruals ($\beta_1 = 0.415, p < 0.01$); this suggests that our results regarding engaging in accrual earnings management are driven mainly by high accrual earnings. In column (1) to column (6) of Table 5, the coefficients on *INVS_MILLS1* are insignificant, suggesting that our estimation does not exhibit sample selection biases.

Control-focused family firms may use either real earnings management or accrual-based earnings management based on their respective costs. Hypothesis H1B indicates that RM can negatively impact future performance (Tabassum et al. 2015; Vorst 2016). If detected, RM may provoke strong negative reactions from non-family shareholders, potentially challenging the family's dominant position in the company. Conversely, AM is more easily detected by auditors and regulatory bodies; this raises the risk of legal and financial repercussions, which could also threaten family control. Our findings suggest that for control-focused family firms, the cost of RM, due to strong negative reactions from non-family shareholders and potential challenges to the family's dominance, might outweigh the cost of AM. Consequently, these firms prefer to use AM over RM when engaging in earnings management.

We further estimate equations (9) and (10) to test Hypothesis H2B. In the various RM equations from column (1) to column (3) of Table 6, we observe that the coefficients of *FAM_NACQ* are positively significant ($\beta_1 = 0.548, p < 0.05$; $\beta_1 = 0.482, p < 0.01$; $\beta_1 = 0.608, p < 0.05$), and greater than those of *FAM_ACQ*. These results indicate that identity-focused family firms substitute RM for AM if performing earnings management, because AM may damage their image and reputation if detected. In column (4) and column (6) of Table 6 we observe that the coefficients of *FAM_NACQ* are negatively significant ($\beta_1 = -0.317, p < 0.05$; $\beta_1 = -0.546, p < 0.01$). In addition, the differences between the coefficients of *FAM_NACQ* and *FAM_ACQ* are negatively significant. These results suggest that if identity-focused family firms decide to employ earnings management, they practice less AM than other family firms and non-family firms.

Identity-focused family firms may choose either real earnings management or accrual-based earnings management based on their costs. AM is more easily detected by regulators and auditors (Zang 2012). Identity-focused family owners worry that AM will harm their credibility in the financial market, leading to value-destroying effects on their SEW. Therefore, they prefer RM, which is less noticeable to outside investors. Conversely, AM involves manipulating accounting entries to smooth earnings without changing underlying business operations (Enomoto et al. 2015); this makes it less conspicuous than RM, which involves real business activity changes. For family firms concerned about their reputation, the subtlety of AM might seem advantageous, as it reduces the risk of negative perceptions from stakeholders. However, since identity-

focused family firms use AM less compared to other family firms and non-family firms, it suggests that AM's detectability by outsiders could damage these firms' reputation and reliability. Consequently, identity-focused family firms might avoid AM despite its subtlety, as illustrated earlier.

For the RM cost variables, AM cost variables, and the other control variables, the results are consistent with prior research when significant.

5.3 Family SEW and Voluntary Disclosure

The empirical results of equations (11) and (12) are presented in Table 7. Consistent with Hypothesis H3A, we observe that the coefficient of *FAM_DIV* in column (1) of Table 7 is negatively significant ($\beta_1 = -1.031, p < 0.01$), suggesting that control-focused family firms engage in less voluntary disclosure, compared to non-family firms. In addition, consistent with Hypothesis H3A, the coefficients of *FAM_DIV* are less than those of *FAM_NDIV* (*F-value* = 19.785, $p < 0.01$); this suggests that family firms prioritizing the Family Control dimension engage in less voluntary disclosure, relative to those that are less concerned with this dimension.

Consistent with Hypothesis 4A, we observe that the coefficient of *FAM_NACQ* in column (2) of Table 7 is positively significant ($\beta_3 = 1.275, p < 0.01$), suggesting that identity-focused family firms engage more in voluntary disclosure as compared to non-family firms. In addition, the coefficients of *FAM_NACQ* are greater than for *FAM_ACQ* (*F-value* = 10.049, $p < 0.01$); this indicates that identity-focused family firms engage more in voluntary disclosure, relative to less identity-focused family firms.

Overall, our results align with the predictions made in Hypothesis H3A, as we find that control-focused family firms engage in less voluntary disclosure, relative to non-control-focused family firms and non-family firms. As illustrated in Hypothesis H3A, these results suggest that control-focused family firms view voluntary disclosure as a loss of control over their business affairs; this makes them hesitant to share information, in order to maintain their autonomy and preserve family control (Ali et al. 2007). Control-focused family owners also fear that voluntary disclosure might expose sensitive information to competitors or other stakeholders, and thus opt to keep certain details confidential to protect family interests. Additionally, increased scrutiny from external stakeholders due to voluntary disclosure could invite interference, which potentially dilutes family control. Finally, control-focused family firms engage more in earnings management, as evidenced earlier, by using opaque disclosure practices to conceal private benefits.

Our results also align with Hypothesis H4A, showing that identity-focused family firms engage in less voluntary disclosure, compared to non-identity-focused family firms and non-family firms. As illustrated in Hypothesis H4A, these findings suggest that voluntary disclosure helps identity-focused family firms demonstrate their commitment to openness, accountability, and integrity, thereby enhancing trust and credibility among stakeholders. It also allows them

Table 7 ‘Family Control’ and ‘Family Identity’ Dimensions of SEW and Voluntary Disclosure

Variables	Dependent variable: DISC	
	(1)	(2)
Constant	0.322** (2.546)	0.324** (2.466)
<i>FAM_DIV</i> (β_1)	-1.013*** (-2.580)	
<i>FAM_NDIV</i> (β_2)	-0.108 (-1.549)	
<i>FAM_NACQ</i> (β_3)		1.275*** (3.014)
<i>FAM_ACQ</i> (β_4)		0.259 (1.380)
<i>INST</i>	1.001*** (2.646)	0.899*** (2.802)
<i>STDREV</i>	0.468*** (3.952)	0.471*** (3.956)
<i>LIT</i>	1.051*** (2.661)	1.046** (2.570)
<i>SIZE</i>	1.019* (1.748)	1.020* (1.828)
<i>MB</i>	1.003 (1.481)	1.004 (1.505)
<i>ROA</i>	0.345 (1.528)	0.339 (1.496)
Year & year controls	Included	Included
<i>F</i> -statistics	14.589***	14.386***
Pseudo <i>R</i> ²	0.428	0.426
No. of observations	16,741	16,741
<i>F</i> -Test:	Diff.	<i>F</i> -stat.
(β_1)-(β_2)	-0.905***	19.785
(β_3)-(β_4)	N/A	1.016***
		10.049

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

to showcase their family heritage, long-term perspective, and emphasis on social responsibility, in order to attract customers, employees, and investors who share their values. Additionally, by sharing information about their ethical practices and social impact initiatives, these firms can enhance their reputation and mitigate reputational risks. Finally, identity-focused family owners may prioritize avoiding legal liabilities and reputational costs arising from not providing earnings warnings before a bad earnings report (Skinner 1994); this makes them more likely to opt for greater disclosure.

For brevity, we omit the results of equations (13) and (14) because they are similar to those of Table 7. Table 8 presents the estimated results for equation (15) to equation (18). Consistent with Hypothesis 3B, in column (1) of Table 8, we observe that the coefficient of *FAM_DIV* is positively significant ($\beta_1 = 0.768$, $p < 0.01$). In addition, the coefficient of *FAM_DIV* is significantly greater than that of *FAM_NDIV* ($F\text{-value} = 16.064$, $p < 0.01$). These outcomes

Table 8 Family SEW and Forward-looking/Historically-focused Disclosures

Variables	<i>FLD</i>	<i>MED</i>	<i>FLD</i>	<i>MED</i>
	(1)	(2)	(3)	(4)
Constant	0.271*** (3.681)	0.152 (0.980)	0.269*** (3.521)	0.150 (0.900)
<i>FAM_DIV</i> (β_1)	0.768*** (3.029)	-0.842** (-2.358)		
<i>FAM_NDIV</i> (β_2)	0.110 (1.283)	-0.054 (-1.400)		
<i>FAM_NACQ</i> (β_3)			-0.865** (-2.011)	0.781*** (3.877)
<i>FAM_ACQ</i> (β_4)			-0.209 (-1.318)	0.038 (1.072)
<i>INST</i>	1.002 (1.176)	1.004** (2.305)	1.007 (1.523)	1.006** (2.406)
<i>STDREV</i>	1.044*** (3.716)	0.515** (2.432)	1.043*** (3.747)	0.526** (2.485)
<i>LIT</i>	0.143*** (4.717)	0.117*** (3.638)	0.142*** (2.632)	0.121*** (3.626)
<i>SIZE</i>	0.106*** (2.809)	0.025** (1.992)	0.108*** (2.888)	0.026** (2.073)
<i>MB</i>	1.015 (1.242)	1.009 (0.669)	1.016 (1.284)	1.011 (0.714)
<i>ROA</i>	0.050** (2.359)	0.212 (0.525)	0.050** (2.199)	0.199 (0.494)
<i>INVS_MILLS</i>	-0.045 (-1.137)	-0.048 (-1.229)	-0.049 (-1.251)	-0.052 (-1.351)
Firm & year controls	Included	Included	Included	Included
<i>F</i> -statistics	14.347***	14.406***	14.367***	14.209***
Adj. / Pseudo R^2	0.471	0.455	0.518	0.500
No. of observations	8,370	8,370	8,370	8,370
<i>F</i> -Test:	Diff.	<i>F</i> -stat.	Diff.	<i>F</i> -stat.
(β_1)-(β_2)	0.658***	16.064	-0.788***	11.329
(β_3)-(β_4)	N/A	N/A	-0.656***	23.126
			0.743***	8.191

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

indicate that family businesses that prioritize control are less inclined to participate in voluntary disclosure; however, when they do so, they engage more in forwarding-looking disclosure, relative to other family firms and non-family firms. In column (2) of Table 8, we observe that the coefficient of *FAM_DIV* is negatively significant ($\beta_1 = -0.842, p < 0.05$). In addition, the coefficient of *FAM_DIV* is significantly less than that of *FAM_NDIV* (*F-value* = 11.329, $p < 0.01$). These findings imply that in cases where control-focused family firms that prioritize control choose to partake in voluntary disclosure, they exhibit a lower likelihood of engaging in historically focused disclosures (i.e., monthly earnings disclosures).

In column (3) of Table 8, we observe that the coefficient of *FAM_NACQ* is negatively significant ($\beta_3 = -0.865, p < 0.05$). In addition, the coefficients of *FAM_NACQ* are significantly less than those of *FAM_ACQ* (*F-value* = 23.126, $p < 0.01$). These results suggest that identity-focused family firms engage in less forward-looking disclosure. Column (4) of Table 8 presents the estimated results for equation (18). Consistent with Hypothesis 4B, we observe that the coefficient of *FAM_NACQ* is positively significant ($\beta_3 = 0.781, p < 0.01$). In addition, the coefficients of *FAM_NACQ* are significantly greater than *FAM_ACQ* (*F-value* = 8.191, $p < 0.01$). The outcomes indicate that identity-focused family firms have a higher tendency to reveal historical and reliable information, such as monthly earnings, when they opt to participate in voluntary disclosure. This holds true in comparison to other non-identity-focused family firms and non-family businesses.

Overall, we observe that control-focused family firms engage in less voluntary disclosure. However, when they do so, they tend to disclose forward-looking rather than historical and verifiable information, aligning with Hypothesis H3B. This approach helps attract outside investors and boosts their confidence in the firm, thereby increasing the control and influence of family owners. Emphasizing long-term value creation through forward-looking disclosures reinforces the family's control and maintains stakeholders' trust and support. Additionally, such information showcases the firm's vision, innovation, and strategic foresight, positioning it as an industry leader. Finally, by focusing on future-oriented disclosures, family owners can avoid challenges to their control rights, since this information cannot be easily verified by outside investors.

In contrast, we observe that identity-focused family firms engage more in voluntary disclosure, particularly of historical and verifiable information, which aligns with Hypothesis H4B. By sharing historical performance data, these firms establish themselves as trustworthy and reliable, thus reinforcing their reputation. They emphasize stability and continuity, to highlight their enduring presence through multiple generations and economic cycles. This reassures stakeholders of their stability and resilience. Additionally, by focusing on tradition and heritage, they celebrate their family's contributions and values, such as by honoring their ancestors, and reinforcing their identity as a family-centric business rooted in tradition.

6. Additional Tests and Robustness Checks

6.1 Using Continuous Family Ownership Variables in Lieu of Family Indicator Variables

We substituted the family indicator variables with continuous family ownership variables, to verify the reliability of our results. Specifically, the continuous family ownership variable associated with control-enhancing mechanisms, *FOWN_NDIV*, is equal to the percentage of common shares held by non-control-focused family firms, and zero otherwise; while *FOWN_DIV* is equal to the percentage of common shares held by control-focused family firms, and zero otherwise. In addition, the continuous family ownership variable associated with the process through which a family has obtained ownership in the firm, *FOWN_NACQ*, is equal to the fractional equity ownership of the family owners of identity-focused family firms, and zero otherwise; while *FOWN_ACQ* is equal to the fractional equity ownership of the family owners of non-identity-focused family firms, and zero otherwise. To test our arguments, we conducted the same multivariate analysis as before, but replaced the family indicator variables with continuous family ownership variables. For brevity, we only display the estimated coefficients in Table 9. Here, we observe that our results are not sensitive after replacing family indicator variables with the continuous family ownership variables.

6.2 Using Family Status of CEO as an Alternative Proxy for the Level of the 'Family Control' Dimension of SEW

The CEO plays an important role in a business, because the person in this position can substantially influence how the firm is directed and managed (Khalil, Cohen, and Trompeter 2011; Kang 2014). Family CEOs tend to focus on family goals at the expense of other objectives. It seems reasonable to expect that personal attachment to the firm, self-identification with the firm, the “utility generated by the ability to exercise authority” (Schulze, Lubatkin, and Dino 2003), social capital, and other such socioemotional wealth, tend to be stronger for family firms with family CEOs, compared to those with professional CEOs. In this case, independent of financial considerations, losses in socioemotional wealth should weigh less heavily on a family firm’s willingness to give up control, if it is managed by a non-family CEO. Based on this reasoning, besides control-enhancing mechanisms, it is therefore argued that family owners’ control and influence over the business and their SEW can be derived from the family status of the CEO. We suggest that the Family Control dimension of SEW is more salient to family-member CEOs than to family-hired CEOs.

We repeated the same multivariate analysis as in our previous analyses, but substituted control-enhancing variables with variables related to the CEO’s family status. The results are

presented in Table 10. In particular, for family indicator variables, *FAM_FCEO* takes the value of 1 if the family members serve as the CEO of the family firm, and 0 otherwise; and *FAM_HCEO* takes the value of 1 if the CEO is hired from outside the family, and 0 otherwise. Regarding the earnings management of family firms, column (1) of Panel A, and columns (1), (3), (5), (7), (9), (11) of Panel B in Table 10, show that family firms with a family CEO engage more in earnings management, compared to family firms with a hired CEO and non-family firms; furthermore, when they decide to engage in earnings management, they are more (less) likely to engage in accrual earnings management (real earnings management), respectively.

Regarding the disclosures of family firms, columns (1), (3), (5) of Panel C in Table 10 show that family firms with family CEO engage in less voluntary disclosures. When they decide to do so, they are more (less) likely to engage in forward-looking disclosures (backward-looking disclosures). In summary, our results are not sensitive after replacing the status of family CEO with the degree of cash–vote divergence. These results increase our confidence that the Family Control dimension of SEW is a likely reason for the differences in earnings management and voluntary disclosures that we observe across family and non-family firms.

6.3 Using the Generational Stage of Family as an Alternative Proxy for the Level of the ‘Family Identity’ Dimension of SEW

Previous research investigating goal variation in family-owned businesses proposes that the significance of non-financial objectives is strongly linked to the generation that manages the company. We suggest that the dimension of Family Identity is more salient to first-generation family firms than to second-, third-, or subsequent-generation family firms.

The first-generation family members are the people who established the firms; they have a unique emotional attachment originating from their involvement (Gómez-Mejía et al. 2007; He and Yu 2019). The first-generation families represent the entrepreneurship brand (Amit, Glosten, and Muller 1990). The fate of family members is intricately linked to that of their enterprises, and their individual identities are often perceived as indivisible from that of their business. It is argued that first-generation members take particular care to perpetuate a positive family image and reputation, because they often view the firm as a long-term investment to be bequeathed to their descendants or other family members (Anderson and Reeb 2003).

The Family Identity dimension is perceived as being less important to second-, third-, or subsequent-generation family firms. First, family ties become weaker as more generations become involved in the business, with each family branch placing the needs of its own nuclear household first (Gersick, Davis, Hampton, and Lansberg 1997; Ensley and Pearson 2005). Furthermore, as the number of generations increases, so does the risk of intra-family conflict (Davis and Harveston 1999; Schulze et al. 2003; Ensley and Pearson 2005). Every family branch possesses unique requirements, priorities, abilities, and responsibilities; this makes it

Table 9 Using Continuous Family Ownership to Proxy Family Firm Variables

Panel A: Family Ownership to Proxy Family SEW and Suspect Earnings Management													
Variables		Prob (Suspect = 1)											
		(1)	(2)										
FOWN_DIV (α ₁)		1.365*** (2.705)											
FOWN_NDIV (α ₂)		0.292 (1.267)											
FOWN_NACQ (α ₃)			-1.294*** (-3.466)										
FOWN_ACQ (α ₄)			-0.325 (-1.198)										
Constant & Controls		Included	Included										
Log likelihood		69.988***	70.115***										
No. of observations		16,741	16,741										
F-Test:		Diff. (F-stat.)	Diff. (F-stat.)										
(α ₁)-(α ₂) or (α ₃)-(α ₄)		1.073*** (11.068)	-0.969*** (9.778)										
Panel B: Family SEW and Earning Management													
Variables		ABExp		ABProd		Total_RM		AM		AM < 0		AM > 0	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
FOWN_DIV (β ₁)		-1.634*** (-2.868)		-1.369** (-2.065)		-1.783*** (-3.637)		0.753** (2.316)		0.202 (1.326)		1.162*** (3.086)	
FOWN_NDIV (β ₂)		-0.179 (-1.375)		-0.089 (-1.287)		-0.165 (-1.454)		0.107 (1.385)		0.073 (1.412)		0.144 (1.514)	
FOWN_NACQ (β ₃)			1.534*** (3.172)		1.349*** (3.426)		1.641** (2.214)		-0.856** (-2.417)		-0.381 (-1.251)		-1.529*** (-2.964)
FOWN_ACQ (β ₄)			0.199 (1.418)		0.146 (1.517)		0.205 (1.280)		-0.224 (-1.428)		-0.196 (-1.561)		-0.277 (-1.350)

Table 9 Using Continuous Family Ownership to Proxy Family Firm Variables (Continued)

Constant& Controls	DISC			FLD			MED		
	Included	Diff. (<i>F</i> -stat)	Included	Included	Diff. (<i>F</i> -stat.)	Included	Included	Diff. (<i>F</i> -stat.)	Included
<i>F</i> -statistics	17.714***	17.665***	17.685***	17.739***	17.431***	17.397***	17.412***	17.351***	17.424***
No. of observations	10,507	10,507	10,507	10,507	10,507	10,507	10,507	10,507	2,626
<i>F</i> -Test:	Diff. (<i>F</i> -stat)	Diff. (<i>F</i> -stat)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)
(β_1)-(β_2) or (β_3)-(β_4)	-1.455*** (9.369)	1.335*** (9.412)	-1.280*** (10.595)	1.203*** (11.029)	-1.618*** (9.715)	1.436*** (9.966)	0.646** (4.743)	-0.632** (5.414)	0.129 (2.286)
Panel C: Family SEW and Voluntary Disclosure									
Variables	DISC			FLD			MED		
	(1)	(2)	(3)	(4)	(5)	(6)			
<i>FWN_DIV</i> (γ_1)	-2.532*** (-2.691)		2.150*** (3.138)		-2.358** (-2.269)				
<i>FWN_NDIV</i> (γ_2)	-0.291 (-1.438)		0.308 (1.392)		-0.152 (-1.321)				
<i>FWN_NACQ</i> (γ_3)		3.570*** (3.125)		-2.422** (-2.131)		2.186** (2.438)			
<i>FWN_ACQ</i> (γ_4)		0.699 (1.291)		-0.585 (-1.429)		0.106 (1.183)			
Constant & Controls	Included	Included	Included	Included	Included	Included			
<i>F</i> -statistics	14.678***	14.495***	14.256***	14.317***	14.258***	14.308***			
No. of observations	16,741	16,741	8,370	8,370	8,370	8,370			
<i>F</i> -Test:	Diff. (<i>F</i> -stat)	Diff. (<i>F</i> -stat)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)	Diff. (<i>F</i> -stat.)			
(γ_1)-(γ_2) or (γ_3)-(γ_4)	-2.241*** (7.128)	2.871*** (10.401)	1.842*** (9.979)	-1.837*** (8.655)	-2.206*** (9.012)	2.080*** (9.665)			

Notes: *, **, *** $p < .10$, $p < .05$, $p < .01$.

Table 10 Alternative Proxies for 'Family Control' and 'Family Identity' Dimensions of SEW and Disclosure Strategies

Panel A: Alternative Proxies for Family SEW and Suspect Earnings Management													
Variables		Prob (Suspect =1)											
		(1)				(2)							
FAM_FCEO (α_1)		0.273*** (2.759)											
FAM_HCEO (α_2)		0.069 (1.393)											
FAM_FGEN (α_3)						-0.508*** (-2.895)							
FAM_LGEN (α_4)						-0.185 (-1.269)							
Constant & Controls		Included											
Log likelihood		71.174***								Included			
No. of observations		16,741								70.816*** 16,741			
F-Test:		Diff. (F-stat.)				Diff. (F-stat.)							
$(\alpha_1)-(\alpha_2)$ or $(\alpha_3)-(\alpha_4)$		0.204** (4.911)				-0.323** (5.308)							
Panel B: Alternative Proxies for Family SEW and Earning Management													
Variables		ABExp		ABProd		Total_RM		AM		AM < 0		AM > 0	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
FAM_FCEO (β_1)		-0.263*** (-3.452)		-0.163** (-2.007)		-0.199*** (-3.352)		0.471*** (2.861)		0.097 (1.495)		0.617*** (3.146)	
FAM_HCEO (β_2)		-0.042 (-1.129)		-0.019 (-1.421)		-0.037 (-1.437)		0.191 (1.358)		0.085 (1.355)		0.271 (1.494)	
FAM_FGEN (β_3)			0.524*** (3.352)		0.196** (2.177)		0.392*** (2.770)		-0.583*** (-2.616)		-0.296 (-1.303)		-0.766*** (-2.877)
FAM_LGEN (β_4)			0.107 (1.437)		0.041 (1.514)		0.090 (1.433)		-0.208 (-1.423)		-0.242 (-1.414)		-0.259 (-1.629)

Table 10 Alternative Proxies for ‘Family Control’ and ‘Family Identity’ Dimensions of SEW and Disclosure Strategies (Continued)

Constant & Controls	Included		Diff.		Included		Diff.		Included		Diff.		Included		Diff.		Included		Diff.	
	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)	(F-stat)
F -statistics	17.278***	17.259***	17.231***	17.278***	17.535***	17.606***	17.265***	17.386***	17.259***	17.163***	17.508***	17.432***								
No. of observations	10,507	10,507	10,507	10,507	10,507	10,507	10,507	10,507	10,507	2,626	7,881	7,881								
F -Test:																				
$(\beta_1)-(\beta_2)$ or $(\beta_3)-(\beta_4)$	-0.221** (4.036)	0.417*** (10.504)	-0.144* (2.931)	0.155* (3.331)	-0.162* (3.323)	0.302*** (10.182)	0.280** (4.060)	-0.375*** (8.043)	0.012 (1.764)	-0.054 (2.166)	0.346*** (10.419)	-0.507*** (11.505)								
Panel C: Alternative Proxies for Family SEW and Voluntary Disclosure																				
Variables																				
DISC																				
FLD																				
MED																				
FAM_FCEO (γ_1)																				
FAM_HCEO (γ_2)																				
FAM_FGEN (γ_3)																				
FAM_LGEN (γ_4)																				
Constant & Controls	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
F -statistics	14.236***	14.258***	16,741	14,258***	14,186***	14,163	14,163	14,163	14,375***	14,375***	14,427***	14,427***								
No. of observations	16,741	16,741	16,741	16,741	8,370	8,370	8,370	8,370	8,370	8,370	8,370	8,370								
F -Test:																				
$(\gamma_1)-(\gamma_2)$ or $(\gamma_3)-(\gamma_4)$	-0.446*** (10.433)	0.513*** (10.125)		0.513*** (10.125)	0.788*** (10.342)	-0.655*** (11.343)	-0.655*** (11.343)	-0.317*** (7.458)	-0.317*** (7.458)	-0.317*** (7.458)	0.370*** (8.032)	0.370*** (8.032)								

Notes: * $p < .10$, ** $p < .05$, *** $p < .01$.

challenging for a family to sustain a common vision and view their reputation and identity as intertwined with that of the enterprise. Finally, in multigenerational firms, ownership is likely to be dispersed, including a growing number of passive family members (Jaffe and Lane 2004), who typically demonstrate less apparent involvement in the family-owned business. In such situations, descendants must share their control over the enterprise with other family members. However, a shared vision is difficult to reach and maintain, because each family branch tends to emphasize the objectives of their own nuclear household (Ensley and Pearson 2005; Lubatkin, Ling, and Schulze 2007).

To evaluate our hypotheses, we conducted the same multivariate analyses as in our prior study, but replaced the variables associated with families obtaining ownership of the business with variables connected to the family's generational status. In particular, for family indicator variables, *FAM_FGEN* takes the value of 1 for a first-generation family firm, and 0 otherwise; *FAM_LGEN* takes 1 for second-, third-, or subsequent-generation family firms, and 0 otherwise.

Table 10 presents an overview of the findings based on the different stages of the family generation. Regarding the earnings management of family firms, column (2) of Panel A, and columns (2), (4), (6), (8), (10), (12) of Panel B in Table 10, show that first-generation family firms engage in less earnings management, compared to later-generation family firms and non-family firms. If they opt for earnings management, it is probable that they will prefer real earnings management over accrual management. Regarding the voluntary disclosures of family firms, columns (2), (4), (6) of Panel C in Table 10 show that the first-generation family firms engage more in voluntary disclosure, relative to the second-, third-, or subsequent-generation family firms and non-family firms. In the event that they choose voluntary disclosure, they participate more in historically focused voluntary disclosure rather than forward-looking disclosure.

In general, our study's results corroborate Hypotheses 3 through 4 when substituting the variable that gauges the family ownership process with that of the family firm's generation stage status. Our results offer further evidence to support the hypothesis that the SEW aspect of Family Identity may account for the differences in disclosure approaches between family- and non-family-owned firms.

6.4 Potential Endogeneity

The regression analysis assumes that family ownership and family presence are exogenous variables. If, on the other hand, family ownership or family presence and financial reporting decisions (i.e., earnings management and voluntary disclosure) are simultaneous, then the results will suffer from an endogeneity bias. To account for any such bias, we follow Demsetz and Villalonga (2001) and employ a two-stage model, in which the dependent variables are family ownership variables (i.e., *FOWN_DIV*, *FOWN_NACQ*), and the instrumental variables in the first stage are firm age (years since establishment), growth (capital expenditure over

sales), profitability (return on assets), and firm size (the natural log of total assets). *FOWN_DIV* (*FOWN_NDIV*) is the percentage of common shares held by the family firms with (without) cash–vote divergence. *FOWN_NACQ* (*FOWN_ACQ*) is the fractional equity ownership of the family owners of identity (non-identity)-focused family firms. The predicted values of *PFOWN_DIV*, *PFOWN_NDIV*, *PFOWN_NACQ*, and *PFOWN_ACQ* generated from the first stage are used for the second-stage regressions. After replacing family dummy variables with predicted family ownership variables, our results (untabulated) are qualitatively unchanged after controlling for the potential endogeneity of various family ownership variables.

6.5 Interaction Effects of SEW Types, Earnings Management, and Voluntary Disclosure

To further strengthen the robustness of the regression results, we categorize family firms into four groups based on two dimensions: Family Control and Family Identity. This categorization allows us to explore the differences in earnings management and voluntary disclosure among these groups. Table 11 presents the analysis of these differences across the various types of family control and family identity.

The table shows that Type I family firms, referred to as pure control-focused family firms, exhibit the family control dimension of socioemotional wealth (SEW) but not the identity dimension, with 2,944 observations. Type II family firms are characterized by both family control and family identity dimensions of SEW, with 2,416 observations. Type III family firms display neither the control nor identity dimensions, with 1,300 observations. Lastly, Type IV family firms, pure identity-focused family firms, exhibit the family identity dimension of SEW but not the control dimension, with 4,005 observations.

Panels A, C, and E of Table 11 compare suspect earnings management (*Prob (Suspect = 1)*), accrual-based earnings management (*AM*), and forward-looking disclosures (*FLD*) across these groups. The results show that Type I family firms have the highest mean values for *Prob (Suspect = 1)*, *AM*, and *FLD* (0.596, 0.031, and 0.172, respectively), followed by Type II family firms. Type III family firms rank next, and Type IV pure identity-focused family firms have the lowest means (0.162, −0.002, and 0.073, respectively). In particular, the means of *Prob (Suspect = 1)*, *AM*, and *FLD* for Type I firms are significantly higher than those of the other three groups, with *p*-values of at least 0.10. These findings support the regression results, indicating that control-focused family firms are more likely to engage in earnings management. When control-focused family firms decide to engage in earnings management or voluntary disclosures, they tend to conduct accrual-based earnings management instead of real earnings management, and provide more forward-looking disclosures.

Panels B, D, and F of Table 11 compare real earnings management (*Total_RM*), voluntary disclosure (*DISC*), and historical and credible disclosures (*MED*) across the four groups. The

Table 11 Interaction Effects of SEW Types, Earnings Management and Voluntary Disclosure

Panel A: Suspect Earnings Management (<i>Prob (Suspect = 1)</i>)			
Family Control Dimension of SEW	Family Identity Dimension of SEW		Differences (<i>t</i> -stats)
	Non-identity-focused	Identity-focused	
Control-focused	Type I family firms 0.596 <i>N</i> = 2,944	Type II family firms 0.391 <i>N</i> = 2,416	【Type I - Type II】 0.205** (2.225)
Non-control-focused	Type III family firms 0.368 <i>N</i> = 1,300	Type IV family firms 0.162 <i>N</i> = 4,005	【Type III - Type IV】 0.206** (2.318)
Differences (<i>t</i> -stats)	【Type I - Type III】 0.228** (2.202)	【Type II - Type IV】 0.229*** (2.121)	【Type I - Type IV】 0.434*** (3.712)
Panel B: Real Earnings Management (<i>Total_RM</i>)			
Family Control Dimension of SEW	Family Identity Dimension of SEW		Differences (<i>t</i> -stats)
	Non-identity-focused	Identity-focused	
Control-focused	Type I family firms -0.093 <i>N</i> = 2,944	Type II family firms -0.044 <i>N</i> = 2,416	【Type I - Type II】 -0.049*** (-3.252)
Non-control-focused	Type III family firms -0.037 <i>N</i> = 1,300	Type IV family firms -0.018 <i>N</i> = 4,005	【Type III - Type IV】 -0.019 (-1.466)
Differences (<i>t</i> -stats)	【Type I - Type III】 -0.056*** (-4.195)	【Type II - Type IV】 -0.026* (-1.775)	【Type I - Type IV】 -0.075*** (-4.435)
Panel C: Accrual-Based Earnings Management (<i>AM</i>)			
Family Control Dimension of SEW	Family Identity Dimension of SEW		Differences (<i>t</i> -stats)
	Non-identity-focused	Identity-focused	
Control-focused	Type I family firms 0.031 <i>N</i> = 2,944	Type II family firms 0.010 <i>N</i> = 2,416	【Type I - Type II】 0.021** (2.206)
Non-control-focused	Type III family firms -0.017 <i>N</i> = 1,300	Type IV family firms -0.002 <i>N</i> = 4,005	【Type III - Type IV】 -0.015** (-2.338)
Differences (<i>t</i> -stats)	【Type I - Type III】 0.048** (2.377)	【Type II - Type IV】 0.012* (1.679)	【Type I - Type IV】 0.033** (2.539)
Panel D: Voluntary Disclosure Score (<i>DISC</i>)			
Family Control Dimension of SEW	Family Identity Dimension of SEW		Differences (<i>t</i> -stats)
	Non-identity-focused	Identity-focused	
Control-focused	Type I family firms 3.839 <i>N</i> = 2,944	Type II family firms 4.368 <i>N</i> = 2,416	【Type I - Type II】 -0.529*** (-4.402)
Non-control-focused	Type III family firms 4.417 <i>N</i> = 1,300	Type IV family firms 4.505 <i>N</i> = 4,005	【Type III - Type IV】 -0.088 (-1.597)
Differences (<i>t</i> -stats)	【Type I - Type III】 -0.578*** (-4.439)	【Type II - Type IV】 -0.137* (-1.736)	【Type I - Type IV】 -0.666*** (-4.712)

Table 11 Interaction Effects of SEW Types, Earnings Management and Voluntary Disclosure (Continue)

Panel E: Forward Looking Disclosures (<i>FLD</i>)			
Family Control Dimension of SEW	Family Identity Dimension of SEW		Differences (<i>t</i> -stats)
	Non-identity-focused	Identity-focused	
Control-focused	Type I family firms 0.172 <i>N</i> = 2,944	Type II family firms 0.125 <i>N</i> = 2,416	【Type I - Type II】 0.047*** (2.835)
Non-control-focused	Type III family firms 0.109 <i>N</i> = 1,300	Type IV family firms 0.073 <i>N</i> = 4,005	【Type III - Type IV】 0.036** (2.471)
Differences (<i>t</i> -stats)	【Type I - Type III】 0.063*** (2.608)	【Type II - Type IV】 0.052*** (3.466)	【Type I - Type IV】 0.099*** (3.233)
Panel F: Historical and Credible Disclosures (<i>MED</i>)			
Family Control Dimension of SEW	Family Identity Dimension of SEW		Differences (<i>t</i> -stats)
	Non-identity-focused	Identity-focused	
Control-focused	Type I family firms 1.535 <i>N</i> = 2,944	Type II family firms 1.781 <i>N</i> = 2,416	【Type I - Type II】 -0.246*** (-2.862)
Non-control-focused	Type III family firms 1.886 <i>N</i> = 1,300	Type IV family firms 2.189 <i>N</i> = 4,005	【Type III - Type IV】 -0.303*** (-2.755)
Differences (<i>t</i> -stats)	【Type I - Type III】 -0.351*** (-3.331)	【Type II - Type IV】 -0.408*** (-3.418)	【Type I - Type IV】 -0.654*** (-3.901)

Notes: **p* < .10, ***p* < .05, ****p* < .01.

results show that Type IV pure identity-focused family firms have the highest mean values for *Total_RM*, *DISC*, and *MED* (−0.018, 4.505, and 2.189, respectively), followed by Type III firms, Type II firms, and finally, Type I pure control-focused family firms, which have the lowest means (−0.093, 3.839, and 1.535, respectively). The means for *Total_RM*, *DISC*, and *MED* in Type IV firms are significantly higher than in the other groups, with *p*-values of at least 0.1. These results corroborate the regression analyses, indicating that identity-focused family firms engage more in voluntary disclosures. When identity-focused family firms decide to engage in earnings management or voluntary disclosures, they participate more in real earnings management instead of accrual-based earnings management, and make credible and historical disclosures.

7. Conclusion

Gómez-Mejía et al. (2014) expanded the traditional agency perspective by employing the socioemotional wealth (SEW) framework to explain how the Family Control and Family Identity dimensions of SEW affect financial reporting decisions (i.e., earnings management

and voluntary disclosure). The SEW model employs these dimensions as a comprehensive but singular explanatory concept, despite not being assessed explicitly. Using Taiwan's listed firms, we validate the framework of Gómez-Mejía et al. (2014), and posit that the variations in family ownership configurations affect the extent of the Family Control dimension of SEW; furthermore, the process by which families obtain ownership of firms affects the extent of the Family Identity dimension. Specifically, we posit that the Family Control dimension of SEW is more salient for control-focused family firms, while Family Identity is more important for identity-focused family firms. We posit and find that control-focused family firms engage more in earnings management, compared to non-control-focused family firms and non-family firms. Given that real earnings management is likely to lead outsider investors to challenge the prevailing position of the family, we posit and find that when they decide to engage in earnings management, they participate more in accrual-based earnings management than real earnings management. Furthermore, we propose and discover that in comparison to purchased family enterprises and non-family enterprises, identity-focused family firms have a lower tendency to conduct earnings management. If they do engage in such practices, they are more prone to employ legitimate earnings management methods, such as real earnings management, to preserve their reputation.

We further examine how the Family Control and Family Identity dimensions of SEW affect voluntary disclosure among family firms. We posit and find that control-focused family firms engage in less voluntary disclosure, relative to non-control focused family firms and non-family firms; and if they do so, they participate more in forward-looking disclosures than historically focused voluntary disclosures. This outcome supports the idea that voluntary revelations will weaken the family's dominance and competitiveness, while forward-looking disclosures are employed by family firms that prioritize control, in order to attract external investors while preserving the family's power. We posit and find that identity-focused family firms engage more in voluntary disclosure relative to non-identity-focused family firms and non-family firms; and that when they do so, their disclosures are more historically focused (i.e., monthly earnings). The findings align with the concept that greater voluntary disclosures, especially for reliable information dissemination (i.e., monthly earnings disclosures), can help identity-focused family firms to gain reputational benefits.

Finally, we posit that the Family Control dimension of SEW is more salient to family CEOs than non-family CEOs, and Family Identity is more important for first-generation than later-generation family firms. The outcomes remain unaffected even when substituting the control-enhancing mechanism variable with that of family CEO status, and replacing the variable of the ownership acquisition process with the generational stage of the family enterprise. All in all, employing alternate proxies for the SEW dimensions of Family Control and Family Identity reinforces our confidence that family owners rely on SEW protection as their primary framework for financial reporting tactics.

REFERENCES

- Achleitner, A. K., N. Günther, C. Kaserer, and G. Siciliano. 2014. "Real earnings management and accrual-based earnings management in family firms." *European Accounting Review* 23 (3): 431-461.
- Ali, A., T.-Y. Chen, and S. Radhakrishnan. 2007. "Corporate disclosures by family firms." *Journal of Accounting & Economics* 44 (1-2): 238-286.
- Amit, R., L. Glosten, and E. Muller. 1990. "Entrepreneurial ability, venture investments, and risk sharing." *Management Science* 36 (10): 1233-1246.
- Anderson, R. C., and D. V. Reeb. 2003. "Founding-family ownership, corporate diversification, and firm leverage." *Journal of Law & Economics* 46 (2): 653-684.
- Anderson, R. C., and D. M. Reeb. 2004. "Board composition: Balancing family influence in S&P 500 firms." *Administrative Science Quarterly* 49 (2): 209-237.
- Ashbaugh, H., R. LaFond, and B. W. Mayhew. 2003. "Do nonaudit services compromise auditor independence? Further evidence." *The Accounting Review* 78 (3): 611-639.
- Bardhan, I., S. Lin, and S. Wu. 2015. "The quality of internal control over financial reporting in family firms." *Accounting Horizons* 29 (1): 41-60.
- Bartov, E., D. Givoly, and C. Hayn. 2002. "The rewards to meeting or beating earnings expectations." *Journal of Accounting & Economics* 33: 173-204.
- Basco, R., and M. J. P. Perez Rodriguez. 2009. "Studying the family enterprise holistically: Evidence for integrated family and business systems." *Family Business Review* 22 (1): 82-95.
- Becker, C. L., M. L. Defond, J. J. Jambalvo, and K. R. Subramanyam. 1998. "The effect of audit quality on earnings management." *Contemporary Accounting Research* 15: 1-24.
- Bergstresser, D., and T. Philippon. 2006. "CEO incentives and earnings management." *Journal of Financial Economics* 80 (3): 511-529.
- Berrone, P., C. Cruz, and L. R. Gómez-Mejía. 2012. "Socioemotional wealth in family firms: A review and a future research agenda." *Family Business Review* 25 (3): 258-279.
- Bertrand, M., and A. Schoar. 2006. "The role of family in family firms." *The Journal of Economic Perspectives* 20 (2): 73-96.
- Bodoff, D. and I. Hirsch. 2023. "Tone and credibility in voluntary disclosures." *Corporate Communications: An International Journal* 28 (6): 943-971.
- Brown, L., and M. Caylor. 2009. "Corporate governance and firm operating performance." *Review of Quantitative Finance & Accounting* 32 (2): 129-144.
- Burgstahler, D., and I. Dichev. 1997. "Earnings management to avoid earnings decreases and losses." *Journal of Accounting & Economics* 24 (1): 99-126.

- Cascino, S., A. Pugliese, D. Mussolino, and C. Sansone. 2010. "The influence of family ownership on the quality of accounting information." *Family Business Review* 23 (3): 246-265.
- Caskey, J., and N. B. Ozel. 2017. "Earnings expectations and employee safety." *Journal of Accounting & Economics* 63 (1): 121-141.
- Claessens, S., S. Djankov, and L. L. Lang. 2000. "The separation of ownership and control in East Asian Corporations." *Journal of Financial Economics* 58 (1-2): 81-112.
- Chau, G., and S. J. Gray. 2010. "Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong." *Journal of International Accounting, Auditing and Taxation* 19: 93-109.
- Chen, S., X. Chen, and Q. Cheng. 2008. "Do family firms provide more or less voluntary disclosure?" *Journal of Accounting Research* 46 (3): 499-536.
- Chrisman, J., J. Chua, and R. A. Litz. 2004. "Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence." *Entrepreneurship Theory & Practice* 28: 335-344.
- Cohen, D. A., and P. Zarowin. 2010. "Accrual-based and real earnings management activities around seasoned equity offerings." *Journal of Accounting & Economics* 50 (1): 2-19.
- Davis, P. S., and P. D. Harveston. 1999. "In the founder's shadow: Conflict in the family firm." *Family Business Review* 12 (4): 311-323.
- De Massis, A., H. Wang, and J. H. Chua. 2019. "Counterpoint: How heterogeneity among family firms influences organizational change." *Journal of Change Management* 19 (1): 37-44.
- Dechow, P. M., R. G. Sloan, and A. P. Sweeney. 1996. "Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC." *Contemporary Accounting Research* 13: 1-36.
- Dechow, P., S. Richardson, and I. Tuna. 2003. "Why are earnings kinky? An examination of the earnings management explanation." *Review of Accounting Studies* 8 (2-3): 355-384.
- Demsetz, H., and B. Villalonga. 2001. "Ownership structure and corporate performance." *Journal of Corporate Finance* 7 (3): 209-233.
- Dichev, I. D., and D. J. Skinner. 2002. "Large-sample evidence on the debt covenant hypothesis." *Journal of Accounting Research* 40 (4): 1091-1123.
- Dichev, I., J. Graham, C. Harvey, and S. Rajgopal. 2013. "Earnings quality: Evidence from the field." *Journal of Accounting & Economics* 56 (2-3): 1-33.
- Distelberg, B., and R. L. Sorenson. 2009. "Updating system concepts in family businesses: A focus on values, resource flows, and adaptability." *Family Business Review* 22 (1): 65-81.
- Dyer, W. G., and D. A. Whetten. 2006. "Family firms and social responsibility: Preliminary evidence from the S&P500." *Entrepreneurship Theory & Practice* 30: 785-802.

- Elias, A. A., R. Y. Cavana, and L. S. Jackson. 2002. "Stakeholder analysis for R&D project management." *R&D Management* 32: 301-310.
- Engel, P. J., A. Hack, L. J. Stanley, and F. W. Kellermanns. 2019. "Voluntary disclosure of individual supervisory board compensation in public family firms." *Journal of Business Research* 101: 362-374.
- Enomoto, M., F. Kimura, and T. Yamaguchi. 2015. "Accrual-based and real earnings management: An international comparison for investor protection." *Journal of Contemporary Accounting & Economics* 11 (3): 183-198.
- Ensley, M., and A. Pearson. 2005. "An exploratory comparison of the behavioral dynamics of top management teams in family and non-family new ventures: Cohesion, conflict, potency, and consensus." *Entrepreneurship Theory & Practice* 29: 267-284.
- Faccio, M., and L. Lang. 2002. "The ultimate ownership of Western European corporations." *Journal of Financial Economics* 65 (3): 365-395.
- Fan, J. P. H., and T. J. Wong. 2002. "Corporate ownership structure and the informativeness of accounting earnings in East Asia." *Journal of Accounting & Economics* 33 (3): 401-425.
- Fiegenger, M. K., B. M. Brown, D. R. Dreux, and W. J. Dennis. 2000. "CEO stakes and board composition in small private firms." *Entrepreneurship Theory & Practice* 24 (4): 5-24.
- Fombrun, C., and M. Shanley. 1990. "What's in a name? Reputation building and corporate strategy." *The Academy of Management Journal* 33 (2): 233-258.
- Gersick, K. E., J. A. Davis, M. M. Hampton, and I. Lansberg. 1997. *Generation to generation. Life cycles of family businesses*. Boston: Harvard Business School Press.
- Golden, J., and M. J. Kohlbeck. 2017. "The influence of family firm dynamics on voluntary disclosures." *Advances in Accounting* 37: 111-121.
- Gómez-Mejía, L., K. Haynes, M. Nunez-Nickel, K. Jacobson, and J. Moyano-Fuentes. 2007. "Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills." *Administrative Science Quarterly* 52 (1): 106-137.
- Gómez-Mejía, L., C. Cruz, P. Berrone, and J. De Castro. 2011. "The bind that ties: Socioemotional wealth preservation in family firms." *Academy of Management Annals* 5 (1): 653-707.
- Gómez-Mejía, L. R., C. Cruz, and C. Imperatore, 2014. "Financial reporting and the protection of socioemotional wealth in family-controlled firms." *European Accounting Review* 23 (3): 387-402.
- Gopalan, R., and S. Jayaraman. 2012. "Private control benefits and earnings management: Evidence from insider controlled firms." *Journal of Accounting Research* 50 (1): 117-157.
- Graham, J. R., C. R. Harvey, and S. Rajgopal. 2005. "The economic implications of corporate financial reporting." *Journal of Accounting & Economics* 40: 3-73.

- Graham, J. R., C. R. Harvey, and S. Rajgopal. 2006. "Value destruction and financial reporting decisions." *Financial Analysts Journal* 62 (6): 27-39.
- Gu, Q., S. L. Wang, and T. Bai. 2024. "Revealed and reserved: A compensating approach of voluntary disclosure by family multinationals." *Journal of International Business Studies* 55: 914-933
- Haw, I.-M., B. Hu. L.-S. Hwang, and W. Wu. 2004. "Ultimate ownership, income management, and legal and extra-legal institutions." *Journal of Accounting Research* 42 (2): 423-462.
- He, W., and X. Yu. 2019. "Paving the way for children: Family firm succession and corporate philanthropy in China." *Journal of Business Finance & Accounting* 46 (9-10): 1237-1262.
- Hermalin, B. E., and M. S. Weisbach. 2012. "Information disclosure and corporate governance." *Journal of Finance* 67 (1): 195-233.
- Hope, O., J. C. Langli, and W. B. Thomas. 2012. "Agency conflicts and auditing in private firms." *Accounting Organizations and Society* 37 (7): 500-517.
- Huang, X. and F. Kang. 2019. "Are family firms more optimistic than non-family firms?" *Accounting Research Journal* 32 (3): 399-416.
- Isakov, D., and J. P. Weisskopf. 2014. "Are founding families special blockholders? An investigation of controlling shareholder influence on firm performance." *Journal of Banking and Finance* 41: 1-16.
- Jaffe, D., and S. Lane. 2004. "Sustaining a family dynasty: Key issues facing complex multigenerational business- and investment-owning families." *Family Business Review* 17 (1): 81-98.
- Kammerlander, N. 2022. "Family business and business family questions in the 21st century: Who develops SEW, how do family members create value, and who belongs to the family?" *Journal of Family Business Strategy* 13 (2): 100470.
- Kang, F. 2014. "Founding family ownership and the selection of industry specialist auditors." *Accounting Horizons* 28 (2): 261-276.
- Khalil, S. K., J. R. Cohen, and G. M. Trompeter. 2011. "Auditor resignation and firm ownership structure." *Accounting Horizons* 25 (4): 703-727.
- Kuo, L. W. 2017. "Reputation as a governance mechanism? Evidence from payout policy of insider-controlled firms in Taiwan." *Journal of Business Finance & Accounting* 44 (9-10): 1443-1476.
- La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 1999. "Corporate ownership around the world." *Journal of Finance* 54 (2): 471-517.
- Leuz, C., D. Nanda, and P. D. Wysocki. 2003. "Earnings management and investor protection: An international comparison." *Journal of Financial Economics* 69 (3): 505-527.

- Li, C., Y. Yan, X. Liu, S. Wan, Y. Xu, and H. Lin. 2023. "Forward looking statement, investor sentiment and stock liquidity." *Heliyon* 9 (4): e15329.
- Lim, S., Z. Matolcsy, and D. Chow. 2007. "The association between board composition and different types of voluntary disclosure." *European Accounting Review* 16 (3): 555-583.
- Liu, S. 2015. "Corporate governance and forward-looking disclosure: Evidence from China." *Journal of International Accounting, Auditing and Taxation* 25: 16-30.
- Lubatkin, M. H., W. S. Schulze, Y. Ling, and R. N. Dino. 2005. "The effects of parental altruism on the governance of family-managed firms." *Journal of Organizational Behavior* 26: 313-330.
- Lubatkin, M. H., Y. Ling, and W. S. Schulze. 2007. "An organizational justice-based view of self-control and agency costs in family firms." *Journal of Management Studies* 44 (6): 955-971.
- Lundholm, R. J. 1999. "Historical accounting and the endogenous credibility of current disclosures." *Journal of Accounting, Auditing and Finance* 18: 207-229.
- Ma, L., S. Ma, and G. Tian. 2017. "Corporate opacity and cost of debt for family firms." *European Accounting Review* 26 (1): 27-59.
- Ma, L., and S. Ma. 2024. "Strategic earnings management in family firms." *Accounting and Finance* 1-32.
- Martin, G., J. T. Campbell, and L. Gomez-Mejia. 2016. "Family control, socioemotional wealth and earnings management in publicly traded firms." *Journal of Business Ethics* 133: 453-469.
- Miller, D., I. Le Breton-Miller, and R. H. Lester. 2013. "Family firm governance, strategic conformity, and performance: Institutional vs. strategic perspectives." *Organization Science* 24 (1): 189-209.
- Mio, C., P. L. Marchini, and A. Mediolì. 2020. "Forward-looking information in integrated reports: Insights from "best in class"." *Corporate Social Responsibility and Environmental Management* 27 (5): 2212-2224.
- Muslu, V., S. Radhakrishnan, K. R. Subramanyam, and D. Lim. 2015. "Forward-looking MD&A disclosures and the information environment." *Management Science* 61 (5): 931-948.
- Paiva, I. S., I. C. Lourenço, and M. C. Branco. 2016. "Earnings management in family firms: Current state of knowledge and opportunities for future research." *Review of Accounting and Finance* 15 (1): 85-100.
- Patelli, L., and A. Prencipe. 2007. "The relationship between voluntary disclosure and independent directors in the presence of a dominant shareholder." *European Accounting Review* 16 (1): 5-33.
- Pazzaglia, F., S. Mengoli, and E. Sapienza. 2013. "Earnings quality in acquired and non-acquired family firms: A socioemotional wealth perspective." *Family Business Review* 26 (4): 374-386.
- Poretti, C., T. Jérôme, and C. Brousseau. 2023. "Family identification and earnings management in listed firms." *Accounting in Europe* 20 (3): 339-369.

- Prencipe, A., G. Markarian, and L. Pozza. 2008. "Earnings management in family firms: Evidence from R&D cost capitalization in Italy." *Family Business Review* 21 (1): 71-88.
- Prencipe, A., S. Bar-Yosef, and H. C. Dekker. 2014. "Accounting research in family firms: Theoretical and empirical challenges." *European Accounting Review* 23 (3): 361-385.
- Ramadani, V., E. Memili, R. Palalić, E. P. C. Chang. 2020. Strategic Management in the Family Businesses. *Entrepreneurial Family Businesses*.
- Ramadani, V., E. P. C. Chang, R. Palalić, and E. Memili. 2024. Socioemotional wealth in family businesses. *Entrepreneurial Family Businesses*.
- Ramadani, V., E. P. C. Chang, R. Palalić, and E. Memili. 2024. Governance in the Family Businesses. *Entrepreneurial Family Businesses*.
- Rangan, S. 1998. "Earnings management and the performance of seasoned equity offerings." *Journal of Financial Economics* 50 (1): 101-122.
- Razzaque, R. M. R., M. J. Ali, and P. R. Mather. 2016. "Real earnings management in family firms: Evidence from an emerging economy." *Pacific-Basin Finance Journal* 40 (B): 237-250.
- Reiss, D., and M. E. Oliveri. 1983. "The family's construction of social reality and its ties to its kin network: An exploration of causal direction." *Journal of Marriage and Family* 45 (1): 81-91.
- Rezaee, Z., and L. Tuo. 2017. "Voluntary disclosure of non-financial information and its association with sustainability performance." *Advances in Accounting* 39: 47-59.
- Roychowdhury, S. 2006. "Earnings management through real activities manipulation." *Journal of Accounting & Economics* 42 (3): 335-370.
- Sageder, M., C. Mitter, and B. Feldbauer-Durstmüller. 2018. "Image and reputation of family firms: A systematic literature review of the state of research." *Review of Managerial Science* 12: 335-377.
- Schulze, W. S., M. H. Lubatkin, and R. N. Dino. 2003. "Exploring the agency consequences of ownership dispersion among the directors of private family firms." *Academy of Management Journal* 46 (2): 179-194.
- Schweiger, N., Matzler, K., Hautz, J. 2023. Family businesses and strategic change: The role of family ownership. *Review of Managerial Science*, Published online.
- Sharma, P. 2004. "An overview of the field of family business studies: Current status and directions for the future." *Family Business Review* 17 (1): 1-36.
- Shi, Y., M. Magnan, and J. B. Kim. 2012. "Do countries matter for voluntary disclosure Evidence from cross-listed firms in the US." *Journal of International Business Studies* 43 (2): 143-165.
- Shleifer, A., and R.W. Vishny. 1997. "A survey of corporate governance." *Journal of Finance* 52 (2): 737-783.

- Skinner, D. J. 1994. "Why firms voluntarily disclose bad news." *Journal of Accounting Research* 32 (1): 38-60.
- Stockmans, A., N. Lybaert, and W. Voordeckers. 2010. "Socioemotional wealth and earnings management in private family firms." *Family Business Review* 23 (3): 280-294.
- Tabassum, N., A. Kaleem, and M. S. Nazir. 2015. "Real earnings management and future performance." *Global Business Review* 16 (1): 21-34.
- Tao, J., A. V. Deokar, and A. Deshmukh. 2018. "Analysing forward-looking statements in initial public offering prospectuses: A text analytics approach." *Journal of Business Analytics* 1 (1): 54-70.
- Teoh, S. H., I. Welch, and T. J. Wong. 1998. "Earnings management and the underperformance of seasoned equity offerings." *Journal of Financial Economics* 50 (1): 63-99.
- Tong, Y. H. 2007. "Financial reporting practices of family firms." *Advances in Accounting* 23 (3): 231-261.
- Villalonga, B., and R. Amit. 2006. "How do family ownership, control and management affect firm value?" *Journal of Financial Economics* 80 (2): 388-417.
- Vorst, P. 2016. "Real earnings management and long-term operating performance: The role of reversals in discretionary investment cuts." *The Accounting Review* 91 (4): 1219-1256.
- Wang, Y. H., and C. H. Lin. 2004. "A multimedia database supports English distance learning." *Information Sciences* 158 (1): 189-208.
- Wang, D. 2006. "Founding family ownership and earnings quality." *Journal of Accounting Research* 44 (3): 619-656.
- Weiss, D. 2014. "Internal controls in family-owned firms." *European Accounting Review* 23 (3): 463-482.
- Williams, R. I., T. M. Pieper, F. W. Kellermanns, and J. H. Astrachan. 2018. "Family firm goals and their effects on strategy, family and organization behavior: A review and research agenda." *International Journal of Management Reviews* 20: S63-S82.
- Zang, A. 2012. "Evidence on the tradeoff between real manipulation and accrual manipulation." *The Accounting Review* 87 (2): 675-703.
- Zellweger, T. M., R. S. Nason, M. Nordqvist, and C. Brush. 2011. "Why do family firms strive for nonfinancial goals? An organizational identity perspective." *Entrepreneurship: Theory & Practice* 37 (2): 1-20.
- Zellweger, T. M., F. W. Kellermanns, J. J. Chrisman, and J. H. Chua. 2012. "Family control and family firm valuation by family CEOs: The importance of intentions for transgenerational control." *Organization Science* 23 (3): 851-868.

Appendix A Variable Definitions

Dependent or independent variables for main tests

FAM_NDIV = a value of 1 if the family firm doesn't have cash-vote divergence, and 0 otherwise.

FAM_DIV = a value of 1 if the family firm has cash-vote divergence, and 0 otherwise.

FAM_NACQ = a value of 1 if a firm has been created or inherited by current family owners, and 0 otherwise.

FAM_ACQ = a value of 1 if family owners acquire the firm by purchase, and 0 otherwise.

Prob(Suspect=1) = a value of 1 if a firm just beats/meets one of the earnings benchmarks (e.g., prior year's earnings, zero earnings and analyst consensus forecasts), and 0 otherwise.

AM = the difference between total accruals and nondiscretionary accruals from the modified Jones model, which is developed by Ashbaugh et al. (2003).

ABExp = the residuals from the corresponding industry-year regression of Roychowdhury (2006) as the proxy for abnormal discretionary expenditures.

ABProd = the residuals from the corresponding industry-year regression of Roychowdhury (2006) as the proxy for abnormal production.

Total_RM = the aggregated real earnings management is equal to the sum of *ABExp* and *ABProd*.

DISC = voluntary disclosure score, if the firm ranked as A+ is denoted as 5, A as 4, B as 3, C as 2, and C- as 1.

Prob(DISC=1) = a value of 1 if *DISC* is above the industry-year median, and 0 otherwise.

FLD = the number of forward-looking sentences (see appendix B, the definitions of forward-looking sentences) divided by the total number of sentences in the MD&A section.

MED = the number of monthly earnings disclosure.

Control variables (Including earnings management and voluntary disclosure models)

BEATER = the frequency of meeting/beating analysts' earnings forecasts in the past four quarters.

SHARE = the natural logarithm of the number of shares outstanding.

ANALYST = the natural logarithm of the number of analysts covering the firm.

BONUS = the average bonus compensation as a proportion of total compensation received by the CEO and the CFO of a firm.

ROA = the ratio of earnings before interests and tax to total assets.

SIZE = the natural logarithm of total assets.

MB = the market-to-book ratio.

LEV = the ratio of long-term debt to total assets.

EARN = the earnings before extraordinary items minus discretionary accruals and production costs, plus discretionary expenditures.

TAX = the marginal tax rate.

MARKET = the percentage of the firm's sales to the total sales of its industry.

Appendix A Variable Definitions

ZSCORE = computed based on Altman's model.

INST = the percentage of institutional ownership.

BIG4 = a value of 1 if the firm is audited by one of the Big 4 CPA firms, and 0 otherwise.

TENURE = a value of 1 if the number of years the auditor has audited the client is above the sample median of six years, and 0 otherwise.

CYCLE = days receivable plus days inventory less days payable.

NOA = a value of 1 if net operating assets at the beginning of the year divided by lagged sales is above the median of the corresponding industry-year, and 0 otherwise.

Pred_RM = the predicted values of equation (7) and (9).

STDREV = the standard deviation of daily stock returns.

LIT = a value of 1 if the industries with high litigation risk, and 0 otherwise.

Other variables used in additional and robust tests

INVS_MILLS = inverse Mills ratio.

FOWN_NDIV = the percentage of common shares held by family firms without control-enhancing mechanisms and 0 otherwise.

FOWN_DIV = the percentage of common shares held by the family firms with control-enhancing mechanisms and 0 otherwise.

FOWN_NACQ = the fractional equity ownership of the family owners of non-acquired family firms and 0 otherwise.

FOWN_ACQ = the fractional equity ownership of the family owners of acquired family firms and 0 otherwise.

FAM_FCEO = a value of 1 if the family members serve as the CEO of the family firm, and 0 otherwise.

FAM_HCEO = a value of 1 if the CEO is hired from outside the family, and 0 otherwise.

FAM_FGEN = a value of 1 for the first-generation family firm, and 0 otherwise.

FAM_LGEN = a value of 1 for second-, third-, or subsequent-generation family firms, and 0 otherwise.

PFOWN_NDIV = the predicted *FOWN_NDIV* from the first-stage regression.

PFOWN_DIV = the predicted *FOWN_DIV* from the first-stage regression.

PFOWN_NACQ = the predicted *FOWN_NACQ* from the first-stage regression.

PFOWN_ACQ = the predicted *FOWN_ACQ* from the first-stage regression.

Appendix B The definitions of forward-looking sentences

In accordance with the approach of Muslu et al. (2015), we identify a sentence in the MD&A section as forward-looking through a three-step search process:

First step
<p>The initial search classifies an MD&A sentence as forward-looking if it contains any of the following keywords: “will,” “future,” “next fiscal,” “next month,” “next period,” “next quarter,” “next year,” “incoming fiscal,” “incoming month,” “incoming period,” “incoming quarter,” “incoming year,” “coming fiscal,” “coming month,” “coming period,” “coming quarter,” “coming year,” “upcoming fiscal,” “upcoming month,” “upcoming period,” “upcoming quarter,” “upcoming year,” “subsequent fiscal,” “subsequent month,” “subsequent period,” “subsequent quarter,” “subsequent year,” “following fiscal,” “following month,” “following period,” “following quarter,” and “following year”. Sentences containing keywords such as “shall,” “should,” “can,” “could,” “may,” or “might” are not categorized as forward-looking, even if they imply future events. This is because these terms are often associated with legal language and boilerplate disclosures that lack meaningful forward-looking implications. Our decision to exclude such boilerplate language from the forward-looking category aligns with the SEC’s criticism of firms for frequently providing non-informative boilerplate disclosures and immaterial information in their MD&A reports (SEC 2003, Li 2010).</p>
Second step
<p>The second search approach categorizes a sentence as forward-looking if it contains variations of specific verbs, including: “aim,” “anticipate,” “assume,” “commit,” “estimate,” “expect,” “forecast,” “foresee,” “hope,” “intend,” “plan,” “project,” “seek,” and “target.” We assess these verbs in various forms to capture the forward-looking context. For brevity, “expect” serves as our template verb, and we consider phrases such as “we expect,” “and expect,” “but expect,” “do not expect,” “company expects,” “corporation expects,” “firm expects,” “management expects,” “and expects,” “but expects,” “does not expect,” “is expected,” “are expected,” “not expected,” “is expecting,” “are expecting,” “not expecting,” “normally expect,” “normally expects,” “currently expect,” “currently expects,” “also expect,” and “also expects.” Similar to the first search, this comprehensive approach with multiple conjugations minimizes the risk of erroneously capturing nouns derived from certain verbs that lack forward-looking connotations, especially those related to “plan,” “project,” and “estimate”.</p>
Third step
<p>The third search method classifies a sentence as forward-looking if it contains a reference to a year that is subsequent to the year of the filing (for example, “2022” in a company’s 10-K filing in 2021). To ensure accuracy, the program is designed to exclude phrases that involve numerical or percentage values occasionally within the specified search range. Any use of characters, whether before, after, or in between the digits (e.g., “\$,” “%,” “,”) disqualifies the number from being classified as a year reference.</p>

家族股權、盈餘管理和自願揭露：家族社會情感 財富觀點

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投稿日期：2024 年 1 月 18 日；2 審後接受，接受日期：2024 年 10 月 10 日

摘 要

本研究以 Gómez-Mejía, Cruz, and Imperatore (2014) 為架構，從 Socioemotional Wealth Perspective (SEW) 探討家族所有權對財務報告決策（包括盈餘管理和自願性揭露）。我們主要在探討家族控制力與認同度兩個 SEW 維度對財務揭露的影響。研究結果顯示，控制型家族企業，從事盈餘管理（自願揭露）的可能性較大（較小），而認同型家族企業，從事盈餘管理（自願揭露）的可能性則較小（較大）。我們進一步發現，當家族企業決定進行盈餘管理或自願性的揭露時，控制型（認同型）家族企業較會（不會）選擇應計數盈餘管理，較不會（會）選擇實際盈餘管理，此外控制型（認同型）家族企業較會（不會）從事前瞻性之揭露，較不會（會）從事歷史性之揭露。

關鍵詞：控制型家族企業、認同型家族企業、財務報導選擇、家族社會情感財富理論

作者感謝領域主編以及兩位匿名評審委員之寶貴意見，文中言論由作者自行負責。作者也感謝國科會所給予的專題計畫經費補助（計畫編號：MOST 109-2410-H-153-033）。

數據可用性：本文使用的數據可從公開資料來源取得。



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Tung Hua Book Co., Ltd.

1. 研究議題及研究假說

本研究首先探討家族股權與財務報導之關聯性。參考家族社會情感財富理論之“家族控制維度”，本研究認為當家族企業利用控制強化機制時，「家族控制」的影響將更為顯著。本研究假設相較於非控制型家族企業及非家族企業，控制型家族企業更有可能從事盈餘管理。管理階層可以透過應計數盈餘管理和真實盈餘管理來操縱盈餘。先前的文獻認為實際盈餘管理一旦被發現 (Tabassum, Kaleem, and Nazir 2015; Vorst 2016)，這種做法很可能會引發非家族股東的強烈負面反應，可能會對家族股東在家族企業內的主導地位構成挑戰。此類行為可能會威脅家族股東的社會情感財富，因為失去對公司的控制權可能會對家族企業的情感依附產生重大影響。另一方面，由於其更大的監管風險和維持權威的能力，以控制為中心的家族公司，亦可能不會進行應計數盈餘管理。因此，本研究假設相較於非控制型家族企業及非家族企業，控制型家族企業決定要進行盈餘管理時，他們可能選擇實際盈餘管理或應計數盈餘管理。

H1A：相較於非控制型家族企業及非家族企業，控制型家族企業更有可能進行盈餘管理。

H1B：當控制型家族企業決定進行盈餘管理時，他們可能選擇實際盈餘管理或應計數盈餘管理。

關於家族認同度方面，過去的研究發現，由家族創辦人創辦的家族企業比透過收購而創立的家族企業將表現出對家族企業更大的認同度 (Pazzaglia, Mengoli, and Sapienza 2013)。因此，本研究假設相較於收購而創立的家族企業及非家族企業，由家族創辦人創辦的家族企業（即認同型家族企業）較不會從事盈餘管理。此外，相較於實際盈餘管理，應計數盈餘管理被認為更容易被外部人員、審計人員和監管機構發現 (Zang 2012)。認同型家族企業更擔心應計數盈餘管理會降低金融市場和利害關係人對家族企業的可靠性，最終對家族企業造成價值破壞。因此，認同型家族企業將青睞實際盈餘管理，此種盈餘管理不太明顯，也不易被外部投資者發現。另一方面，基於應計數的盈餘管理技術通常涉及會計分錄之調整，以平滑收益或在不同期間之收入轉移，不必改變企業之業務營運 (Enomoto, Kimura, and Yamaguchi 2015)。因此應計數盈餘管理可能不如實際盈餘管理引人注目，實際盈餘管理涉及業務活動的實際變化並降低公司的長期價值。對於關心聲譽的認同型家族企業來說，應計數之盈餘管理可能更可取，因為應計數之盈餘管理可以降低利害關係人對認同型家族企業之負面認同風險。因此，本研究假設相較於非認同型家族企業及非家族企業，認同型家族企業決定要進行盈餘管理時，他們可能選擇實際盈餘管理或應計數盈餘管理。

H2A：相較於非認同型家族企業及非家族企業，認同型家族企業較少進行盈餘管理。

H2B：當認同型家族企業決定進行盈餘管理時，他們可能選擇實際盈餘管理或應計數盈餘管理。

此外，本研究也探討家族股權與自願揭露間的關聯性。參考家族社會情感財富理論之“家族控制維度”，本研究認為相較於非控制型家族企業及非家族企業，優先考慮控制權的控制型家族企業將提供更少的自願揭露，因為增加揭露可能會削弱家族企業之控制權。揭露更多可驗證的訊息使外部利害關係人更能驗證所提供的訊息，並可能挑戰家族的決策及選擇，從而削弱家族股東對家族企業的控制力。因此本研究假設，相對於非控制型家族企業及非家族企業，控制型家族企業決定要進行自願揭露時，控制型家族企業則偏好揭露前瞻性或較不易驗證的資訊。

H3A：相較於非控制型家族企業及非家族企業，控制型家族企業較不會進行自願性揭露。

H3B：當控制型家族企業決定進行自願揭露時，他們較偏好前瞻性的資訊揭露。

關於家族社會情感財富理論之“家族認同維度”與自願揭露間的關聯性，本研究假設，由於與自願揭露相關有助於提高企業的名聲，相較於非認同型家族企業及非家族企業，認同型家族企業更傾向於自願揭露。此外，認同型家族企業將避免揭露不確定性較大的資訊所帶來的風險，從而避免受到指責或對保證準確性的挑戰。因此，本研究假設，相較於非認同型家族企業及非家族企業，認同型家族企業決定要進行自願揭露時，認同型家族企業傾向揭露更可靠的歷史資訊。值得注意的是，相當多的臺灣上市公司選擇自願揭露每月的月盈餘。月盈餘通常被視為可靠的歷史資訊之一。因此，本研究預期，相較於非認同型家族企業及非家族企業，認同型家族企業更傾向於揭露月盈餘的歷史性資訊。

H4A：相較於非認同型家族企業及非家族企業，認同型家族企業較會進行自願性揭露。

H4B：當認同型家族企業決定進行自願揭露時，他們較偏好歷史性的資訊揭露。

2. 研究結果及意涵

本研究使用臺灣上市公司之資料，驗證 Gómez-Mejía et al. (2014) 家族社會財富情感之研究框架，並假設家族股權配置的變化將受家族社會財富情感理論之「家族控制」維度所影響，而家族獲得股權的過程將受家族社會財富情感理論之「家族認同」維度所影響。本

研究發現，相較於非控制型家族企業及非家族企業，控制型家族企業偏好進行盈餘管理。此外本研究進一步發現，當控制型家族企業決定進行盈餘管理時，他們偏好進行應計盈餘管理而非實際盈餘管理。另一方面，相較於非認同型家族企業及非家族企業，認同型家族企業較不會進行盈餘管理。再者，當認同型家族企業決定進行盈餘管理時，他們更傾向於採用合規的盈餘管理方法，例如實際盈餘管理，以維護家族自身的聲譽。

本研究進一步探討家族社會財富情感理論的「家族控制」維度和「家族認同」維度如何影響家族企業的自願揭露。研究發現，相較於非控制型家族企業及非家族企業，控制型家族企業較少進行自願性揭露。然而如果控制型家族企業決定進行自願性揭露時，他們偏好進行前瞻性的資訊揭露而非歷史性的資訊揭露。這是因為自願揭露將削弱家族主導地位及其控制力，而控制型家族企業較會採用前瞻性的揭露，一方面藉此吸引外部投資者，另一方面同時保留家族之控制力。此外，相較於非認同型家族企業及非家族企業，認同型家族企業較偏好自願性揭露。當認同型家族企業決定進行自願揭露時，他們偏好進行歷史性的資訊揭露。這是因為可靠的資訊傳播，可以幫助認同型的家族企業獲得更多之家族聲譽利益。