

illuminating the shadows: a systematic review of earnings management practices in family-owned enterprises and future research directions

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Abstract

Purpose – The present research conducts a thorough review of published literature relevant to earnings management (EM) practices in family firms (FFs), utilizing the Scopus database, intending to identify potential directions for future research.

Design/methodology/approach – Through a systematic review, this study focuses on identifying and summarizing trends in publications over the years, the journal outlets, geographical contexts, research methodologies, the temporal evolution of theories and the specific constructs under investigation.

Findings – Earlier empirical studies suggest that corporate governance enhances integrity and transparency in FFs, thereby reducing EM practices. Contrarily, compliance with International Financial Reporting Standards (IFRS) seems to offer managers more opportunities for convenient EM rather than restricting such practices. Notably, corporate social responsibility (CSR) practices do not appear to mitigate EM practices consistently. The literature, however, reveals inclusive results and areas requiring deeper exploration for more definitive results. For instance, certain corporate governance mechanisms, such as family-specific social and cultural business characteristics, subjective measures of family businesses, behavioral approaches to family owners' decision-making and directors' personal, psychological and social factors, remain largely untested. Additionally, there is a notable research gap concerning the relationship between IFRS, capital structure and EM.

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Originality/value – This study’s contributions lie in its comprehensive literature review, identification of research trends and gaps, and its potential to guide future research endeavors in the domain of EM practices in FFs.

Keywords Discretionary accruals, Real earnings management, Family firms, Family ownership, Corporate governance

Paper type Literature review

1. Introduction

Following the 2008 global financial crisis, a series of high-profile scandals, such as Enron and WorldCom, brought to light unethical corporate practices. These challenges underscored the need for reliable financial disclosures (Al Amosh and Mansor, 2021), good governance practices, the reduction of information asymmetry and the establishment of trust among various stakeholders (Jensen and Meckling, 1976; Ananzeh *et al.*, 2022; Khatib, 2023). Ownership concentration, referring to the ownership share of the largest owners in a firm, significantly influences corporate decision-making and may compromise governance efficiency by prioritizing personal interests over the company’s interests. Controlling shareholders have a substantial impact on a firm’s accounting information (Al Amosh and Khatib, 2022) and this control is determined by their ability to manipulate financial data for their interests (Aws *et al.*, 2021). Family firms (FFs), according to the FF institute, contribute to between 70 and 90% of worldwide gross domestic product (GDP) and employ between 60 and 70% of global human capital. These firms encompass three interconnected spheres: business, family and ownership. The tangible aspect (ownership), logical aspect (business) and emotional side (family) are inextricably intertwined and nearly inseparable (Davis and Taguiri, 1989).

In contrast to non-FFs, FFs often make decisions based on emotional attachment to their businesses (Ferramosca and Ghio, 2018), aligning with family and legacy goals. However, these generational goals in FF decision-making may pose challenges for minority shareholders. The nature of corporate ownership in FFs can also influence disclosure and transparency practices (Alareeni and Hamdan, 2020; Al Amosh and Khatib, 2022), potentially impacting the board of directors’ decision-making abilities. Consequently, this may compromise the existing corporate governance system, with family ties potentially leading to unethical practices, such as manipulating financial statements for private gain.

Numerous scholars have reviewed the literature on either FFs or earnings management (EM). For example, Rahman and Chowdhury (2020) conducted a literature review on CSR and EM, finding that social responsibility may limit EM practices and safeguard investors’ interests. Teixeira *et al.* (2020) systematically reviewed FFs, concluding by highlighting theoretical approaches to study FF conduct, performance and the comparison of family vs. non-family CEOs.

Unlike the preceding studies, this study distinguishes itself by focusing specifically on the EM practices of FFs, considered one of the unethical practices prevalent in family-dominated companies. It also sheds light on the most common theories in the literature, identifying critical research gaps. Methodologically, this work includes a systematic review of 92 relevant published articles in the Scopus database, one of the most reliable research indexing databases. We chose the study period from 2009 to 2022, following the world’s financial crises in 2008. Consequently, numerous unanswered questions exist regarding firms’ reporting practices, transparency, governance and agency issues. Additionally, after diagnosing the financial crisis, priorities shift towards investigating unethical corporate practices, such as profit management, which could lead to potential financial disasters and exploring ways to mitigate them. This research contributes to the literature by being the first to conduct a systematic literature review (SLR) on EM practices in FFs. Furthermore, our work identifies

numerous areas for future research, provides an integrated review of earlier studies and patterns in terms of theories and techniques and categorizes the sample by construct and research streams.

This systematic review critically examines the landscape of EM within family-owned enterprises, a topic that, despite its importance, has been insufficiently explored in existing literature. Family businesses, integral to global economies, often present unique financial reporting dynamics due to their distinctive governance structures and cultural values. This review aims to bridge a significant gap in the literature by providing a comprehensive analysis of EM practices specifically in the context of family-owned businesses. Moreover, the study aims to collate, analyze and synthesize existing research to better understand the prevalence, methods and implications of EM in family-owned enterprises. By doing so, the review seeks to reveal nuances and patterns that have not been adequately addressed in previous studies.

The rest of the paper proceeds as follows. [Section 2](#) describes the review methodology, [Section 3](#) presents the results and discussions, [Section 4](#) analyses future research directions and [Section 5](#) presents the concluding remarks.

2. Methodology

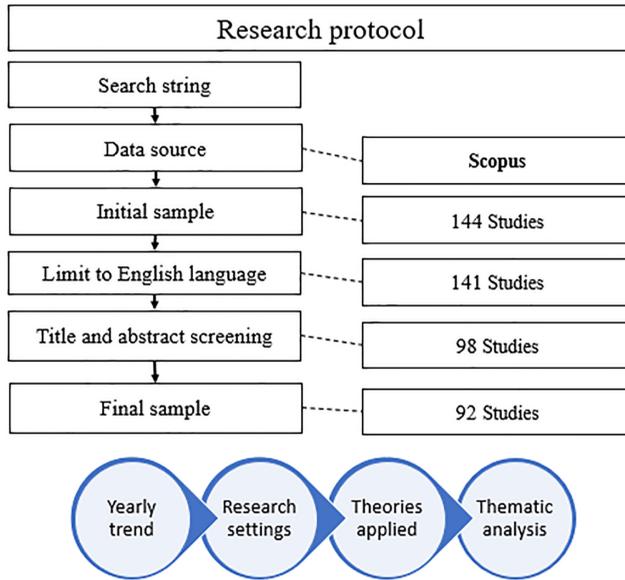
The keywords from the title and abstract were utilized to search the Scopus database, chosen for its status as the largest database of peer-reviewed literature. Peer-reviewed journals are considered valid sources for knowledge development in specific fields, ensuring the inclusion of high-quality and prominent journals in this study ([Khatib et al., 2021](#)). Furthermore, Scopus provides advanced search features that assist researchers in generating reliable search strings across several subjects.

In according with the methodology outlined by [Teixeira et al. \(2020\)](#), keywords were selected based on earlier publications and were applied to search through titles, abstracts and keywords of published materials. The selected keywords, including “family” AND “earning” OR “Abnormal discretionary” OR “Production cost” OR “abnormal cash flow” OR “Discretionary” were used to search the database. These keywords were extracted through a review of papers related to earning management and FFs.

This SLR adheres to the methodologies established in previously published SLRs by [Khatib et al. \(2021\)](#). Initially, the search procedures yielded 144 published articles, covering a broad spectrum of research relevant to the topic. Recognizing language constraints and the need for a comprehensive understanding of each study, a decision was made to include only those studies published in English, resulting in 141 English-language articles.

Articles that did not primarily focus on EM or FFs and their alternative terms in the title, abstract or keywords were screened out. This step ensured that each study explicitly addressed the dual themes of EM and FFs, narrowing the sample down to 98 papers that specifically addressed these themes ([Figure 1](#)).

To ensure specificity and relevance to the research topic, an additional layer of scrutiny was applied. Each of the 98 papers underwent a comprehensive review, focusing on the full text to ascertain alignment with inclusion criteria. In the final review stage, six studies did not meet the stringent criteria, resulting in their exclusion. Hence, a final sample of 92 articles specifically addressing FFs’ EM practices was obtained. The inclusion and exclusion methodologies were also adopted from previous literature (e.g., [Khatib et al., 2021](#); [Khatib, 2023](#)). A full-text check of the articles was conducted through manual content analysis to determine relevance and eligibility and to comprehend ongoing research trends, methodologies and theoretical underpinnings of the literature. Consistent with [Khatib et al. \(2021\)](#), this study focuses on the frequencies of journal outlets, year of publications, geographic context, research methodology, theory and construct under each study.



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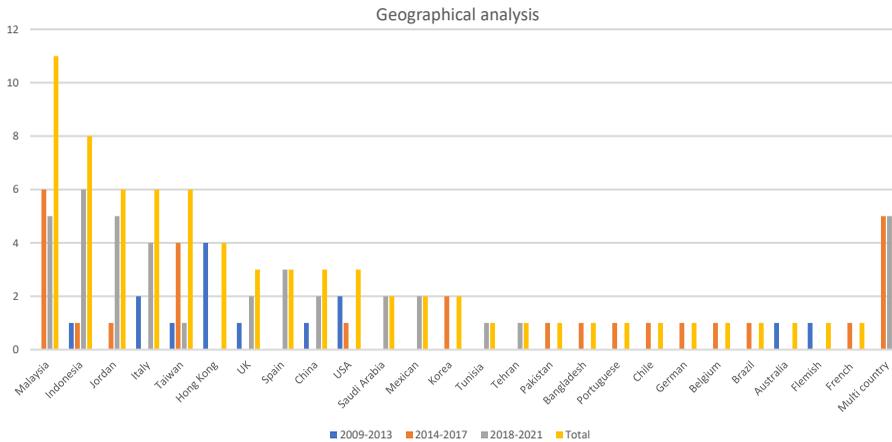
Figure 1. Flow chart of searching literature on Scopus database

3. Result and discussion

The results indicate a rising trend in recent years in the exploration of the topic. This trend indicates an increasing recognition of the significance of EM in FFs in the aftermath of the global financial crisis and its adverse effects (Dimitras *et al.*, 2015). Consequently, future research in this area is deemed essential.

3.1 Geographical distribution

Figure 2 shows the geographical distribution of sample data. According to this distribution, the majority of studies were conducted at the country level, with 11 being cross-country



Source(s): The authors' creation

Figure 2. Geographical distribution of the sample studies

studies (e.g., [Attig et al., 2020](#); [Tommasetti et al., 2020](#); [Sáenz González and García-Meca, 2014](#)). Cross-country studies offer a more in-depth understanding of the relationship, compared to a single-country perspective. Additionally, they provide a complementary basis for expanding regional and global research benefits, thereby enhancing the generalizability of findings.

In the case of single-country studies, 11 were carried out in the Malaysian setting (e.g., [Wan Mohammad and Wasiuzzaman, 2020](#); [Ghaleb et al., 2020](#)). As a developing and rapidly growing economy, Malaysia's market is characterized by ownership concentration, with most enterprises being family-owned. The country's stock market also holds critical importance for its population size ([Ahmad-Zaluki et al., 2011](#)). Therefore, firms with concentrated ownership structures engage in manipulative practices. Like other developing countries, Malaysia provides a rich context for study.

Additionally, eleven researchers investigated the Indonesian market (e.g., [Karsana et al., 2022](#); [Kumala and Siregar, 2020](#); [Putra et al., 2021](#)) and seven studied the Jordanian, Italian, Pakistan, Portugal and Taiwanese markets. Four studies were conducted in Hong Kong, and six were conducted in China, the United Kingdom and the United States of America. Notably, research in emerging countries is gaining popularity, indicating a need to study developing countries where concentrated ownership is dominant. However, stakeholder pressure may play a significant role in reducing unethical activities.

3.2 Theoretical perspective

The predominant explanation for earning management lacks specific, explicit theoretical foundations. We examined the literature to identify the most frequently used theories in a sample of 92 studies. Agency theory emerged as the most utilized theoretical lens, followed by the socio-emotional wealth (SEW) model. These findings support Lourenço and Branco's (2016) assertion that agency theory is the most commonly employed framework for researching FFs and EM. Agency theory explains conflicts of interest among owners, while socio-emotional theory proposes that FFs make decisions by balancing non-economic and economic goals. Eleven papers employed a variety of theoretical perspectives, differing in their research problems, such as [Yang and Kim's \(2019\)](#) study on the Korean stock exchange, focusing on managerial overconfidence behaviors and real earnings management (REM) through the managerial overconfidence theory lens.

Quantitatively, 39% of studies incorporated agency theory (36 articles), reflecting a tendency in prior research to emphasize the agency perspective and SEW, often neglecting other theoretical frameworks, such as stakeholders theory. Stakeholder theory emphasizes the interconnected relationships between businesses and various stakeholders ([Zellweger and Nason, 2008](#)). Within this framework, different stakeholders exert varying degrees of pressure on corporations to disclose information ([Al Amosh and Khatib, 2023](#)). For instance, investors and analysts seek rational reasons for organizations' performance to inform investment decisions. From this standpoint, legitimacy may play a significant role in explaining the relationship between FFs and EM, as firms rely on their social and financial reputation to justify their operations ([Gavana et al., 2017](#)), avoiding opaque financial reports to bolster credibility and evade unethical behavior that could jeopardize their validity.

Accountability theory advocates for the reward and punishment principle for managerial behaviors ([Aerts et al., 2013](#)), arguing that if FFs provide misleading information, the market will penalize the firm with a negative stock price. Thus, practitioners may face severe repercussions if unethical behaviors are discovered, potentially affecting family businesses' goals, decisions and financial strategies. We recommend that future research employ behavioral theories to understand the motives behind EM by FFs, as behavioral finance can complement classical and neoclassical financial theory.

On the contrary, [Zhong et al. \(2022\)](#) argued, through the Socio-emotional Wealth theory, that the dominance of family founders in FFs may prevent such firms from engaging in EM activities, due to family influence. This theory holds promise as an explanation for the behavior of family businesses in future research, addressing the emotional needs of the family distinct from financial aspects.

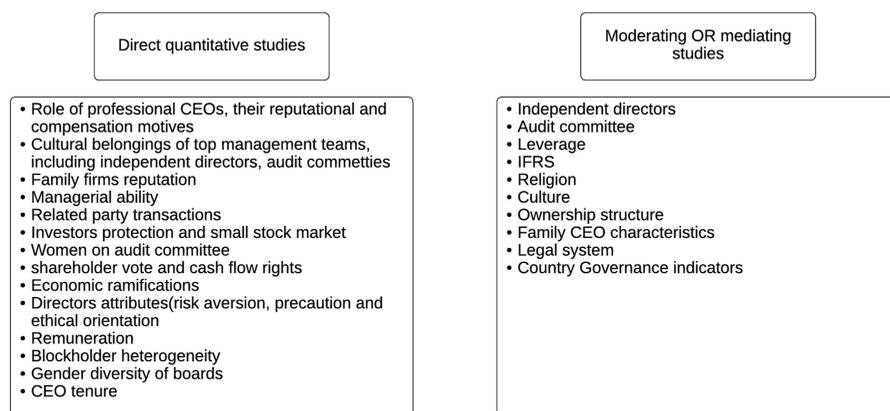
3.3 Prior research settings

Building on [Khatib et al.'s \(2021\)](#) framework, this systematic review categorizes research methods into four different categories: (1) quantitative research, (2) qualitative research, (3) review articles and (4) non-empirical research. Quantitative research involves utilizing statistical tools to investigate empirical phenomena, while qualitative research quantitatively describes phenomena without relying on statistical methodologies. Review articles summarize prior research findings, while non-empirical pieces are theoretical or philosophical. [Figure 3](#) shows the factors considered in all direct and indirect quantitative studies.

[Gomez-Mejia et al. \(2014\)](#) and [AL-Duais et al. \(2019\)](#) conducted two conceptual studies, concluding that financial reporting decisions in FFs are influenced by family's whims, allowing the family to govern EM practices and information disclosure, often aligned with preserving the family's SEW in its many manifestations.

Two studies adopted a qualitative approach to investigate EM in FFs. Qualitative approaches enable the investigation of problems, and the production of research that quantitative methods alone may be unable to accomplish ([Getulio et al., 2020](#)). According to [Creswell \(1999\)](#), qualitative research is "an inquiry method for comprehending a social or human issue based on the construction of a complex, holistic picture using words, careful reporting of informants' perspectives, and fieldwork in a natural context" ([Creswell, 1999](#), pp. 1–2). Hence, a qualitative approach aids in uncovering new insights, making it suitable for further investigation and understanding of complex phenomena. It provides a deeper understanding of the dynamics of FFs ([Nordqvist et al., 2009](#)), offering novel perspectives on EM strategies in FFs.

Out of the 86 quantitative empirical publications, 83 studies conducted a firm-level analysis using archival data. Three studies relied on bank data, whereas two studies ([Stockmans et al., 2013](#)) employed the survey method. Only [Duréndez and Madrid-Guijarro's](#)



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Figure 3. Factors in direct and indirect quantitative studies

(2018) study combined archival and survey data to investigate the role of accounting quality in small and medium-sized firms, revealing that FFs should encourage family participation in culture and experience while minimizing internal authority.

3.4 Thematical analysis

This section outlines the themes explored by scholars to investigate EM practices in FFs. Corporate governance emerges as the predominant theme, followed by CSR and international financial reporting standards. To facilitate reporting, this study categorized the sample into different themes based on the explicit construct addressed. Thematic analysis was employed in this study to systematically categorize and interpret the primary themes within the literature on EM practices in FFs. This approach was chosen for its effectiveness in identifying, analyzing and reporting patterns (themes) within data, allowing for a nuanced understanding of the subject. Each article underwent a thorough reading to comprehend the depth and breadth of the research conducted. This step involved examining codes and considering how different codes might combine to form an overarching 'theme'. For example, discussions on board structure, family involvement in management and shareholder rights were clustered under 'corporate governance mechanisms'. In total, five different themes were identified: (1) corporate governance mechanisms, (2) CSR, (3) international financial reporting standards and (4) capital structure.

3.4.1 Corporate governance mechanisms. The findings demonstrate that much of the literature focuses on corporate governance and its influence on EM practices in FFs. The corporate governance mechanism functions as an effective control system, enhancing the quality of financial reporting (Al Amosh and Khatib, 2021). An excellent governance system may alleviate agency problems and reduce costs by harmonizing shareholders' interests with those of management. Studies predominantly explore internal governance mechanisms, such as ownership structure, board independence, board diversity, top management team characteristics and auditors' independence. For instance, Putra *et al.* (2021) investigated the impact of managerial ability on real EM in FFs and non-FFs. Their findings report that FFs had a lower likelihood of having higher-ability managers participating in REM than non-FFs. Burghleh and Al-Okdeh (2020) pointed out that the board of directors' characteristics, such as board size, financial experience and board meetings, reduce undesirable behavior and curb EM practices, preserving the rights of minority shareholders. Out of the 92 studies, 32 used the corporate governance framework to explain the relationship between EM in FFs and non-FFs. Mohammad (2022) provided evidence supporting the notion that the interplay of external and internal governance factors limits engagement in profit management activities for Malaysian family businesses. This limitation fosters stakeholder confidence and propels efforts toward meeting their aspirations.

However, the literature has yielded mixed evidence, indicating a critical need for further investigation and the testing of mediating factors to ensure more accurate results in the future. Future studies should also investigate the importance of external governance mechanisms controlled by external stakeholders, such as regulatory bodies, governments, financial institutions, their regulations and media scrutiny. Table 1 presents selected studies, the constructs under investigation, sample data and critical findings. Given that the majority of the sample studies are empirical, we recommend more comprehensive studies of the construct, incorporating both quantitative and qualitative approaches to offer more sophisticated perspectives.

3.4.2 Corporate social responsibility. CSR has emerged as a significant concern for stakeholders in today's corporate landscape, including investors, regulators and academics. The increasing importance of CSR is attributed to factors such as the globalization of financial markets, stakeholder pressure for a firm's environmental and social disclosure and

	EM measure	EM model	Corporate governance measure	Key findings
Putra <i>et al.</i> (2021) Indonesia	Real EM	Roychowdhury model (2006)	Managerial ability	Compared to non-FFs, FFs diminish the likelihood of higher-ability managers indulging in REM
Wan Mohammad and Wasuzzaman (2020) Malaysia	Absolute discretionary accruals	Jones Model (1991)	Audit committee independence and board ethnicity	The study could not show a causal connection between audit committee independence and EM activities, confirming that giving top management more authority results in less effective independent directors
San Martín Reyna (2018) Mexico	Absolute discretionary accruals	Jones Model (1991)	Block holder, institutional, and family ownership	Family and institutional ownership both lower EM. However, the effect varies according to the size of the business
Idris <i>et al.</i> (2018) Jordan	Discretionary accruals	Kothari <i>et al.</i> (2005)	Board independence	Board independence and EM have a negative association. Moreover, this connection deteriorates when family ownership control is involved
Lassouz <i>et al.</i> (2017) 12 MENA countries	Discretionary accruals developed their model	Kanagaretham <i>et al.</i> (2010)	state ownership, institutional ownership, block holder ownership, family ownership	Banks with a more concentrated ownership structure control their profitability via discretionary loan loss reserves. State and institutional owners promote EM, and family owners discourage the practice
Abdullah and Ismail (2016) Malaysia	Discretionary accruals	Kothari <i>et al.</i> (2005)	Women on audit committees, women directors on boards of directors, family ownership in a firm, family farms	The presence of women on board or an audit committee and family ownership does not indicate an inclination toward EM. Women on boards of directors are not associated with income-reducing accruals; their presence on audit committees results in income-reducing EM
Surifah (2015) Indonesia	Discretionary accruals	Beaver and Engel (1996)	Index of corporate governance	Family-owned banks and private institutions manage their real earnings and have smaller discretionary accruals than government-owned banks
Sáenz González and García-Meca (2014) Latin America countries	Discretionary accruals	Dechow <i>et al.</i> (1995)	Institutional ownership, internal property, ownership concentration, board size, board independence, board activity, CEO duality	External directors have a restricted role, while boards that meet more regularly take a more active part in supervising insiders, indicating a reduced reliance on deceptive methods. We see a non-linear connection between insider ownership and discretionary accruals when primary shareholders' ownership is modest

(continued)

Table 1.
Sample studies on EM
in FFs

	EM measure	EM model	Corporate governance measure	Key findings
<i>Stockman's et al. (2013)</i> Belgium	Discretionary accruals	Kothari et al. (2005)	Outside director, CEO duality	Increased outside board representation and CEO nonuality may have a restrictive influence on EM
Jaggi et al. (2009) Hong Kong firms	Discretionary accruals	Francis et al. (2005)	Corporate board independence, family ownership	Corporate boards' monitoring efficacy is tempered in family-controlled businesses, either <i>via</i> ownership concentration or through the inclusion of family members on corporate boards
<i>Corporate social responsibility</i>				
<i>Kumala and Siregar (2020)</i> Indonesia	Discretionary Accruals	Kothari et al. (2005)	Corporate social responsibility	A negative association between corporate social responsibility disclosures (CSRDs) and earnings management
Sial et al. (2019) China	Discretionary Accruals real earnings management	Dechow et al. (1995) , Dechow et al. (1998)	Corporate social responsibility	A significant negative relationship between two-way CSR and accrual-based EM. Moreover, female, and independent directors moderate the two-way relationship between CSR and EM
<i>International financial reporting standards</i>				
Setiawan et al. (2020) Indonesia	Discretionary accruals	Beaver and Engel (1996)	IFRS standards as dummy	The adoption of the IFRS requirements has a good effect on reducing earnings management and concentrated family ownership also help to mitigate the earnings management. The combined effects of both the IFRS adoption and the concentrated family ownership strengthen the negative effect of the IFRS on earnings management only in the case of ownership exceeding 50%
Ratnaningrum et al. (2019) Indonesia	Discretionary accruals	Kothari et al. (2005)	IFRS standards	After IFRS adoption, when family firms engage in earnings management, there is a reduction of the value relevance of earnings but there is no increase in the value relevance of book value

(continued)

	EM measure	EM model	Corporate governance measure	Key findings
<i>Leverage</i> Bonacchi <i>et al.</i> (2018) Italy	Discretionary accruals real earning management Dechow Discretionary accruals	Kothari <i>et al.</i> (2005), Dechow <i>et al.</i> (1998)	Debt needed	Italian nonlisted subsidiaries engaging in accrual and real earnings management, so that their listed parents can meet or beat benchmarks we do not find support for the hypothesis that the incentive to manage earnings is stronger for leveraged FF than for NFF
Paiva <i>et al.</i> (2016), Portuguese	Discretionary real earning management	Dechow <i>et al.</i> (1995)	Leverage, family, non family firms	The impact of leverage on real and accrual-based earning management is stronger for family-controlled businesses than for non-family-controlled businesses
Shahzad <i>et al.</i> (2017), Pakistan	Discretionary accrual real earning management	Kaszniik (1999) model, Dechow <i>et al.</i> (1995)	Leverage, family, non family firms	
Source(s): The authors' creation				

Table 1.

stakeholder involvement (Al Amosh and Khatib, 2021; Hossain and Alam, 2016). While CSR is mandatory and governed by legislation (Crawford and Williams, 2010), it remains a voluntary practice in many developing and industrialized nations.

The literature indicates a mixed trend in the relationship between CSR and EM in FFs. Some studies suggested a negative relationship (e.g., Sial *et al.*, 2019; Kumala and Siregar, 2020), while Liu *et al.* (2017) argued that FFs are more engaged in CSR and EM, denying a direct relationship between the two. Despite this, the research on this relationship is limited, making generalization challenging. Therefore, expanding the study base to include more perspectives is crucial. CSR in FFs can act as a double-edged sword in the context of EM. While a strong commitment to CSR may encourage ethical and transparent financial reporting, there might be instances where earnings are managed to portray a more favorable image aligned with the firm's CSR initiatives. Future studies could explore how CSR activities correlate with EM practices in family businesses, examining whether a genuine commitment to CSR is associated with lower levels of earnings manipulation.

3.4.3 International financial reporting standards. Two types of accounting standards exist which are rule-based and principle-based. International Financial Reporting Standards (IFRS) is considered a proponent of principle-based accounting standards, providing more detailed guidance on accounting standards. The application of IFRS provides more accurate, comprehensive and sophisticated financial statements to investors compared to rule-based standards (Ball, 2006; Brown, 2011). Researchers agree that the application of IFRS restrains the motives of EM, leading to greater transparency in financial reports (Setiawan *et al.*, 2020; Ratnaningrum *et al.*, 2019). However, studies in this domain are limited, necessitating further investigation to identify how FFs adhere to international standards and how audit quality can affect this relationship. The adoption of international financial reporting standards is another critical theme. Compliance with IFRS can enhance transparency and comparability of financial statements. For FFs, especially those with international operations or aspirations, aligning with these standards may be viewed as a way to gain credibility and attract foreign investment. However, the complexity of IFRS can also create opportunities for EM. Future research can delve into the impact of IFRS adoption on EM practices, especially contrasting family businesses in regions with different levels of enforcement and cultural attitudes toward compliance.

3.4.4 Capital structure. The literature has revealed inconsistencies in the relationship between capital structure, FFs and EM. Paiva *et al.* (2016) indicated that FFs with higher financial leverage have a greater incentive to engage in EM, while Shahzad *et al.* (2017) contradicted this hypothesis with contradictory results. We propose further research on the role of optimal capital structure in EM practices, incorporating diverse proxies of capital structure such as the long-term debt ratio, sustainability ratio, debt-to-equity ratio, etc.

The capital structure of FFs constitutes a pivotal theme. Family businesses may lean towards debt rather than equity to prevent dilution of family ownership, yet this choice can heighten financial risk and exert pressure on earnings. This dynamic could result in more assertive EM practices, either to meet debt covenants or to uphold a certain level of financial health in the eyes of creditors and investors. Future studies could explore how different capital structures in FFs influence their EM strategies and the long-term implications of these choices.

4. Future research directions

4.1 Future empirical directions

This study explores several dimensions for future quantitative studies aimed at comprehending how these characteristics influence EM in FFs. Specifically, (1) the role of a professional chief executive officer (CEO) and its reputational and compensation motives in FFs; (2) the role of related party transactions; (3) the impact of FFs' reputation; (4) managerial

ability; (5) governance mechanism related to EM; (6) top management teams, including independent directors and audit committee characteristics like education, experience, cultural belongings, etc.; (7) audit quality; (8) CEO tenure; (9) gender diversity on boards; (10) the influence of appointing women on the audit committee, considering women's attributes, such as risk aversion, precaution and ethical orientation; (11) the influence of shareholder vote and cash-flow rights on board composition and the relationship with EM; (12) FFs' sustainability practices and (13) remuneration packages; (14) economic ramifications such as investment efficiency and the effect of leverage on investment efficiency and (15) the impact of weak investor protection and a small stock market.

The current study also highlights certain gaps in qualitative research, such as the characteristics of directors and the personal, psychological, behavioral, cultural and social factors that significantly influence decision-making and the relationships between owners and other board members. Furthermore, future research could explore whether financial reporting quality depends on unique characteristics of FFs, such as altruism, SEW and a focus on family rather than business goals.

4.2 Future theoretical directions

The review concludes that agency theory is the most popular theoretical perspective. This theory focuses on the conflict of interest between managers and shareholders, as well as between majority and minority shareholders. However, due to the intricate nature of family systems, financial ambitions often intertwine with non-financial ones. As a result, the explanatory power of the agency hypothesis may be limited.

Stakeholder theory, in particular, offers a critical complementary lens for studying this topic that has been overlooked in the literature. FFs strive to meet the needs of stakeholders in various ways. EM may also be part of the company's strategy to demonstrate its performance to various groups, such as other family members, investors or less powerful shareholders. These two concepts demand further elaboration in terms of theoretical foundations and empirical validation. Consequently, additional research is necessary to either substantiate or challenge these theoretical explanations.

4.3 Future approach directions

Given the variety of models and measurement methods in micro-level studies and the pervasiveness of indirect measurement methods generated by these models, there is a need for method development research to systematically analyze and verify EM models and, where necessary, create new ones. Robustness using a variety of proxies is recommended due to the lack of consensus on EM model(s). Alternative tactics, such as survey research or in-depth interviews, may be effective in exploring the sensitive nature of EM.

Moreover, future researchers are encouraged to explicitly mention the theoretical guidance of their studies, fostering the development of theoretical frameworks that can enhance future empirical research. These frameworks may provide comprehensive insights into the motivations of public sector organizations to participate in EM and the variables influencing such practices. In this regard, future researchers should present perspectives on contextual motives in theory selection to offer more comprehensive insights into the relationship between context and the chosen theories. This approach will shed light on the extent to which theory selection reflects the prevailing culture in different countries.

5. Conclusion

The paper aims to provide a systematic analysis of current knowledge about EM practices in FFs to address the existing literature gap. We analyzed 92 articles from 67 journals listed in

the Scopus database, categorizing them into reviews, conceptual, non-empirical and empirical studies. The results indicate a growing trend in adopting agency theory to explain EM practices in FFs. Earlier research predominantly employed various regression techniques, with ordinary least squares being the most prevalent. On the other hand, a minority of empirical publications employed non-linear models to capture non-monotonic correlations.

Most empirical work focused on a single market sample, highlighting the need for cross-country comparative research. After classifying empirical records according to the study construct, we discovered limited efforts to comprehend the antecedents of EM. In contrast, earlier research predominantly examined the outcomes of EM, such as debt contracts, governance roles and CSR practices.

This work contributes to the growing literature on EM in FFs by conducting a thorough systematic review of relevant published research with a multidisciplinary focus to organize knowledge, benefiting researchers, practitioners and policymakers. To this end, we propose several areas for further research, emphasizing the need for more attention to the relationships between EM practices and less explored aspects of FFs, such as audit fees, capital structure, innovation, CSR and directors' personal, psychological, behavioral, cultural and social factors. In terms of theory, we present a critical analysis of the adoption of agency theory and the SEW model in explaining EM behavior in FFs. The theoretical gap could be closed by adopting a multi-theoretical perspective to provide a fuller understanding of these practices. Future research should use a comparative approach and leverage improvements to enhance theory testing where feasible. Additionally, it is suggested that various methodologies be employed to construct theories and investigate the effects of EM on family organizations.

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