

Related party transactions and earnings management in family firms: the moderating role of board characteristics

Impact of
board
characteristics
on RPTs & EM

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Abstract

Purpose – The purpose of this paper is to investigate the effect of family control on the association between related party transactions (RPTs) and different forms of accrual-based earnings management (AEM) and real earnings management (REM), analyzing the effect of board characteristics on the possible association.

Design/methodology/approach – This paper studies a sample of Italian non-financial listed firms over the 2014–2019 period, by GLS regression models, controlling for the fixed effects of the company's sector of operation and the year.

Findings – Results indicate a different association between RPTs and earnings management (EM) in family and non-family firms. They point out that family firms use RPTs in association with downward AEM and REM perpetrated by abnormal discretionary expenses as well as a substitute of REM via abnormal production costs. For non-family firms, findings indicate only a substitution effect between RPTs and AEM. Furthermore, CEO duality, board gender diversity and the presence of the family on the board positively moderate the association between RPTs and, respectively, REM implemented through sales manipulations, downward AEM and upward AEM.

Originality/value – This study suggests that the socioemotional wealth (SEW) differently affects the relationship between RPTs and EM, according to the form of the latter. It also points out family firms' heterogeneity in earnings manipulations, by providing evidence of the moderating role of board characteristics on the association between RPTs and the various forms of EM.

Keywords Related party transactions, Accrual-based earnings management, Real earnings management, Family firms, Board characteristics

Paper type Research paper

1. Introduction

Over recent decades, the literature has widely studied earnings manipulation practices due to the possible serious effects that these practices can generate for investors and, more in general, for a company's stakeholders (Chih *et al.*, 2008). Research has also pointed out the possible harmful effect stakeholders may suffer from a firm's transactions with related parties, namely companies belonging to the group of the reporting entity, its managers, majority shareholders and their close family members (Ryngaert and Thomas, 2012).

Earnings management (EM) practices, together with opportunistic related party transactions (RPTs), played a pivotal role in serious financial scandals involving large companies such as Bank of Credit and Commerce, Enron, Adelphia, Worldcom, Parmalat and



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Cirio and Subprime Mortgage. This has led scholars to investigate the determinants of the phenomenon of EM. In particular, different governance aspects have been analyzed, such as board characteristics (Davidson *et al.*, 2005; Klein, 2002; Kao and Chen, 2004), ownership concentration (Yeo *et al.*, 2002), presence of institutional investors (Chung *et al.*, 2002; Rajgopal *et al.*, 2003) and family control (Prencipe *et al.*, 2008; Jaggi *et al.*, 2009; Stockmans *et al.*, 2010; Achleitner *et al.*, 2014; Chi *et al.*, 2015; Martin *et al.*, 2016). The latest stream of the literature has provided mixed results, suggesting a more grained analysis of family firms in order to take into account their heterogeneity. The effect of a family CEO (Yang, 2010; Ansari *et al.*, 2021), family involvement in C-suite roles (Ferramosca and Allegrini, 2018), board independence (Prencipe and Bar-Yosef, 2011; Jaggi *et al.*, 2009) and female directorship (Vieira and Madaleno, 2019; Abdullah and Ismail, 2016; Mnif and Cherif, 2020) on EM have been analyzed, pointing out that family firms' governance characteristics affect their propensity to manipulate earnings.

Conversely, a limited number of scholars has investigated the relation between RPTs and EM (Thomas *et al.*, 2004; Munir *et al.*, 2013; Haji-Abdullah and Wan-Hussin, 2015; Marchini *et al.*, 2018; El-Helaly *et al.*, 2018; Alhadab *et al.*, 2020), and results are quite mixed, suggesting that this issue deserves further research. This stream of literature has also taken into consideration the effect of ownership concentration (Munir *et al.*, 2013), auditor type (El-Helaly *et al.*, 2018) and ownership structure in terms of ownership concentration, family ownership and institutional ownership (Alhadab *et al.*, 2020) on the association between RPTs and EM. The last study did not find a significant effect of family ownership on the association. Nevertheless, the definition of family ownership it assumed leaves room for more grained studies as it bases on the presence of two or more board members sharing the same surname, without controlling for the actual family ownership of a firm. Moreover, to the best of our knowledge, no studies have analyzed the family effect on the association between RPTs and EM by taking into consideration family firms' heterogeneity. According to literature, board characteristics and the extent to which family members occupy board positions are a major source of heterogeneity in family businesses (Chua *et al.*, 2012; Nordqvist *et al.*, 2014; Diéguez-Soto and Martínez-Romero, 2019), so, given the literature gap mentioned above, our research question is: "Does family ownership control affect the association between RPTs and EM? If so, do board characteristics moderate the association?"

We address this issue by drawing on Agency theory integrated by the socioemotional wealth (SEW) construct. We study a sample of 170, *ex* 2019, Italian non-financial listed firms for the period 2014–2019. The Italian context is of interest as, although RPTs are strictly regulated, they have nonetheless been opportunistically used and this has led to big financial scandals (Marchini *et al.*, 2018). Moreover, a large presence of family companies that have a long-lasting family control (Franks *et al.*, 2012) makes Italy a good setting in which to focus the research on family businesses.

"Earnings management occurs when management uses judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers" (Healy and Wahlen, 1999, p. 368). Managers might manipulate earnings by exploiting discretionary accruals (Kothari *et al.*, 2005; Jones, 1991) or resorting to real EM (REM) by departing from "normal operational practices" (Roychowdhury, 2006, p. 337).

Therefore, we study the effect of family control on the association between RPTs and different forms of EM: accrual-based earnings management (AEM), estimated by the Kothari model (Kothari *et al.*, 2005), and REM estimated by abnormal levels of cashflow from operations, abnormal levels of production costs and abnormal levels of discretionary expenses (Roychowdhury, 2006). In doing so, we control for the effect of certain governance characteristics such as level of family ownership, CEO duality, weight of women and family

members on the board, presence of a Big Four auditing firm and for a range of company attributes. The literature points out the growing interest on corporate governance in family businesses (Shekhar *et al.*, 2021), and to the best of our knowledge, this is the first paper to provide a grained analyses of the moderating effect of family firm governance attributes on the association between RPTs and EM.

Our empirical evidence points out a different association between RPTs and EM in family and non-family firms. For family firms, we find a significant positive association between RPTs and downward AEM and REM perpetrated by abnormal discretionary expenses as well as a significant negative relationship between RPTs and abnormal production costs. For non-family firms, we provide evidence for a significant negative association between RPTs and absolute discretionary accruals.

Focusing on family businesses, we find that board characteristics moderate the relationship between RPTs and different types of earnings manipulations. In particular, we find that the presence of CEO duality, board gender diversity and the presence of the family on the board positively affect the association between RPTs and, respectively, REM implemented through sales manipulations, downward AEM and upward AEM.

This study adds to the stream of research on EM and RPTs as, according to Agency theory, our results suggest that abnormal levels of RPTs are used as a substitute, or together with, different types of EM. The contribution to family firm literature is twofold. On the one hand, we provide evidence that the concern for SEW preservation makes the above association different in family and non-family firms. On the other, our results point out family firms' heterogeneity in earnings manipulations showing that board characteristics differently moderate the association between RPTs and the various form of EM.

The remainder of the paper is organized as follows: [section 2](#) provides the theoretical framework, the literary review and hypotheses development; [section 3](#) describes the data and methods; [section 4](#) provides results, robustness checks and the discussion; [section 5](#) concludes with contributions, implications, limits of the study and suggestions for further research.

2. Theoretical framework, literature review and hypotheses development

2.1 Agency conflicts, socioemotional wealth and earnings manipulations

Most studies dealing with EM practices rely on agency theory to explain why companies engage in this unethical behavior (Paiva *et al.*, 2016). Incentives for firms to manipulate earnings vary according to the different types of agency conflicts (Jensen and Meckling, 1976; Fama and Jensen, 1983). The first type of conflict arises between principal (shareholders) and agent (managers). Due to the separation between ownership and control, as occurs in publicly held corporations, shareholders find it difficult to constantly monitor managers' decisions. This leads to information asymmetries as well as increasing the risk that managers act in their own self-interest and harm shareholders. When managers' compensation is tied to company performance, managers may inflate or decrease earnings according to the need, respectively, to meet a performance target that will entitle them to a benefit or to transfer some of the profits to future periods if they expect the company to perform below the target to which their compensation is related.

Family firms are characterized by ownership concentration (Faccio and Lang, 2002), the owning family often risks most of its private wealth in the company (Bennedsen *et al.*, 2010), and this is a motivation to monitor managers closely and thus prevent opportunistic behaviors. Furthermore, the fact that family members often hold top management positions fosters the alignment of interests between managers and the controlling family (Blanco-Mazagatos *et al.*, 2016).

The second type of agency conflict occurs between majority and minority shareholders. When ownership is highly concentrated, as in family businesses, a controlling shareholder

might exert pressure on managers' decision-making process (Demsetz and Lehn, 1985) to appropriate private benefits at the cost of minority shareholders (Villalonga and Amit, 2010; Faccio *et al.*, 2001).

Agency conflicts in family firms are also shaped by non-financial goals. The family has a stock of affective values invested in the firm and its preservation becomes a priority, which makes family businesses different from non-family firms (Chua *et al.*, 2015). Relative to non-family businesses, family firms attach great importance to other relevant values in addition to financial performance, such as family legacy, trust, commitment and reputation (Camilleri and Valeri, 2021).

The concept of SEW (Gómez-Mejía *et al.*, 2007, 2011), through its different dimensions, encompasses the various non-financial returns the family receives from exerting control over the firm (Berrone *et al.*, 2012). Family control and influence over the firm gives the family visibility and status (Gavana *et al.*, 2021). Organizations' social structure is characterized by the set of relationship among their members (Valeri, 2021, p. 4), and in family firms, relationships involve family members as well as non-family members (Miller *et al.*, 2009). Family members are emotionally attached to the company, establish long-term relationships with employees and forge strong social ties with the community affected by the business (Berrone *et al.*, 2010, 2012). It becomes crucial to pass on the firm to future generations, who will thus inherit and perpetuate the links created by the family, its values, reputation and social status (Berrone *et al.*, 2012). Since the controlling family expects to derive both financial and non-financial returns from the firm, the incentive to monitor managers is greater in family businesses than in their non-family counterparts, lowering agency conflicts.

The desire to preserve SEW has different effects on agency conflicts of the second type (Martin *et al.*, 2017), namely those between majority shareholders and minority shareholders. On the one hand, the determination to maintain control over the company may induce the family to take decisions that adversely affect the firm's performance, damaging minority shareholders (Gómez-Mejía *et al.*, 2007). Furthermore, family-controlled firms may have an incentive to manage earnings downward to reduce dividends, retain resources in the firm and protect transgenerational control (Achleitner *et al.*, 2014). On the other hand, family members experience a strong sense of identification with the firm, so that firm's reputation and family reputation are strictly linked (Deephouse and Jaskiewicz, 2013). The fact that the company image reflects on the family may reduce the incentive to undertake activities detrimental to minority shareholders, which, if uncovered, would compromise the reputation of the firm and the family (Gottardo and Moisélo, 2018).

2.2 Related party transactions and earnings manipulations

Research provides two alternative explanations on the role of related party transactions. The first is the efficient transaction hypothesis (Friedman *et al.*, 2003; Pozzoli and Venuti, 2014), according to which RPTs are an effective way to reduce transaction costs through the formation of a group internal market (Claessens *et al.*, 2006; Jian and Wong, 2010).

The second is the conflict of interests' transaction hypothesis (Pozzoli and Venuti, 2014), in which RPTs are a means through which managers and controlling shareholders (*insiders*) expropriate the firm's resources for private benefit, to the detriment of minority shareholders and creditors (*outsiders*) (Mohammed, 2020; Johnson *et al.*, 2000).

Opportunistic RPTs are used to improve the firm's financial performance (Jian and Wong, 2010; Williams and Taylor, 2013), and there is a tendency for firms to use RPTs to boost financial performance during the pre-initial public offering (IPO) period (Aharony *et al.*, 2010) causing a negative impact on post-IPO long-term performance (Chen *et al.*, 2011).

Empirical research provides evidence of the propension for business group owners to transfer profits from companies where they have low cashflow rights, to companies where they have high cashflow rights (Bertrand *et al.*, 2002). The controlling shareholder in a

business group may exploit different types of shareholding structures (direct, indirect and pyramidal ownership) in order to gain private benefits via RPTs, making it harder to identify the related party (Ali *et al.*, 2021). Furthermore, the literature, basing on quantitative analysis methods, suggests that transactions with related parties may be either a substitute (El-Helaly *et al.*, 2018) or a complement to EM practices (Thomas *et al.*, 2004; Marchini *et al.*, 2018), as well as a standalone tool to manipulate earnings (Chen *et al.*, 2011).

2.3 Earnings management, RPTs and family firms

The literature has shown a different propensity to manipulate earnings in family and non-family businesses (Prencipe *et al.*, 2008; Achleitner *et al.*, 2014; Chi *et al.*, 2015; Gavana *et al.*, 2017; Gottardo and Moisello, 2018). In particular, there is evidence that family firms exhibit a lower propensity to resort to AEM than non-family firms (Ali *et al.*, 2007; Tong, 2007; Jiraporn and DaDalt, 2009; Prencipe and Bar-Yosef, 2011; Martin *et al.*, 2016).

EM and firms' reputation are negatively associated (Rodriguez-Ariza *et al.*, 2016; Salehi *et al.*, 2020). The interests of families are closely related to the interests of the business, so that they would not be prone to managing earnings to avoid possible damage to the survival of the company and its reputation (Salvato and Moores, 2010; Borralho *et al.*, 2020). Family firms who value SEW to a larger extent tend to avoid EM, which, if detected, would damage the reputation of the company and the family, putting at risk the survival of the firm for subsequent generations (Suprianto *et al.*, 2019; Martin *et al.*, 2016). Moreover, long-term focus limits pressure on a firm's management to achieve short-term performance goals, reducing the incentives for EM (Jiraporn and DaDalt, 2009). Nevertheless, there is evidence that family firms inflate earnings when economic performance is negative or decreasing in order to maintain lenders' trust, prevent their interference and preserve family control and influence (Stockmans *et al.*, 2010).

Empirical findings on family firms' propensity to engage in REM are mixed and they depend mainly on the institutional settings considered by scholars (Ghaleb *et al.*, 2020). Actually, REM benefits short-term cashflows to the detriment of long-term cashflows, resulting in a value decreasing activity (Roychowdhury, 2006). Since one of the main SEW priorities is to pass the business onto succeeding generations, family firms were found to resort less to REM than non-family businesses (Achleitner *et al.*, 2014). Nevertheless, in countries characterized by weak investor protection the controlling family has a greater incentive to expropriate minority shareholders through REM, which is difficult to uncover and can be implemented during the year and not only at the reporting date (Eng *et al.*, 2019; Razaque *et al.*, 2016).

As regards RPT research focusing on the nature of a firm's ownership has pointed out that RPTs have a negative effect on a firm's performance and that the effect is stronger for family firms (Mohammed, 2020), suggesting an opportunistic use of these transactions. There is also evidence (Kohlbeck *et al.*, 2018) that family firms are more prone to enter into RPTs and that their financial performance declines when they report transactions with directors, officers and major shareholders. When opportunistic RPTs are put in place, managers may resort to EM practices to increase the benefits extracted or to disguise the expropriations perpetrated to the detriment of outsiders (Sarлак and Akbari, 2014; Marchini *et al.*, 2018). Studies focusing on emerging markets have pointed out that RPTs exacerbate REM, but family ownership moderates this opportunistic association (Haji-Abdullah and Wan-Hussin, 2015). On the other hand, researchers focusing on Jordanian companies found a significant moderating effect of ownership concentration on the association between AEM and RPTs (Alhadab *et al.*, 2020).

The empirical literature has provided evidence of an association between RPTs and EM, suggesting that transactions with related parties may be used as a substitute or a complement to other forms of earnings manipulations. Research has also pointed out an effect of family control on EM practices related to the peculiarities of agency conflicts and the

relevance of non-financial goals in family firms. Basing ourselves on the theoretical framework and the above literature review, we posit the following:

H1a. Family control affects the association between RPTs and REM

H1b. Family control affects the association between RPTs and AEM

2.4 Earnings management and family firms' board characteristics

EM practices differ according to family businesses' corporate governance attributes. The propensity for family firms to manage earnings is higher in the case of non-family CEOs, relative to family CEOs, as their compensation is more often linked to the financial performance of the firm to align the interests of family owners and CEOs (Yang, 2010). Moreover, because of a different level of family identification with the firm, companies created or inherited by a family present a higher quality of reported earnings relative to firms acquired by a family, especially when the CEO is a family member (Pazzaglia *et al.*, 2013). Conversely, there is evidence that CEO duality may lower the board's effectiveness to provide oversight over managerial behavior, increasing EM (Chi *et al.*, 2015). The literature also points out that founder CEOs tend to implement upward EM when they are close to reappointment to prevent minority shareholders from requesting a professional CEO to improve the firm's financial performance (Ansari *et al.*, 2021).

On the one hand, the literature (Schulze *et al.*, 2003) suggests that information asymmetry is lower when family members, rather than outsiders, perform monitoring as they communicate and cooperate more easily. From this perspective, family member participation would be an informal mechanism for enhancing internal corporate governance, especially in opaque markets (Fan and Yu, 2022). On the other hand, research has pointed out that the presence of family members on the board reduces the effectiveness of audit committees (Jaggi and Leung, 2007) and independent directors (Prencipe and Bar-Yosef, 2011; Jaggi *et al.*, 2009) in limiting EM.

The literature has investigated the influence of women directorship on EM in family firms. Findings point out that the presence of women on a board decreases EM (Vieira and Madaleno, 2019; Mnif and Cherif, 2020), although a previous study carried out in Malaysia showed that family ownership does not interact with women on boards to influence the propensity for EM (Abdullah and Ismail, 2016).

Regarding the effect of board characteristics on RPTs, there is evidence that family companies with multiple family members involved in the business are less prone to engage in RPTs than family firms in which only one family member owns and/or manages the business (Fan and Yu, 2022).

The above literature review points out that board characteristics influence EM practices in family firms as well as their propensity to engage in RPTs, therefore we expect board characteristics to affect how family businesses may associate RPTs and different forms of EM. We posit the following:

H2a. Board characteristics moderate the association between RPTs and REM in family firms

H2b. Board characteristics moderate the association between RPTs and AEM in family firms

3. Methodology

3.1 Sample

The data sample includes firms listed on the Italian stock exchange in the period 2014–2019. We exclude regulated industries such as banks, credit firms, brokers and insurance because of their unique accounting practices and regulations.

The final sample is given by 170 listed firms as in 2019 with available information on RPTs and 522 firm-year observations. We hand-collected the data on RPTs from the notes to the financial statements. The balance-sheet data are from Orbis, the global Bureau van Dijk database. Board characteristics and corporate governance are reconstructed based on information available on the Chamber of Commerce register and the Orbis database.

3.2 Dependent variables

We examine the relation between accrual and REM activities and RPTs for family and non-family firms. We define a family firm as one where the ultimate owner is a family that owns at least 20% of common shares (Villalonga and Amit, 2010). We measure AEM with discretionary accruals (Dechow *et al.*, 1995; Jones, 1991; Roychowdhury, 2006). We use three REM proxies: abnormal levels of cashflow from operations (RMCFO); abnormal levels of production costs (RMPROD); abnormal levels of discretionary expenses (RMDISX).

We measure discretionary accruals (DA) for each firm as the difference between total accruals and non-discretionary accruals. We estimate non-discretionary accruals by using the Kothari *et al.* model (2005):

$$\begin{aligned} TA_{i,t}/A_{i,t-1} = & \alpha_0 + \alpha_1(1/A_{i,t-1}) + \alpha_2[(\Delta REV_{i,t} - \Delta REC_{i,t})/A_{i,t-1}] + \alpha_3(PPE_{i,t}/A_{i,t-1}) \\ & + \alpha_4(NI_{i,t}/A_{i,t-1}) + \varepsilon_{i,t} \end{aligned} \quad (a.1)$$

where:

$A_{i,t-1}$ = lagged total assets

$\Delta REV_{i,t}$ = change in revenues in period t

$\Delta REC_{i,t}$ = change in trade receivables in period t

$PPE_{i,t}$ = gross property, plant and equipment

$NI_{i,t}$ = net income

We estimate normal levels of cashflow from operations; normal levels of production costs and normal levels of discretionary expenses as in El-Helaly *et al.* (2018):

$$REM_{i,t} = \alpha_0 + \alpha_1(1/A_{i,t-1}) + \alpha_2(REV_{i,t}/A_{i,t-1}) + \alpha_3(\Delta REV_{i,t}/A_{i,t-1}) + \varepsilon_{i,t} \quad (a.2)$$

where:

$$REM_{i,t} = CFO_{i,t}/A_{i,t-1} \text{ or } PROD_{i,t}/A_{i,t-1} \text{ or } DISX_{i,t}/A_{i,t-1}$$

The estimated residuals in the previous accruals and REM equations proxy for discretionary accruals (DA) and for the abnormal levels of cashflows from operations, production cost and discretionary expenses (RMCFO, RMPROD, RMDISX) [1]. In the models, we use the absolute value of discretionary accruals (ABSDA), or positive and negative discretionary accruals (PDA and NDA, respectively).

3.3 Explanatory and control variables

The explanatory and control variables are RPTs, board size (BSIZE), weight of woman on the board (WBD), CEO duality (CEOD), family ownership (FOWN), weight of family members on the board (FMBD), audit quality (BIG4), ROA, SIZE, leverage (LEV), firm age (AGE), market-to-book ratio (MKTBOOK), year and industry dummies.

Related party transactions are measured as the value of RPT scaled by total assets (Ryngaert and Thomas, 2012; Habib *et al.*, 2017). RPT is the sum of sales, purchases and outstanding balances between the company and its related parties (El-Helaly *et al.*, 2018; Alhadab *et al.*, 2020).

Board size (BSIZE) is measured as the number of board members (Jensen, 1993). WBD is the weight of women as a percentage of board members (Nadeem *et al.*, 2017; Cruz *et al.*, 2019). CEO duality (CEOD) is a dummy with value of 1 if the CEO is also the chair of the board (Huybrechts *et al.*, 2013). Family involvement is proxied by the family ownership (FOWN) and by the weight of family members sitting on the board of directors (FMBD).

Audit quality (BIG4) is a dummy variable that receives the value of 1 if the auditor is a member of the Big Four group and zero otherwise (Bennouri *et al.*, 2015). We control for possible effects of net income on EM including ROA (Roychowdhury, 2006).

Firm size (SIZE) is the log of total assets (Muñoz-Bullon *et al.*, 2018; Ginesti and Ossorio, 2021).

Financial leverage (LEV) is measured as total financial debt scaled by assets (Anagnostopoulou and Tsekrekos, 2017; Zamri *et al.*, 2013).

We also control for firm age (AGE) and for the market-to-book ratio (MKTBOOK) (Marchini *et al.*, 2018; Dechow *et al.*, 2011).

Finally, we include dummies to control for year and industry effects.

3.4 Models

For each proxy of accrual and REM, we run the model:

$$EM_{i,t} = \beta_0 + \beta_1 RPT_{i,t} + \sum \beta_k X_{k,i,t} + \varepsilon_{i,t} \quad (1)$$

where:

$EM_{i,t}$ = DA, RMCFO, RMPROD, RMDISX

$RPT_{i,t}$ = related party transactions for firm i in period t scaled by assets

$X_{k,i,t}$ = control variables

To take into account the possible interaction effects between RPTs and CEOD, WBD and FMBD, for the family firm sub-sample, we implemented the augmented model:

$$EM_{i,t} = \beta_0 + \beta_1 RPT_{i,t} + \sum \beta_k X_{k,i,t} + \beta_w \text{Interaction variables} + \varepsilon_{i,t} \quad (2)$$

We run generalized least squares (GLS) models separately for family and non-family firms, adjusting standard errors for clustering at the firm level in the presence of correlations across firms and controlling for time and industry fixed effects using dummies.

4. Results and discussion

4.1 Descriptive statistics

Table 1 shows the descriptive statistics for the full sample and the family and non-family firms separately. The mean values for the REM proxies RMCFO, RMPROD and RMDISX are close to zero but with significant differences between family and non-family firms. On the other hand, the value of discretionary accruals measured in absolute terms (ABSDA), or distinguishing negative (NDA) from positive discretionary accruals (PDA), are not statistically different for the two sub-samples. RPTs represent, on average, 7% of assets, but with marked differences between the two sub-samples as the average value for family firms is half the value of non-family firms. Board size and women on board are statistically different for family and non-family firms, and the same is true for CEO duality.

	All firms	Non-family firms	Family firms	T-Test	
ABSDA	0.058 (0.072)	0.061 (0.074)	0.057 (0.071)	0.77	
NDA	-0.055 (0.066)	-0.059 (0.071)	-0.053 (0.062)	-1.11	
PDA	0.063 (0.079)	0.063 (0.077)	0.062 (0.080)	0.04	
RMCF0	-0.000 (0.091)	-0.007 (0.101)	0.005 (0.084)	-2.16**	
RMPROD	0.000 (0.234)	-0.021 (0.205)	0.015 (0.249)	-2.72***	
RMDISX	-0.000 (0.230)	0.017 (0.225)	-0.013 (0.232)	2.31**	
RPT	0.070 (0.113)	0.101 (0.154)	0.052 (0.077)	6.18***	
AbRPT	0.000 (0.101)	0.017 (0.136)	-0.010 (0.074)	3.64***	
ROA	0.056 (0.125)	0.049 (0.150)	0.061 (0.107)	-1.65*	
MKTBK	0.805 (0.998)	0.800 (1.168)	0.814 (0.885)	-0.36	
WBD	0.326 (0.147)	0.339 (0.150)	0.318 (0.145)	2.29**	
FMWBD/WBD			21.2%		
FMWBD/FMBD			25.2%		
FOWN	0.363 (0.305)	-	0.586 (0.139)	-	
CEOD	0.334 (0.472)	0.269 (0.444)	0.374 (0.484)	-3.62***	
OWCEO/CEOD		56.5%			
FMCEO/CEOD			95.7%		
FMBD	0.166 (0.175)	-	0.263 (0.150)	-	
BIG4	0.806 (0.396)	0.801 (0.400)	0.809 (0.393)	-0.33	
SIZE	12.82 (2.10)	13.11 (2.54)	12.64 (1.75)	3.64***	
BSIZE	9.52 (3.41)	9.10 (3.65)	9.79 (3.22)	-3.30***	
LEV	0.280 (0.156)	0.276 (0.161)	0.282 (0.153)	-0.62	
AGE	48.79 (35.38)	48.30 (41.47)	49.09 (31.02)	-0.37	

Table 1.
Descriptive statistics

Table 2 shows that RPTs are correlated with abnormal cash flows from operations (RMCF0) and discretionary expenses (RMDISX). Abnormal cash flows from operations are negatively correlated with negative and positive discretionary accruals. The correlation matrix shows moderate to average associations between the variables, and we can rule out multicollinearity problems.

4.2 Empirical results

Tables 3 and 4 present the GLS panel results for equation (1) for each earning management proxy with firm's clustering to control for firm fixed effects and with year and industry fixed effects. We show a base model with the same explanatory variables for family and non-family firms, and a specific model of family firms where we add the variables measuring family involvement.

Table 5 presents the family firm results for the model in equation (2), introducing interaction effects of RPT with CEO duality, women on board and family members on board.

4.3 Robustness analysis

To verify that our results are not driven by the choice of measuring RPTs as a continuous variable, we re-run the above analysis with two different specifications for this variable. In the first specification, we measure RPTs using as an explanatory variable the estimated residual (ABNRPT) of the following equation:

$$RPT_{i,t} = \alpha_0 + \alpha_1 (A_{i,t}) + \alpha_2 (MKTBOOK_{i,t}) + \alpha_3 (LEV_{i,t}) + \sum \alpha_k D_k + \varepsilon_{i,t}$$

where:

$A_{i,t}$ = total assets

Table 2.
Pearson correlations

	RMCFD	RMPROD	RMDISX	RPT	ROA	MKTBK	WBD	FOWN	CEOD	FMBD	BIG4	SIZE	BFSIZE	LEV	AGE
ARSDA	-0.036	-0.023	-0.015	-0.032	-0.079	0.028	-0.099	-0.035	-0.002	-0.059	-0.132	-0.218	-0.170	0.045	-0.114
NDA	-0.107	0.012	0.002	0.041	0.118	0.044	0.081	0.036	-0.002	0.114	0.072	0.201	0.191	-0.064	0.056
PDA	-0.149	-0.035	-0.030	-0.024	-0.026	0.089	-0.113	-0.036	-0.005	-0.003	-0.184	-0.235	-0.148	0.021	-0.171
RMCFD		0.225	-0.001	0.066	0.230	0.221	-0.062	0.058	-0.049	0.044	0.091	0.044	0.119	-0.098	-0.033
RMPROD			-0.793	-0.041	0.287	0.179	-0.040	0.068	0.120	0.010	-0.002	-0.037	0.021	-0.103	-0.037
RMDISX				0.079	0.061	-0.025	0.021	-0.060	-0.112	-0.010	0.010	0.093	0.018	0.051	0.014
RPT					-0.007	0.005	0.131	-0.171	-0.019	-0.159	0.048	-0.029	-0.043	0.094	0.115
ROA						0.327	-0.044	0.029	0.063	0.049	0.022	0.044	0.097	-0.248	-0.028
MKTBK							-0.102	0.001	0.027	-0.060	0.020	-0.129	0.074	-0.295	-0.058
FOWN								-0.104	-0.072	-0.021	0.182	0.229	0.129	0.046	0.194
CEOD									0.078	0.697	-0.002	-0.149	0.049	0.028	0.017
FMBD										0.236	-0.213	-0.175	-0.189	0.063	-0.098
BIG4											-0.086	-0.164	-0.104	0.042	-0.031
SIZE												0.493	0.291	0.014	0.150
BFSIZE													0.439	0.056	0.305
LEV														-0.034	0.140

Note(s): Values in italics are significant at 5% level

	Non-family firms Model 1		Family firms Model 2		Non-family firms Model 1		Family firms Model 2		Non-family firms Model 1		Family firms Model 1		Family firms Model 2	
	RMCFD	RMCFD	RMCFD	RMCFD	RMPROD	RMPROD	RMPROD	RMPROD	RMSDX	RMSDX	RMSDX	RMSDX	RMSDX	RMSDX
INT	-0.06(0.05)	-0.06(0.05)	-0.05(0.06)	0.20(0.20)	0.11(0.14)	0.24(0.34)	0.24(0.34)	-0.12(0.13)	-0.43(0.20)**	-0.48(0.35)	-0.43(0.20)**	-0.48(0.35)	-0.43(0.20)**	-0.48(0.35)
RPT	0.05(0.05)	0.01(0.05)	-0.00(0.05)	-0.41(0.25)*	0.07(0.09)	-0.48(0.22)**	-0.48(0.22)**	0.09(0.07)	0.35(0.25)	0.42(0.22)*	0.35(0.25)	0.42(0.22)*	0.35(0.25)	
BSIZE	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.01)	-0.00(0.01)	0.00(0.01)	0.00(0.01)	-0.00(0.00)	-0.00(0.01)	-0.00(0.01)	-0.00(0.01)	-0.00(0.01)	-0.00(0.01)	
WBD	0.05(0.07)	-0.02(0.03)	-0.01(0.03)	-0.04(0.14)	-0.16(0.23)	0.02(0.17)	0.02(0.17)	0.11(0.20)	0.05(0.15)	-0.01(0.17)	0.05(0.15)	-0.01(0.17)	0.05(0.15)	
CEOD	-0.01(0.02)	-0.01(0.01)	-0.01(0.01)	0.04(0.04)	0.06(0.04)	0.05(0.04)	0.05(0.04)	-0.08(0.04)**	-0.03(0.04)	-0.05(0.04)	-0.03(0.04)	-0.05(0.04)	-0.03(0.04)	
FOWN	-	-	0.00(0.00)	-	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.21(0.12)*	0.00(0.00)	0.21(0.12)*	0.00(0.00)	
FMBD	-	-	-0.03(0.03)	-	-0.03(0.03)	-0.23(0.13)*	-0.23(0.13)*	0.06(0.08)	-0.07(0.06)	-0.00(0.00)	-0.07(0.06)	-0.00(0.00)	-0.07(0.06)	
BIG4	0.01(0.03)	0.00(0.01)	-0.00(0.01)	0.06(0.06)	0.04(0.07)	0.05(0.06)	0.05(0.06)	0.06(0.08)	0.12(0.19)	-0.06(0.06)	0.12(0.19)	-0.06(0.06)	0.12(0.19)	
ROA	0.25(0.13)*	0.23(0.12)*	0.24(0.12)*	0.19(0.17)	0.97(0.36)***	0.22(0.15)	0.22(0.15)	-0.22(0.36)	0.04(0.01)***	0.10(0.17)	0.04(0.01)***	0.10(0.17)	0.04(0.01)***	
SIZE	-0.00(0.00)	0.00(0.00)	0.00(0.00)	-0.02(0.01)*	-0.01(0.01)*	-0.03(0.01)**	-0.03(0.01)**	0.01(0.01)	0.16(0.09)**	0.04(0.01)***	0.16(0.09)**	0.04(0.01)***	0.16(0.09)**	
LEV	0.10(0.04)***	-0.01(0.03)	-0.02(0.03)	0.17(0.09)*	0.16(0.12)	-0.19(0.09)**	-0.19(0.09)**	-0.05(0.12)	0.00(0.00)	0.18(0.08)**	0.00(0.00)	0.18(0.08)**	0.00(0.00)	
AGE	-0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	0.00(0.00)	-0.00(0.00)	-0.00(0.00)	-0.00(0.00)	-0.00(0.00)	-0.00(0.00)	
MKTBOOK	0.01(0.01)	0.02(0.01)**	0.02(0.01)**	0.05(0.02)***	-0.02(0.03)	0.04(0.02)***	0.04(0.02)***	0.03(0.03)	-0.02(0.02)	-0.02(0.02)	-0.02(0.02)	-0.02(0.02)	-0.02(0.02)	
INDUSTRY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
YEAR	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	
obs	287	522	522	514	280	514	514	287	522	522	522	522	522	
R2	0.29	0.24	0.25	0.16	0.28	0.17	0.17	0.18	0.13	0.13	0.13	0.13	0.14	

Note(s): Non-family and family firms pooling GLS results

Table 3.
Real earnings
management and RPT

Table 4.
Accrual earnings
management and RPT

	Non-family firms		Family firms		Non-family firms		Family firms		Non-family firms		Family firms	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
INT	0.08 (0.03)**	0.05 (0.03)*	-0.13 (0.03)***	0.09 (0.04)**	NDA	NDA	NDA	NDA	PDA	PDA	PDA	PDA
RPT	-0.03 (0.02)**	-0.04 (0.05)	0.03 (0.03)	-0.04 (0.04)	0.03 (0.03)	0.03 (0.05)	0.03 (0.05)	0.08 (0.05)*	-0.01 (0.02)	-0.06 (0.10)	-0.04 (0.09)	-0.04 (0.09)
BSIZE	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)*	-0.00 (0.00)	0.00 (0.00)*	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)*	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
WBD	0.07 (0.04)	0.01 (0.3)	-0.01 (0.03)	0.02 (0.03)	-0.01 (0.03)	-0.01 (0.03)	-0.01 (0.03)	-0.05 (0.03)	0.07 (0.06)	0.01 (0.05)	0.01 (0.04)	0.01 (0.04)
CEOD	-0.00 (0.01)	-0.01 (0.01)*	-0.01 (0.01)	-0.01 (0.01)*	-0.01 (0.01)	0.02 (0.01)**	0.02 (0.01)**	0.02 (0.01)*	-0.02 (0.01)**	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
FOWN		-		-0.00 (0.00)		-	-	-0.00 (0.00)*		-	-	-0.00 (0.00)*
FMBD		-		-0.04 (0.03)*		-	-	0.12 (0.03)***		-	-	0.06 (0.04)
BIG4	0.03 (0.01)**	0.01 (0.01)	-0.01 (0.02)	0.0 - (0.01)	-0.01 (0.02)	-0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.05 (0.02)**	0.02 (0.01)	0.03 (0.02)*	0.03 (0.02)*
ROA	-0.15 (0.10)	-0.03 (0.05)	-0.10 (0.07)	-0.04 (0.06)	-0.10 (0.07)	-0.01 (0.06)	-0.02 (0.06)	-0.02 (0.06)	-0.25 (0.09)***	-0.06 (0.07)	-0.09 (0.08)	-0.09 (0.08)
SIZE	-0.01 (0.00)***	-0.00 (0.00)	0.00 (0.00)**	-0.00 (0.00)	0.00 (0.00)**	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.01 (0.00)**	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
LEV	0.03 (0.02)	0.01 (0.03)	0.02 (0.03)	0.00 (0.03)	0.02 (0.03)	-0.01 (0.03)	0.00 (0.03)	0.00 (0.03)	0.06 (0.03)**	0.01 (0.04)	0.02 (0.04)	0.02 (0.04)
AGE	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.0 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
MKTBOOK	0.01 (0.01)	0.00 (0.00)	0.01 (0.00)	0.00 (0.00)	0.01 (0.00)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.01)**	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)
INDUSTRY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
YEAR	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
obs	287	522	147	522	147	284	284	284	140	238	238	238
R2	0.18	0.07	0.47	0.08	0.47	0.07	0.12	0.12	0.29	0.12	0.16	0.16

Note(s): Non-family and family firms pooling GLS results

	Family firms Model 3	Family firms Model 3	Family firms Model 3	Family firms Model 3	Family firms Model 3	Family firms Model 3
INT	RMFCO -0.03 (0.06)	RMPROD 0.26 (0.36)	RMDSX -0.51 (0.37)	ABS 0.09 (0.05)*	NDA -0.03 (0.06)	PDA 0.13 (0.06)**
RPT	-0.06 (0.15)	-0.59 (0.70)	0.65 (0.68)	-0.02 (0.12)	-0.12 (0.13)	-0.14 (0.26)
BSIZE	0.00 (0.00)	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.00)	0.00 (0.00)*	-0.00 (0.00)
WBD	-0.01 (0.04)	-0.03 (0.20)	0.05 (0.21)	0.02 (0.03)	-0.08 (0.05)*	0.01 (0.06)
CEOD	-0.02 (0.01)**	0.04 (0.05)	-0.03 (0.05)	-0.01 (0.01)	0.01 (0.01)	-0.01 (0.01)
FOWN	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)*	-0.00 (0.00)*
FMBD	-0.02 (0.04)	-0.13 (0.15)	0.14 (0.14)	-0.05 (0.03)	0.12 (0.04)***	0.01 (0.06)
BIG4	-0.00 (0.01)	0.04 (0.05)	-0.05 (0.05)	0.01 (0.01)	-0.00 (0.01)	0.03 (0.02)
ROA	0.23 (0.12)*	0.23 (0.15)	0.09 (0.17)	-0.04 (0.06)	-0.02 (0.06)	-0.09 (0.08)
SIZE	-0.00 (0.00)	-0.03 (0.01)**	0.04 (0.01)***	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
LEV	-0.01 (0.03)	-0.17 (0.09)*	0.17 (0.09)*	-0.00 (0.03)	0.00 (0.03)	0.01 (0.05)
AGE	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
MKTBOOK	0.02 (0.01)**	0.04 (0.02)***	-0.02 (0.02)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)
RPT*CEOD	0.21 (0.08)***	0.23 (0.46)	-0.27 (0.47)	-0.09 (0.07)	0.07 (0.08)	-0.17 (0.13)
RPT*WBD	0.06 (0.32)	1.25 (1.46)	-1.29 (1.54)	-0.01 (0.21)	0.51 (0.29)*	-0.44 (0.44)
RPT*FMBD	-0.28 (0.30)	-2.31 (2.11)	1.88 (2.12)	0.08 (0.24)	-0.15 (0.24)	1.29 (0.70)*
INDUSTRY	yes	yes	yes	yes	yes	yes
YEAR	yes	yes	yes	yes	yes	yes
obs	522	514	522	522	284	238
R ²	0.26	0.18	0.15	0.08	0.13	0.17

Note(s): Family firms pooling GLS results

Table 5.
Real and accrual
earnings management,
RPT and interaction
effects

$RPT_{i,t}$ = related party transactions for firm i in period t scaled by assets

MKTBOOK = market-to-book ratio

LEV = financial debts scaled by assets

D_k = year and industry dummies

For the second specifications, we follow [Ryngaert and Thomas \(2012\)](#) who suggest using a dummy variable equal to 1 if the sum of RPT exceeds a certain threshold with respect to assets. In this case, we assumed as a cutoff point the sample median level of the RPTs to asset ratio, which is 8.2%. DRPT is a dummy that takes value of 1 if RPTs are equal or exceed 8.2% of assets and zero otherwise.

[Tables 6–8](#) report the results for ABNRPT, while [Tables 9–11](#) display the results using the dummy DRPT. The evidence based on these alternative measures of the RPTs variable by and large confirm the findings of the base model in [Tables 3–5](#), pointing out the robustness of these results.

4.4 Discussion

Our empirical findings suggest that family control affects the association between RPTs and EM in different ways, according to the type of earnings manipulation taken into account.

Our results show that family firms are less prone to engage in AEM than non-family businesses, although the difference is not significant. Nevertheless, they present significantly higher levels of REM perpetrated by the means of anticipated sales and overproduction. These results are consistent with the evidence that REM is difficult to discover and, given the reputational concerns related to the preservation of SEW, family firms might prefer this form of earnings manipulation ([Lin and Shen, 2015](#); [Calabrò et al., 2020](#)). On the other hand, our findings point out that family firms are significantly less prone to perpetrate REM by the means of a reduction of discretionary expenses as it increases short-run performance but jeopardizes a firm's durability and the perpetuation of the family dynasty through the business ([Berrone et al., 2012](#)). The value of RPTs is significantly lower for family than for non-family firms, but when they engage in high levels of RPTs, they also tend to manipulate earnings by means of abnormal discretionary expenses, as indicated by the significant positive association between RPTs and RMDIX. When managers use RPTs in order to expropriate a firm's resources, they have incentives to manipulate earnings to maximize any benefits extracted or to mask such expropriation ([Marchini et al., 2018](#); [Jian, 2003](#)).

Our findings show a negative significant relation between RPTs and RMPROD for family firms, suggesting that family companies strongly engaged in RPTs tend to use these transactions as a substitute for upward EM by the means of overproduction as the latter might be costly for shareholders. This type of REM jeopardizes SEW, as it implies a firm's shift from its normal business operations in order to reduce the fixed cost per unit and the average unit cost of production. This enhances present performance but reduces future operating results, by the means of bigger inventory costs and lowers liquidity ([Roychowdhury, 2006](#); [Eng et al., 2019](#)).

We do not find a significant association between RPTs and RMCFO in family or in non-family businesses. This suggests that RPTs are not significantly related to earnings manipulations implemented through sales anticipations and that they might be used as a stand-alone type of EM in both types of company.

We find a significant relationship between RPTs and REM perpetrated by overproduction and discretionary expenses only for family firms. This supports the view that family control affects the above association ([H1a](#)) and suggests that non-family firms' higher level of RPTs might not be a complement to, or a substitute of REM, but an autonomous form of earnings manipulation.

	Non-family firms		Family firms		Non-family firms		Family firms		Non-family firms		Family firms	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
INT	RMCF0	RMCF0	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMDSX	RMDSX
AbnRPT	0.05 (0.05)	-0.06 (0.04)	0.13 (0.14)	0.17 (0.19)	0.20 (0.34)	-0.53 (0.22)**	0.09 (0.07)	0.09 (0.07)	0.09 (0.07)	0.39 (0.25)	-0.41 (0.19)**	-0.44 (0.35)
BFSIZE	0.00 (0.00)	0.00 (0.00)	-0.00 (0.01)	0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
WBD	0.05 (0.07)	-0.02 (0.03)	-0.16 (0.23)	-0.04 (0.14)	0.03 (0.16)	0.05 (0.15)	0.11 (0.20)	0.05 (0.15)	0.05 (0.15)	0.05 (0.15)	0.05 (0.15)	-0.01 (0.17)
CEOD	-0.01 (0.02)	-0.01 (0.01)	0.06 (0.04)	0.04 (0.04)	0.05 (0.04)	0.05 (0.04)	-0.08 (0.04)**	-0.04 (0.04)	-0.04 (0.04)	-0.04 (0.04)	-0.05 (0.04)	-0.05 (0.04)
POWN					0.00 (0.00)	0.00 (0.00)						-0.00 (0.00)
FMBD					-0.03 (0.03)	-0.22 (0.13)*						0.21 (0.12)*
BIG4	0.01 (0.03)	0.00 (0.01)	-0.04 (0.07)	0.07 (0.06)	0.06 (0.06)	0.06 (0.06)	0.06 (0.08)	0.06 (0.06)	0.06 (0.08)	-0.07 (0.06)	-0.06 (0.06)	-0.06 (0.06)
ROA	0.25 (0.13)*	0.23 (0.12)*	0.97 (0.36)***	0.19 (0.17)	0.22 (0.15)	0.22 (0.15)	-0.22 (0.36)	0.12 (0.19)	-0.22 (0.36)	0.12 (0.19)	0.12 (0.19)	0.10 (0.17)
SIZE	-0.00 (0.00)	0.00 (0.00)	-0.01 (0.01)*	-0.02 (0.01)*	-0.02 (0.01)*	-0.02 (0.01)*	0.01 (0.01)	0.04 (0.01)***	0.01 (0.01)	0.04 (0.01)***	0.04 (0.01)***	0.04 (0.01)***
LEV	0.11 (0.04)***	-0.01 (0.03)	0.17 (0.12)	-0.21 (0.09)**	-0.24 (0.08)***	-0.24 (0.08)***	-0.04 (0.12)	0.20 (0.09)**	-0.04 (0.12)	0.20 (0.09)**	0.20 (0.09)**	0.23 (0.08)***
AGE	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
MKTBOOK	0.01 (0.01)	0.02 (0.01)**	-0.02 (0.03)	0.04 (0.02)**	0.04 (0.02)**	0.04 (0.02)**	0.03 (0.03)	0.03 (0.03)	0.03 (0.03)	-0.02 (0.02)	-0.02 (0.02)	-0.01 (0.02)
INDUSTRY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
YEAR	287	522	280	514	514	514	287	522	287	522	522	522
obs	0.29	0.24	0.28	0.16	0.16	0.18	0.18	0.13	0.18	0.13	0.13	0.14
R2												

Note(s): Non-family and family firms pooling GLS results

Table 6.
Real earnings
management and
AbnRPT

Table 7.
Accrual earnings
management and
AbnRPT

	Non-family firms		Family firms		Non-family firms		Family firms		Non-family firms		Family firms		Non-family firms		Family firms	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
INT	0.07 (0.03)**	0.05 (0.03)	ABS	0.09 (0.04)**	NDA	-0.12 (0.02)***	NDA	-0.04 (0.04)	NDA	-0.05 (0.05)	PDA	0.04 (0.04)	PDA	0.12 (0.06)**	PDA	0.06 (0.06)
AbnRPT	-0.03 (0.02)**	-0.04 (0.04)	ABS	-0.04 (0.04)	NDA	0.03 (0.03)	NDA	0.03 (0.05)	NDA	0.08 (0.05)*	PDA	-0.01 (0.02)	PDA	-0.05 (0.08)	PDA	-0.08 (0.09)
BSIZE	-0.00 (0.00)	-0.00 (0.00)	ABS	-0.00 (0.00)	NDA	0.00 (0.00)*	NDA	0.00 (0.00)	NDA	0.00 (0.00)*	PDA	-0.00 (0.00)	PDA	-0.00 (0.00)	PDA	-0.00 (0.00)
WBD	0.07 (0.04)	0.01 (0.03)	ABS	0.02 (0.03)	NDA	-0.01 (0.03)	NDA	-0.01 (0.03)	NDA	-0.05 (0.03)	PDA	0.08 (0.06)	PDA	0.01 (0.04)	PDA	0.01 (0.05)
GEOD	-0.00 (0.01)	-0.01 (0.01)*	ABS	-0.01 (0.01)	NDA	-0.01 (0.01)	NDA	0.02 (0.01)**	NDA	0.02 (0.01)	PDA	-0.02 (0.01)**	PDA	-0.01 (0.01)	PDA	-0.01 (0.01)
FOWN			ABS	-0.00 (0.00)	NDA		NDA		NDA	-0.00 (0.00)*	PDA		PDA	-0.00 (0.00)*	PDA	
FMBD			ABS	-0.04 (0.03)*	NDA		NDA		NDA	0.12 (0.03)***	PDA		PDA	0.06 (0.04)	PDA	
BIG4	0.03 (0.01)**	0.01 (0.01)	ABS	0.01 (0.01)	NDA	-0.01 (0.02)	NDA	-0.00 (0.01)	NDA	0.00 (0.01)	PDA	0.05 (0.02)**	PDA	0.03 (0.02)*	PDA	0.02 (0.01)
ROA	-0.15 (0.10)	-0.03 (0.05)	ABS	-0.04 (0.06)	NDA	-0.10 (0.07)	NDA	-0.01 (0.06)	NDA	-0.02 (0.06)	PDA	-0.26 (0.09)***	PDA	-0.06 (0.07)	PDA	-0.09 (0.08)
SIZE	-0.01 (0.00)***	-0.00 (0.00)	ABS	-0.00 (0.00)	NDA	0.00 (0.00)**	NDA	-0.00 (0.00)	NDA	-0.00 (0.00)	PDA	-0.01 (0.00)**	PDA	-0.00 (0.00)	PDA	-0.00 (0.00)
LEV	0.02 (0.02)	0.00 (0.02)	ABS	-0.00 (0.03)	NDA	0.02 (0.03)	NDA	-0.01 (0.03)	NDA	0.01 (0.01)	PDA	0.06 (0.03)**	PDA	-0.00 (0.04)	PDA	0.02 (0.04)
AGE	0.00 (0.00)	-0.00 (0.00)	ABS	-0.00 (0.00)	NDA	-0.00 (0.00)	NDA	0.00 (0.00)	NDA	0.00 (0.00)	PDA	0.00 (0.00)	PDA	-0.00 (0.00)	PDA	-0.00 (0.00)
MKTBOOK	0.01 (0.01)	0.00 (0.00)	ABS	0.00 (0.00)	NDA	0.01 (0.00)*	NDA	0.00 (0.01)	NDA	0.01 (0.01)	PDA	0.02 (0.01)**	PDA	0.01 (0.01)	PDA	0.01 (0.01)
INDUSTRY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
YEAR	287	522	522	522	147	147	284	284	284	284	140	140	238	238	238	238
obs	0.18	0.07	0.08	0.08	0.47	0.47	0.07	0.07	0.12	0.12	0.29	0.29	0.13	0.13	0.16	0.16
R2	Note(s): Non-family and family firms pooling GLS results															

	Family firms Model 4	Family firms Model 4	Family firms Model 4	Family firms Model 4	Family firms Model 4	Family firms Model 4
INT	RMCFO -0.04 (0.06)	RMPROD 0.21 (0.35)	RMDSX -0.47 (0.36)	ABS 0.09 (0.04)**	NDA -0.04 (0.05)	PDA 0.12 (0.06)*
AbnRPT	0.10 (0.18)	-0.45 (0.88)	0.77 (0.91)	0.06 (0.14)	-0.12 (0.16)	0.02 (0.30)
BSize	0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.00)	0.00 (0.00)*	-0.00 (0.00)
WBD	-0.01 (0.03)	0.04 (0.17)	-0.01 (0.18)	0.02 (0.03)	-0.05 (0.03)*	-0.01 (0.05)
CEOD	-0.01 (0.01)	0.05 (0.04)	-0.05 (0.03)	-0.01 (0.01)*	0.02 (0.01)*	-0.02 (0.01)
FOWN	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)*	-0.00 (0.00)*
FMBD	-0.03 (0.03)	-0.23 (0.12)*	0.22 (0.11)**	-0.04 (0.03)	0.11 (0.03)***	0.07 (0.05)
BIG4	0.00 (0.01)	0.06 (0.06)	-0.06 (0.06)	0.01 (0.01)	-0.00 (0.01)	0.03 (0.02)
ROA	0.23 (0.12)*	0.21 (0.15)	0.10 (0.17)	-0.04 (0.06)	-0.02 (0.06)	-0.09 (0.08)
SIZE	-0.00 (0.00)	-0.02 (0.01)*	0.04 (0.01)***	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
LEV	-0.01 (0.03)	-0.23 (0.09)**	0.24 (0.09)**	0.00 (0.03)	0.01 (0.04)	0.01 (0.05)
AGE	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
MKTBOOK	0.02 (0.01)**	0.04 (0.02)**	-0.01 (0.02)	0.00 (0.00)	0.01 (0.01)	0.01 (0.01)
AbnRPT*CEOD	0.15 (0.10)	0.34 (0.50)	-0.43 (0.52)	-0.07 (0.07)	0.03 (0.08)	-0.21 (0.13)
AbnRPT*WBD	-0.31 (0.41)	0.03 (1.96)	-0.85 (2.03)	-0.26 (0.27)	0.63 (0.34)*	-0.46 (0.57)
AbnRPT*FMBD	-0.27 (0.28)	-1.17 (1.75)	0.95 (1.87)	0.16 (0.25)	-0.23 (0.25)	0.76 (0.63)
INDUSTRY	yes	yes	yes	yes	yes	yes
YEAR	yes	yes	yes	yes	yes	yes
obs	522	514	522	522	284	238
R2	0.25	0.18	0.15	0.08	0.13	0.17

Note(s): Family firms pooling GLS results

Table 8.
Real and accrual
earnings management,
AbnRPT and
interaction effects

Table 9.
Real earnings
management
and DRPT

	Non-family firms Model 5		Family firms Model 5		Non-family firms Model 5		Family firms Model 5		Non-family firms Model 5		Family firms Model 5		Non-family firms Model 5		Family firms Model 5	
	RMCFO	RMCFO	RMCFO	RMCFO	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD	RMPROD
INT	-0.03 (0.04)	-0.01 (0.04)	-0.03 (0.05)	0.06 (0.12)	-0.00 (0.09)	0.06 (0.12)	0.15 (0.27)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)	0.03 (0.08)
DRPT	0.00 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.11 (0.04)***	0.00 (0.03)	-0.11 (0.04)***	-0.11 (0.03)***	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)	0.03 (0.02)
ESIZE	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
WBD	0.05 (0.05)	-0.03 (0.03)	-0.03 (0.03)	0.05 (0.10)	-0.11 (0.16)	0.05 (0.10)	0.10 (0.11)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)	0.06 (0.15)
CEOD	-0.02 (0.01)	-0.02 (0.01)**	-0.02 (0.01)*	0.04 (0.03)	0.04 (0.04)	0.04 (0.03)	0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)
FOWN			0.00 (0.00)				0.00 (0.00)									
FMBD			0.01 (0.03)				-0.20 (0.11)*									
BIG4	0.01 (0.02)	-0.00 (0.01)	-0.00 (0.01)	0.02 (0.04)	0.05 (0.05)	0.02 (0.04)	0.01 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)	-0.03 (0.05)
ROA	0.23 (0.11)**	0.23 (0.10)**	0.23 (0.10)**	0.18 (0.17)	0.69 (0.30)**	0.18 (0.17)	0.18 (0.16)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)	0.07 (0.28)
SIZE	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.02 (0.01)*	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
LEV	0.08 (0.03)**	-0.00 (0.03)	-0.00 (0.03)	-0.13 (0.09)	0.20 (0.11)*	-0.13 (0.09)	-0.15 (0.09)*	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)	-0.12 (0.10)
AGE	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
MKTBOOK	0.01 (0.01)	0.02 (0.01)***	0.02 (0.01)***	0.05 (0.02)***	-0.00 (0.02)	0.05 (0.02)***	0.05 (0.02)***	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
INDUSTRY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
YEAR	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
obs	340	608	608	599	332	599	599	339	339	339	339	339	339	339	339	339
R2	0.25	0.22	0.22	0.16	0.20	0.16	0.17	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14

Note(s): Non-family and family firms pooling GLS results

	Non-family firms Model 5		Family firms Model 6		Non-family firms Model 5		Family firms Model 6		Non-family firms Model 5		Family firms Model 5		Family firms Model 6	
	ABS	ABS	ABS	ABS	NDA	NDA	NDA	NDA	NDA	NDA	PDA	PDA	PDA	PDA
INT	0.16 (0.03)***	0.08 (0.03)***	0.12 (0.04)***	-0.19 (0.05)***	-0.06 (0.03)**	-0.06 (0.04)	0.15 (0.04)***	0.11 (0.04)**	0.19 (0.05)***	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
DRPT	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	0.02 (0.01)*	0.01 (0.01)	0.01 (0.01)	-0.01 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
BFSIZE	-0.00 (0.00)**	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)**	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
WBD	0.01 (0.03)	-0.00 (0.03)	0.00 (0.03)	0.01 (0.03)	-0.00 (0.03)	-0.03 (0.03)	0.02 (0.05)	-0.01 (0.04)	-0.02 (0.04)	0.02 (0.05)	-0.01 (0.04)	-0.01 (0.04)	-0.02 (0.04)	-0.02 (0.04)
CEOD	0.01 (0.01)	-0.02 (0.01)**	-0.01 (0.01)*	-0.02 (0.01)*	0.02 (0.01)**	0.01 (0.01)*	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.02 (0.01)	-0.02 (0.01)
POW			-0.00 (0.00)			-0.00 (0.00)*			-0.00 (0.00)*				-0.00 (0.00)*	
FMBD			-0.03 (0.02)			0.08 (0.03)**			0.02 (0.03)				0.02 (0.03)	
BIG4	0.01 (0.02)	0.00 (0.01)	0.00 (0.01)	-0.02 (0.02)	-0.01 (0.01)	-0.00 (0.01)	0.00 (0.02)	-0.00 (0.01)	0.00 (0.01)	0.00 (0.02)	-0.00 (0.01)	-0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
ROA	-0.03 (0.07)	-0.04 (0.04)	-0.05 (0.05)	-0.06 (0.09)	-0.01 (0.05)	-0.02 (0.06)	-0.07 (0.08)	-0.10 (0.07)	-0.11 (0.07)*	-0.07 (0.08)	-0.10 (0.07)	-0.10 (0.07)	-0.11 (0.07)*	-0.10 (0.07)
SIZE	-0.01 (0.00)**	-0.00 (0.00)	-0.00 (0.00)	0.01 (0.00)**	0.00 (0.00)	0.00 (0.00)	-0.01 (0.00)**	-0.00 (0.00)	-0.01 (0.00)	-0.01 (0.00)**	-0.00 (0.00)	-0.00 (0.00)	-0.01 (0.00)	-0.01 (0.00)
LEV	-0.01 (0.03)	0.00 (0.02)	0.00 (0.02)	0.01 (0.04)	-0.00 (0.03)	0.01 (0.03)	0.03 (0.03)	-0.00 (0.03)	0.01 (0.03)	0.03 (0.03)	-0.00 (0.03)	-0.00 (0.03)	0.01 (0.03)	0.01 (0.03)
AGE	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
MKTBOOK	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.01 (0.00)	0.00 (0.01)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)	0.01 (0.01)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01 (0.00)	0.01 (0.00)
INDUSTRY	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
YEAR	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
obs	340	608	608	175	322	322	165	286	283	165	286	283	283	283
R2	0.16	0.07	0.08	0.29	0.07	0.10	0.19	0.11	0.13	0.19	0.11	0.13	0.13	0.13

Note(s): Non-family and family firms pooling GLS results

Table 10.
Accrual earnings
management
and DRPT

Table 11.
Real and accrual
earnings management,
DRPT and interaction
effects

	Family firms Model 7	Family firms Model 7	Family firms Model 7	Family firms Model 7	Family firms Model 7	Family firms Model 7
INT	RMCFO -0.02 (0.05)	RMCFOD 0.15 (0.27)	RMDSX -0.33 (0.27)	ABS 0.12 (0.04)***	NDA -0.06 (0.04)	PDA 0.17 (0.05)***
DRPT	-0.01 (0.03)	-0.08 (0.12)	0.07 (0.11)	-0.00 (0.02)	-0.02 (0.02)	-0.02 (0.03)
BSIZE	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
WBD	-0.02 (0.04)	0.10 (0.11)	-0.08 (0.12)	0.00 (0.03)	-0.05 (0.03)	-0.03 (0.05)
CEOD	-0.03 (0.01)***	0.05 (0.04)	-0.05 (0.04)	-0.01 (0.01)	0.02 (0.01)**	-0.01 (0.01)
FOWN	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)*	-0.00 (0.00)*
FMBD	0.02 (0.03)	-0.16 (0.11)	0.14 (0.10)	-0.03 (0.02)	0.07 (0.03)**	0.00 (0.04)
BIG4	-0.00 (0.01)	0.01 (0.05)	-0.04 (0.05)	0.00 (0.01)	-0.01 (0.01)	-0.00 (0.02)
ROA	0.23 (0.10)**	0.18 (0.16)	0.20 (0.18)	-0.05 (0.05)	-0.01 (0.05)	-0.11 (0.07)*
SIZE	-0.00 (0.00)	-0.02 (0.01)*	0.03 (0.01)***	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
LEV	0.00 (0.03)	-0.14 (0.09)	0.16 (0.9)*	-0.00 (0.02)	0.01 (0.03)	0.00 (0.04)
AGE	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
MKTBOOK	0.02 (0.01)***	0.05 (0.02)***	-0.02 (0.02)	-0.00 (0.00)	0.01 (0.01)	0.00 (0.01)
RPT*CEOD	0.06 (0.02)***	0.03 (0.07)	-0.02 (0.07)	-0.01 (0.02)	-0.02 (0.02)	-0.04 (0.02)**
RPT*WBD	-0.01 (0.06)	0.09 (0.31)	-0.11 (0.31)	-0.00 (0.06)	0.09 (0.05)*	-0.07 (0.09)
RPT*FMBD	-0.08 (0.05)*	-0.30 (0.29)	0.25 (0.28)	0.01 (0.05)	0.05 (0.06)	0.26 (0.09)***
INDUSTRY	yes	yes	yes	yes	yes	yes
YEAR	yes	yes	yes	yes	yes	yes
obs	608	599	608	608	322	286
R2	0.24	0.17	0.12	0.08	0.11	0.15

Note(s): Family firms pooling GLS results

As for the relation between RPTs and AEM, we find a negative relation between RPTs and absolute discretionary accruals only for non-family companies, suggesting that this type of firm tends to use the transactions with related parties as a substitute for AEM. Splitting the analyses of AEM into downward and upward EM, we find a significant positive relation between RPTs and downward EM only for family firms, partially supporting H1b. This association suggests that when family firms use RPTs in order to transfer financial benefits to the controlling shareholders – to the detriment of non-family shareholders – they also exploit the judgment inherent in some accounting choices to pursue, at the same time, their non-financial goals. In fact, by lowering earnings they reduce the outflow of resources in the form of dividends to the benefit of self-financing (Achleitner *et al.*, 2014). In so doing, they avoid the use of external equity financing and ownership dilution as the preservation of family control on the business is a main aspect of SEW (Gomez-Mejia *et al.*, 2007).

Controlling for the effect of family firms' board characteristics on the association between RPTs and EM, we find a significant positive association between the interaction, 'CEO duality-RPTs and RMCFO', supporting H2a. This indicates that, in the presence of CEO duality, high levels of RPTs are significantly used in association with earnings manipulations by means of sales anticipations. In accordance with previous research, we find that CEO duality is more common in family-controlled firms than in non-family companies (Cheung *et al.*, 2005) and that the position is normally held by a family member (95.7% for our sample). CEO duality indicates a strong will of the owning family to maintain its control and influence on the business in order to preserve SEW. Under this view, the associated use of RPTs and REM is consistent with previous research pointing out that family CEOs might manipulate earnings to enhance performance and protect their appointment (Ansari *et al.*, 2021), in this case in the dual role of CEO and chair of the board. On the other hand, CEO duality might indicate an opaque governance and a higher ability to extract private benefits from the business (Sharma, 2004; Claessens *et al.*, 2002). Therefore, this result might suggest that, in cases of CEO duality when RPTs are used in order to extract benefits for the controlling family to the detriment of minority shareholders, REM might be used in order to mask or enhance this benefit (Marchini *et al.*, 2018; Jian, 2003).

Our empirical evidence shows a significant positive relation between the interaction "family members on board-RPTs and upward AEM". This means that, when family members sit on the board, RPTs are used in association with accrual-based earnings manipulations that increase performance. The literature reports that the presence of family members on the board weakens the effectiveness of audit committees in monitoring managerial exploitation of discretionary accruals (Jaggi and Leung, 2007). Consistently, our results suggest that when RPTs are opportunistically used, the presence of family members on the board facilitates the resort to AEM to raise performance in order to increase or disguise the benefit.

According to H2b, we find a weakly significant association between the interaction "women on the board-RPTs and downward AEM". Like previous literature, we find that the presence of women on the board, *per se*, exerts a lowering effect on the propensity to manipulate earnings using discretionary accrual (Vieira and Madaleno, 2019). On the other hand, our results suggest that when family firms' management engages in high levels of RPTs, extracting resources from the company, gender diversity tends to produce an opposite effect and might enhance the level of downward EM in order to reduce the exit of resources from the company *via* dividends or taxation. Given empirical evidence pointing out that female directors moderate the use of leverage in family firms (Huang and Kisgen, 2013; Poletti-Hughes and Martinez Garcia, 2022), this effect might be explained as the will to increase self-financing and limit the recourse to external financing.

5. Concluding remarks

This study is aimed at analyzing the relation between RPTs and different types of EM in family and non-family firms, as well as within family firms. It investigates the association between RPTs and different types of real and AEM for a sample of Italian family and non-family firms, for the period 2014–2019. This is one of the few papers studying this relationship in developed economies (Marchini *et al.*, 2018; El-Helaly *et al.*, 2018), and in doing so, it is the first research that deepens the analysis considering the effect of board characteristics in family businesses.

We add to the stream of literature that studies RPTs from an agency conflicts perspective as we provide evidence that companies use this type of transactions in association with, or as a substitute of, AEM or REM, controlling for certain governance and firm attributes. We contribute to SEW studies as, consistent with this view, we find that family control shapes agency conflicts and, as a result, the relationship between RPTs and EM in family businesses. We also extend family firm accounting research by highlighting the moderating role of board characteristics, in terms of CEO power, family member involvement and gender diversity, on the association between RPTs and the various forms of EM. In doing so, we also contribute to the growing stream of research on family firm governance (Shekhar *et al.*, 2021) by providing evidence of the different effects of its attributes on earnings quality. We highlight the need to consider family firms as a heterogeneous group (Chi *et al.*, 2015; Nordqvist *et al.*, 2014; Diéguez-Soto and Martínez-Romero, 2019). In fact, taking into account board characteristics, we find that CEO duality, the weight of family members on board size and the presence of women on the board positively moderate, respectively, the association between RPTs and RMCFO, upward AEM and downward AEM. The last result also add to the stream of studies that analyses the effect of gender diversity in family firms' accounting choices (Abdullah and Ismail, 2016; Vieira and Madaleno, 2019; Mnif and Cherif, 2020).

These findings have practical implications for investors and auditors. They indicate that, although the level of RPTs, AEM and REM via abnormal discretionary expenses tends to be lower in family businesses, they might use opportunistic relationships between RPTs and EM, and board composition significantly influences the association. Moreover, the moderating effect of CEO duality and of family members weight on the board also suggest to regulators involved in issues related to corporate governance and RPTs a reflection on CEO power and board independence.

Our study has some limitations. It analyses the effect of family control on the relationship between RPTs and EM. Other SEW dimensions, such as the sense of identification with the company, concern for the firm's reputation and sense of dynasty might affect the association. We based our analyses on data contained in the financial statements, so we cannot measure these dimensions. Further research could extend the analysis to other SEW dimensions, collecting the above information by the means of surveys.

This explorative study analyses the effect of certain board characteristics (CEO duality, proportion of family members and women on board size) on the association between RPTs and EM. Further studies could deepen the analyses by adding more elements in terms of board diversity. A grained analysis of family members on the board in terms of generation, family branches they belong to and ownership stake held could better explain the effect of family businesses' heterogeneity on earnings manipulations.

Our research studies a single country sample in order to focus on the effect of family control and the moderating role of board characteristics on the association between RPTs and EM, preventing the confounding effects stemming from the use of different institutional settings. This might affect the generalizability of our findings, so future studies could analyze the possible effect of specific institutional aspects by extending the analysis to an international sample.

Note

1. Given the dimension of the data sample, equations (a1)-(a2) are estimated for the full sample.

References

- Abdullah, S.N. and Ismail, K.N.I.K. (2016), "Women directors, family ownership and earnings management in Malaysia", *Asian Review of Accounting*, Vol. 24 No. 4, pp. 525-550.
- Achleitner, A.K., Günther, N., Kaserer, C. and Siciliano, G. (2014), "Real earnings management and accrual-based earnings management in family firms", *European Accounting Review*, Vol. 23 No. 3, pp. 431-461.
- Aharony, J., Wang, J. and Yuan, H. (2010), "Tunneling as an incentive for earnings management during the IPO process in China", *Journal of Accounting and Public Policy*, Vol. 29 No. 1, pp. 1-26.
- Alhadab, M., Abdullatif, M. and Mansour, I. (2020), "Related party transactions and earnings management in Jordan: the role of ownership structure", *Journal of Financial Reporting and Accounting*, Vol. 18 No. 3, pp. 505-531.
- Ali, A., Chen, T.Y. and Radhakrishnan, S. (2007), "Corporate disclosures by family firms", *Journal of Accounting and Economics*, Vol. 44 Nos 1-2, pp. 238-286.
- Ali, S.H.A., Rahmat, M.M., Ismail, N.I. and Saleh, N.M. (2021), "Controlling shareholder ownership structure and conflict-related party transactions", *Asian Journal of Accounting and Governance*, Vol. 15, pp. 65-75.
- Anagnostopoulou, S.C. and Tsekrekos, A.E. (2017), "The effect of financial leverage on real and accrual-based earnings management", *Accounting and Business Research*, Vol. 47 No. 2, pp. 191-236.
- Ansari, I.F., Goergen, M. and Mira, S. (2021), "Earnings management around founder CEO reappointments and successions in family firms", *European Financial Management*, Vol. 27 No. 5, pp. 925-958.
- Bennedsen, M., Perez-Gonzalez, F. and Wolfenzon, D. (2010), "The governance of family firms", in Baker, K.H. and Anderson, R. (Eds), *Corporate Governance: A Synthesis of Theory, Research, and Practice*, pp. 371-389, Wiley.
- Bennouri, M., Nekhili, M. and Touron, P. (2015), "Does auditor reputation 'Discourage' related-party transactions? The French case", *Auditing: A Journal of Practice and Theory*, Vol. 34 No. 4, pp. 1-32.
- Berrone, P., Cruz, C., Gomez-Mejia, L.R. and Larraza-Kintana, M. (2010), "Socioemotional wealth and corporate responses to institutional pressures: do family-controlled firms pollute less?", *Administrative Science Quarterly*, Vol. 55 No. 1, pp. 82-113.
- Berrone, P., Cruz, C. and Gomez-Mejia, L.R. (2012), "Socioemotional wealth in family firms, theoretical dimensions, assessment approaches, and agenda for future research", *Family Business Review*, Vol. 25 No. 3, pp. 258-279.
- Bertrand, M., Mehta, P. and Mullainathan, S. (2002), "Ferretting out tunneling: an application to Indian business groups", *The Quarterly Journal of Economics*, Vol. 117 No. 11, pp. 121-148.
- Blanco-Mazagatos, V., de Quevedo-Puente, E. and Delgado-García, J.B. (2016), "How agency conflict between family managers and family owners affects performance in wholly family-owned firms: a generational perspective", *Journal of Family Business Strategy*, Vol. 7 No. 3, pp. 167-177.
- Borrallho, J.M., Gallardo Vázquez, D. and Hernández-Linares, R. (2020), "Earnings management in private family versus non-family firms. The moderating effect of family business generation", *Spanish Journal of Finance and Accounting/Revista Española de Financiación y Contabilidad*, Vol. 42 No. 2, pp. 210-233.
- Calabrò, A., Cameran, M., Campa, D. and Pettinicchio, A. (2020), "Financial reporting in family firms: a socioemotional wealth approach toward information quality", *Journal of Small Business Management*, Vol. 60 No. 4, pp. 1-35.

- Camilleri, M.A. and Valeri, M. (2021), "Thriving family businesses in tourism and hospitality: a systematic review and a synthesis of the relevant literature", *Journal of Family Business Management*, Vol. ahead-of-print No. ahead-of-print, doi: [10.1108/JFBM-10-2021-0133](https://doi.org/10.1108/JFBM-10-2021-0133).
- Chen, J.J., Cheng, P. and Xiao, X. (2011), "Related party transactions as a source of earnings management", *Applied Financial Economics*, Vol. 21 No. 3, pp. 165-181.
- Cheung, Y.L., Stouraitis, A. and Wong, A.W. (2005), "Ownership concentration and executive compensation in closely held firms: evidence from Hong Kong", *Journal of Empirical Finance*, Vol. 12 No. 4, pp. 511-532.
- Chi, C.W., Hung, K., Cheng, H.W. and Lieu, P.T. (2015), "Family firms and earnings management in Taiwan: influence of corporate governance", *International Review of Economics and Finance*, Vol. 36, pp. 88-98.
- Chih, H.L., Shen, C.H. and Kang, F.C. (2008), "Corporate social responsibility, investor protection, and earnings management: some international evidence", *Journal of Business Ethics*, Vol. 79 No. 1, pp. 179-198.
- Chua, J.H., Chrisman, J.J. and De Massis, A. (2015), "A closer look at socioemotional wealth: its flows, stocks, and prospects for moving forward", *Entrepreneurship Theory and Practice*, Vol. 39 No. 2, pp. 173-182.
- Chua, J.H., Chrisman, J.J., Steier, L.P. and Rau, S.B. (2012), "Sources of heterogeneity in family firms: an introduction", *Entrepreneurship Theory and Practice*, Vol. 36 No. 6, pp. 1103-1113.
- Chung, R., Firth, M. and Kim, J.B. (2002), "Institutional monitoring and opportunistic earnings management", *Journal of Corporate Finance*, Vol. 8 No. 1, pp. 29-48.
- Claessens, S., Djankov, S., Fan, J.P. and Lang, L.H. (2002), "Disentangling the incentive and entrenchment effects of large shareholdings", *The Journal of Finance*, Vol. 57 No. 6, pp. 2741-2771.
- Claessens, S., Fan, J.P. and Lang, L.H. (2006), "The benefits and costs of group affiliation: evidence from East Asia", *Emerging Markets Review*, Vol. 7 No. 1, pp. 1-26.
- Cruz, C., Justo, R., Larraza-Kintana, M. and Garcés-Galdeano, L. (2019), "When do women make a better table? Examining the influence of women directors on family firm's corporate social performance", *Entrepreneurship Theory and Practice*, Vol. 43 No. 2, pp. 282-301.
- Davidson, R., Goodwin-Stewart, J. and Kent, P. (2005), "Internal governance structures and earnings management", *Accounting and Finance*, Vol. 45 No. 2, pp. 241-267.
- Dechow, P.M., Sloan, R.G. and Sweeney, A.P. (1995), "Detecting earnings management", *Accounting Review*, Vol. 70 No. 2, pp. 193-225.
- Dechow, P.M., Ge, W., Larson, C.R. and Sloan, R.G. (2011), "Predicting material accounting misstatements", *Contemporary Accounting Research*, Vol. 28 No. 1, pp. 17-82.
- Deephouse, D.L. and Jaskiewicz, P. (2013), "Do family firms have better reputations than non-family firms? An integration of socio-emotional wealth and social identity theories", *Journal of Management Studies*, Vol. 50 No. 3, pp. 337-360.
- Demsetz, H. and Lehn, K. (1985), "The structure of corporate ownership: causes and consequences", *Journal of Political Economy*, Vol. 93 No. 6, pp. 1155-1177.
- Diéguez-Soto, J. and Martínez-Romero, M.J. (2019), "Family involvement in management and product innovation: the mediating role of R&D strategies", *Sustainability*, Vol. 11 No. 7, 2162.
- El-Helaly, M., Georgiou, I. and Lowe, A.D. (2018), "The interplay between related party transactions and earnings management: the role of audit quality", *Journal of International Accounting, Auditing and Taxation*, Vol. 32, pp. 47-60.
- Eng, L.L., Fang, H., Tian, X., Yu, T.R. and Zhang, H. (2019), "Financial crisis and real earnings management in family firms: a comparison between China and the United States", *Journal of International Financial Markets, Institutions and Money*, Vol. 59, pp. 184-201.

-
- Faccio, M. and Lang, L.H. (2002), "The ultimate ownership of Western European corporations", *Journal of Financial Economics*, Vol. 65 No. 3, pp. 365-395.
- Faccio, M., Lang, L.H.P. and Young, L. (2001), "Dividends and expropriation", *American Economic Review*, Vol. 91, pp. 54-78.
- Fama, E. and Jensen, M. (1983), "Agency problems and residual claims", *Journal of Law and Economics*, Vol. 26 No. 2, pp. 327-349.
- Fan, J.P. and Yu, X. (2022), "Do founding families downgrade corporate governance? The roles of intra-family enforcement", *Journal of Corporate Finance*, Vol. 73, 102190.
- Ferramosca, S. and Allegrini, M. (2018), "The complex role of family involvement in earnings management", *Journal of Family Business Strategy*, Vol. 9 No. 2, pp. 128-141.
- Franks, J., Mayer, C., Volpin, P. and Wagner, H.F. (2012), "The life cycle of family ownership: international evidence", *The Review of Financial Studies*, Vol. 25 No. 6, pp. 1675-1712.
- Friedman, E., Johnson, S. and Mitton, T. (2003), "Propping and tunneling", *Journal of Comparative Economics*, Vol. 31 No. 4, pp. 732-750.
- Gavana, G., Gottardo, P. and Moisello, A.M. (2017), "Earnings management and CSR disclosure. Family vs non-family firms", *Sustainability*, Vol. 9 No. 12, 2327.
- Gavana, G., Gottardo, P. and Moisello, A.M. (2021), "Family control and influence on JV investment—the moderating effect of JV type and IC components", *Journal of Intellectual Capital*, Vol. 22 No. 7, pp. 68-91.
- Ghaleb, B.A.A., Kamardin, H. and Tabash, M.I. (2020), "Family ownership concentration and real earnings management: empirical evidence from an emerging market", *Cogent Economics and Finance*, Vol. 8 No. 1, 1751488.
- Ginesti, G. and Ossorio, M. (2021), "The influence of family-related factors on intellectual capital performance in family businesses", *Journal of Management and Governance*, Vol. 25 No. 2, pp. 535-560.
- Gomez-Mejia, L.R., Haynes, K.T., Nunez-Nickel, M., Jacobson, K.J.L. and Moyano-Fuentes, J. (2007), "Socioemotional wealth and business risks in family-controlled firms, evidence from Spanish olive oil mills", *Administrative Science Quarterly*, Vol. 52 No. 1, pp. 106-137.
- Gomez-Mejia, L.R., Cruz, C., Berrone, P. and De Castro, J. (2011), "The bind that ties: socioemotional wealth preservation in family firms", *The Academy of Management Annals*, Vol. 5 No. 1, pp. 653-707.
- Gottardo, P. and Moisello, A.M. (2018), *Capital Structure, Earnings Management, and Risk of Financial Distress: A Comparative Analysis of Family and Non-family Firms*, Springer.
- Habib, A., Muhammadi, A.H. and Jiang, H. (2017), "Political connections, related party transactions, and auditor choice: evidence from Indonesia", *Journal of Contemporary Accounting and Economics*, Vol. 13 No. 1, pp. 1-19.
- Haji-Abdullah, N.M. and Wan-Hussin, W.N. (2015), "Related party transactions, audit committees and real earnings management: the moderating impact of family ownership", *Advanced Science Letters*, Vol. 21 No. 6, pp. 2033-2037.
- Healy, P.M. and Wahlen, J.M. (1999), "A review of the earnings management literature and its implications for standard setting", *Accounting Horizons*, Vol. 13 No. 4, pp. 365-383.
- Huang, J. and Kisgen, D.J. (2013), "Gender and corporate finance: are male executives overconfident relative to female executives?", *Journal of Financial Economics*, Vol. 108 No. 3, pp. 822-839.
- Huybrechts, J., Voordeckers, W. and Lybaert, N. (2013), "Entrepreneurial risk taking of private family firms: the influence of a nonfamily CEO and the moderating effect of CEO tenure", *Family Business Review*, Vol. 26 No. 2, pp. 161-179.
- Jaggi, B. and Leung, S. (2007), "Impact of family dominance on monitoring of earnings management by audit committees: evidence from Hong Kong", *Journal of International Accounting, Auditing and Taxation*, Vol. 16 No. 1, pp. 27-50.

- Jaggi, B., Leung, S. and Gul, F. (2009), "Family control, board independence and earnings management: evidence based on Hong Kong firms", *Journal of Accounting and Public Policy*, Vol. 28 No. 4, pp. 281-300.
- Jensen, M. (1993), "The modern industrial revolution, exit and failure of internal control system", *The Journal of Finance*, Vol. 48 No. 3, pp. 831-880.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305-360.
- Jian, M. (2003), "Earnings management and tunneling through related party transactions: evidence from Chinese corporate groups", [Doctoral Dissertation, Hong Kong University of Science and Technology], ProQuest Dissertations Publishing. Degree Year 2003. 3101015, available at: <https://www.proquest.com> (accessed 25 March 2022).
- Jian, M. and Wong, T.J. (2010), "Propping through related party transactions", *Review of Accounting Studies*, Vol. 15 No. 1, pp. 70-105.
- Jiraporn, P. and DaDalt, P.J. (2009), "Does founding family control affect earnings management?", *Applied Economics Letters*, Vol. 16 No. 2, pp. 113-119.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2000), "Tunneling", *American Economic Review*, Vol. 90 No. 2, pp. 22-27.
- Jones, J.J. (1991), "Earnings management during import relief investigations", *Journal of Accounting Research*, Vol. 29 No. 2, pp. 193-228.
- Kao, L. and Chen, A. (2004), "The effects of board characteristics on earnings management", *Corporate Ownership and Control*, Vol. 1 No. 3, pp. 96-107.
- Klein, A. (2002), "Audit committee, board of director characteristics, and earnings management", *Journal of Accounting and Economics*, Vol. 33 No. 3, pp. 375-400.
- Kohlbeck, M.J., Lee, H.S.G., Mayhew, B.W. and Salas, J.M. (2018), "The influence of family firms on related party transactions and associated valuation implications", SSRN, available at: <https://ssrn.com/abstract=3154565> (accessed 1 March 2022).
- Kothari, S.P., Leone, A.J. and Wasley, C.E. (2005), "Performance matched discretionary accrual measures", *Journal of Accounting and Economics*, Vol. 39 No. 1, pp. 163-197.
- Lin, Y.M. and Shen, C.A. (2015), "Family firms' credit rating, idiosyncratic risk, and earnings management", *Journal of Business Research*, Vol. 68 No. 4, pp. 872-877.
- Marchini, P.L., Mazza, T. and Mediolì, A. (2018), "Related party transactions, corporate governance and earnings management", *Corporate Governance*, Vol. 18 No. 6, pp. 1124-1146.
- Martin, G., Campbell, J.T. and Gomez-Mejia, L. (2016), "Family control, socioemotional wealth and earnings management in publicly traded firms", *Journal of Business Ethics*, Vol. 133 No. 3, pp. 453-469.
- Martin, G., Gómez-Mejía, L.R., Berrone, P. and Makri, M. (2017), "Conflict between controlling family owners and minority shareholders: much ado about nothing?", *Entrepreneurship Theory and Practice*, Vol. 41 No. 6, pp. 999-1027.
- Miller, D., Jangwoo, L., Sooduck, C. and Le Breton-Miller, I. (2009), "Filling the institutional void: the social behaviour and performance of family vs non family technology firms in emerging markets", *Journal of International Business Studies*, Vol. 40 No. 5, pp. 802-817.
- Mnif, Y. and Cherif, I. (2020), "Female board directorship and earnings management", *Pacific Accounting Review*, Vol. 33 No. 1, pp. 114-141.
- Mohammed, N. (2020), "Related party transactions, family firms and firm performance", *Accounting Analysis Journal*, Vol. 8 No. 3, pp. 179-183.
- Munir, S., Saleh, N.M., Jaffar, R. and Yatim, P. (2013), "Family ownership, related party transactions and earnings quality", *Asian Academy of Management Journal of Accounting and Finance*, Vol. 9 No. 1, pp. 129-153.

- Muñoz-Bullon, F., Sanchez-Bueno, M.J. and Suárez-González, I. (2018), "Diversification decisions among family firms: the role of family involvement and generational stage", *BRQ Business Research Quarterly*, Vol. 21 No. 1, pp. 39-52.
- Nadeem, M., Zaman, R. and Saleem, I. (2017), "Boardroom gender diversity and corporate sustainability practices: evidence from Australian Securities Exchange listed firms", *Journal of Cleaner Production*, Vol. 149, pp. 874-885.
- Nordqvist, M., Sharma, P. and Chirico, F. (2014), "Family firm heterogeneity and governance: a configuration approach", *Journal of Small Business Management*, Vol. 52 No. 2, pp. 192-209.
- Paiva, I.S., Lourenço, I.C. and Branco, M.C. (2016), "Earnings management in family firms: current state of knowledge and opportunities for future research", *Review of Accounting and Finance*, Vol. 15 No. 1, pp. 85-100.
- Pazzaglia, F., Mengoli, S. and Sapienza, E. (2013), "Earnings quality in acquired and nonacquired family firms: a socioemotional wealth perspective", *Family Business Review*, Vol. 26 No. 4, pp. 374-386.
- Poletti-Hughes, J. and Martinez Garcia, B. (2022), "Leverage in family firms: the moderating role of female directors and board quality", *International Journal of Finance and Economics*, Vol. 27 No. 1, pp. 207-223.
- Pozzoli, M. and Venuti, M. (2014), "Related party transactions and financial performance: is there a correlation? Empirical evidence from Italian listed companies", *Open Journal of Accounting*, Vol. 3 No. 1, pp. 28-37.
- Prencipe, A. and Bar-Yosef, S. (2011), "Corporate governance and earnings management in family-controlled companies", *Journal of Accounting, Auditing and Finance*, Vol. 26 No. 2, pp. 199-227.
- Prencipe, A., Markarian, G. and Pozza, L. (2008), "Earnings management in family firms: evidence from R&D cost capitalization in Italy", *Family Business Review*, Vol. 21 No. 1, pp. 71-88.
- Rajgopal, S., Shevlin, T. and Venkatachalam, M. (2003), "Does the stock market fully appreciate the implications of leading indicators for future earnings? Evidence from order backlog", *Review of Accounting Studies*, Vol. 8 No. 4, pp. 461-492.
- Razzaque, R.M.R., Ali, M.J. and Mather, P.R. (2016), "Real earnings management in family firms: evidence from an emerging economy", *Pacific-Basin Finance Journal*, Vol. 40, pp. 237-250.
- Rodriguez-Ariza, L., Martínez-Ferrero, J. and Bermejo-Sánchez, M. (2016), "Consequences of earnings management for corporate reputation: evidence from family firms", *Accounting Research Journal*, Vol. 29 No. 4, pp. 457-474.
- Roychowdhury, S. (2006), "Earnings management through real activities manipulation", *Journal of Accounting and Economics*, Vol. 42 No. 3, pp. 335-370.
- Ryngaert, M. and Thomas, S. (2012), "Not all related party transactions (RPTs) are the same: ex ante versus ex post RPTs", *Journal of Accounting Research*, Vol. 50 No. 3, pp. 845-882.
- Salehi, M., Hoshmand, M. and Ranjbar, H.R. (2020), "The effect of earnings management on the reputation of family and non-family firms", *Journal of Family Business Management*, Vol. 10 No. 2, pp. 128-143.
- Salvato, C. and Moores, K. (2010), "Research on accounting in family firms: past accomplishments and future challenges", *Family Business Review*, Vol. 23 No. 3, pp. 193-215.
- Sarlak, N. and Akbari, M. (2014), "Relationship between related party transactions and earnings management", *Accounting and Auditing Review*, Vol. 20 No. 4, pp. 77-92.
- Schulze, W.S., Lubatkin, M.H. and Dino, R.N. (2003), "Toward a theory of agency and altruism in family firms", *Journal of Business Venturing*, Vol. 18 No. 4, pp. 473-490.
- Sharma, P. (2004), "An overview of the field of family business studies: current status and directions for the future", *Family Business Review*, Vol. 17 No. 1, pp. 1-36.

- Shekhar, S., Gupta, A. and Valeri, M. (2021), "Mapping research on family business in tourism and hospitality: a bibliometric analysis", *Journal of Family Business Management*, Vol. ahead-of-print No. ahead-of-print, doi: [10.1108/JFBM-10-2021-0121](https://doi.org/10.1108/JFBM-10-2021-0121).
- Stockmans, A., Lybaert, N. and Voordeckers, W. (2010), "Socioemotional wealth and earnings management in private family firms", *Family Business Review*, Vol. 23 No. 3, pp. 280-294.
- Suprianto, E., Rahmawati, R., Setiawan, D. and Aryani, Y.A. (2019), "Controlling generation of family firms and earnings management in Indonesia: the role of accounting experts of audit committees", *Journal of International Studies*, Vol. 12 No. 3, pp. 265-276.
- Thomas, W.B., Herrmann, D.R. and Inoue, T. (2004), "Earnings management through affiliated transactions", *Journal of International Accounting Research*, Vol. 3 No. 2, pp. 1-25.
- Tong, Y.H. (2007), "Financial reporting practices of family firms", *Advances in Accounting*, Vol. 23, pp. 231-261.
- Valeri, M. (2021), *Organizational Studies: Implications for the Strategic Management*, Springer Nature, Switzerland.
- Vieira, E. and Madaleno, M. (2019), "Earnings management and corporate governance in family firms: evidence from a small market", *International Financial Reporting Standards and New Directions in Earnings Management*, IGI Global, Hershey, Pennsylvania, pp. 127-153.
- Villalonga, B. and Amit, R. (2010), "Family control of firms and industries", *Financial Management*, Vol. 39 No. 3, pp. 863-904.
- Williams, M.P. and Taylor, D.W. (2013), "Corporate propping through related party transactions: the effect of China and securities regulations", *International Journal of Law and Management*, Vol. 55 No. 1, pp. 28-41.
- Yang, M.L. (2010), "The impact of controlling families and family CEOs on earnings management", *Family Business Review*, Vol. 23 No. 3, pp. 266-279.
- Yeo, G.H., Tan, P.M., Ho, K.W. and Chen, S.S. (2002), "Corporate ownership structure and the informativeness of earnings", *Journal of Business Finance and Accounting*, Vol. 29 Nos 7-8, pp. 1023-1046.
- Zamri, N., Rahman, R.A. and Isa, N.S.M. (2013), "The impact of leverage on real earnings management", *Procedia Economics and Finance*, Vol. 7, pp. 86-95.

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