Related party transactions and audit fees in a dominant owner context

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By adopting an integrated theoretical approach, which combines supply and demand forces, the current work examines the effect of related party transactions (RPTs) on audit fees in a sample of non-financial Spanish listed firms during the period 2005–2017. Our results show a negative effect of the amount involved in RPTs and external audit fees. Thus, in a context where both investor protection and litigation risk are low and where ownership concentration is prevalent, audit fees are less likely to incorporate agency conflicts associated to RPTs and, in contrast, are mainly affected by auditee needs.

Keywords: related party transactions, external audit fees, audit risk.

1. Introduction

In this study, we investigate the effect of RPTs on audit fees. Accounting scandals involving firms such as Enron, WorldCom, Hollinger and Refco in the US, and Parmalat, Pescanova or Bankia in Europe, have eroded public confidence in the financial reporting process and audit function. In fact, related party transactions (RPTs) seem to have been a major problem in these financial scandals. Although these transactions were supposedly conducted at arm's length, in practice they benefited the principals involved (i.e., managers, large shareholders or their relatives).

Accounting organizations have long expressed concerns regarding the potential consequences of RPTs in capital markets (e.g., FASB, 1982; IASB, 2009). However, available empirical evidence has failed to reach any clear consensus concerning how harmful RPTs might prove to be (Bell & Carcello, 2000; Beasley et al., 2001; Apostolou et al., 2001; Wilks & Zimbelman, 2004; Moyes et al., 2005; Gordon et al., 2007; Louwers et al., 2008). Despite this lack of consensus, there is no doubt that the audit function has an important part to play in the presence of RPTs. In this sense, external auditors play a critical role in validating the firm’s accounting information and the audit function is thus

expected to facilitate the operation of capital markets and to promote the efficient flow of scarce human and financial capital towards promising investment opportunities (Bushman & Smith, 2003). However, very few studies have considered auditors' response in the presence of RPTs (e.g., Bennouri et al., 2015; Fang et al., 2018; Jiang et al., 2010). Furthermore, empirical evidence concerning the effect of RPTs on audit fees is recent and scarce, such that any results remain far from conclusive (e.g., Al-Dhamari et al., 2018; Habib et al., 2015; Kohlbeck & Mayhew 2017).

In the current paper, we extend this body of research by investigating the effect of RPTs on audit fees in a continental European setting. To fulfil this aim, we use a sample of Spanish listed firms over the period 2005-2017. We conduct our main empirical analysis by regressing total audit fees on RPT values and by controlling for a diversity of audit fee determinants. Our results show a negative effect of RPTs on audit fees. Thus, the low investor protection and low litigation risk that characterize the Spanish setting make auditors less prone to incorporate agency conflicts related to RPTs in the final fee and, in contrast, auditors are more likely to respond to their auditee's needs.

Our study makes several contributions. By integrating both supply and demand side arguments, we contribute to the scant research on auditor response to RPTs in a dominant owner context (e.g., Fang et al., 2018; Jiang et al., 2010) and, in particular, to the recent and very limited empirical evidence regarding the effect of RPTs on audit fees in that context (e.g., Al-Dhamari et al., 2018; Habib et al., 2015). Furthermore, our work complements the findings in Kohlbeck and Mayhew (2017) who conducted their study in the US context where, unlike continental Europe, litigation risk for managers, auditors and board members is higher and financial and audit reporting are the main means of solving agency conflicts derived from the separation between ownership and control. Finally, our work contributes to studies exploring the drivers of audit fees in the Spanish

context (De Fuentes & Pucheta-Martínez, 2009; De Fuentes & Sierra-Grau, 2015; Desender et al., 2013; Monterrey-Mayoral & Sánchez-Segura, 2007; Sierra-García et al., 2019) by showing a new driver of audit fees in the Spanish context, namely, the amount of RPTs.

The rest of the paper is organized as follows. The second section reviews the theoretical background and develops the hypotheses. The third section presents the research design and in the fourth section we show our results. Finally, the conclusions of the study are presented in section 5.

2. Literature review and hypotheses development

Previous literature has revealed that auditors play an active monitoring role in the presence of RPTs. Jiang et al. (2010) report that a qualified audit opinion is much more likely to be received by Chinese listed firms with high levels of intercorporate loans. In a similar vein, Fang et al. (2018) find a positive effect of certain RPTs on auditors' propensity to issue a modified audit opinion. Other studies consider that RPTs increase audit risk and affect auditor performance. Bennouri et al. (2015) investigate the relation between the presence of auditors with a brand-name reputation for providing high quality audit reports and the number of RPTs reported by the firm. The authors find that French firms audited by Big 4 auditors report fewer RPTs due to the accounting uncertainty surrounding RPT reporting. Furthermore, some recent studies have investigated the auditor's willingness to price audit risk associated to RPTs. Thus, Habib et al. (2015) find that RPTs trigger an increase in audit fees in Chinese listed firms. Further analysis shows relatively high audit fees for RPT loans and capital transfers when listed parents transact with their subsidiaries. In contrast, Al-Dhamari et al. (2018) found no effect of RPTs on audit fees for Malaysian firms. Further analysis carried out by the authors shows a positive effect of related party sales and purchases on audit fees. Finally, some studies

have evidenced that audit fees might reflect insiders' demands for audit quality. In the US context, Kohlbeck and Mayhew (2017) show a negative effect of RPTs on audit fees. The authors attribute their findings to firms that commit to RPTs demanding lower quality audits, in line with the literature on private control benefits. However, further analysis shows that those firms who commit to RPTs which are less likely to have legitimate business purposes that subsequently restate, pay higher fees. As the authors point out, this latter type of RPT thus increases audit risk and auditor willingness to incorporate this agency conflict into the audit pricing.

As shown, empirical evidence concerning the effect of RPTs on audit fees is very recent and scarce, with the results proving to be mixed and far from conclusive. Moreover, findings from previous studies cannot be extrapolated to a continental European setting due to institutional differences. With the exception of Kohlbeck and Mayhew (2017) who carry out their study in the US market, the remaining empirical evidence on the effect of RPTs on audit fees has focused on East Asian economies (Al-Dhamari et al., 2018; Habib et al., 2015) and particularly in the Chinese context where state ownership is prevalent and listed firms are consequently subject to substantial government influence. Compared to privately owned Spanish listed firms, Chinese state owned firms face an extra agency relation, since controlling owners are themselves agents of the true owners - the state (Chen et al., 2011). As pointed out by previous authors, Chinese controlling shareholders who usually gain effective control of the firm, are largely isolated against pressures from non-state minority shareholders but enjoy the benefit of a large stream of direct capital. The nature of this government interference in the economy might shape in a different way auditor's and controlling shareholder's incentives to affect audit fees. In the Chinese context, auditors therefore find themselves struggling to strike a balance between complying with the Guanxi code, common in

Confucian cultures and based on the principles of trust, bonding, reciprocity and empathy (Yau et al., 2000) to preserve auditor reputation and an impartial assessment of the company's true and fair situation (Liu, 2013; Du et al., 2015). Results from previous studies are thus difficult to extrapolate to a continental European setting.

Thus, in contrast to the US, where no shareholder has powerful incentives to monitor managers because it would prove complicated and costly (Jensen & Meckling, 1976), ownership in continental Europe is often concentrated in the hands of controlling owners who are ideally placed to supervise managers (La Porta et al., 1999; Cuervo, 2002).

However, as RPTs increase, the agency conflict between dominant and minority shareholders also increases because dominant shareholders might commit to RPTs for their own benefit at the expense of minority shareholder wealth. In this sense, the low investor protection and litigation risk that characterize the Spanish setting (Djankov et al., 2008; La Porta et al., 1998) decrease the likelihood that dominant shareholders will be sued when they opportunistically commit to RPTs. Under the absence of a strong legal risk, the audit function thus becomes an unwanted cost (beyond the legal requirement) that is increasingly borne by the controlling shareholder (Barroso et al., 2018) and which would hinder the latter's capacity to use RPTs to extract rents. According to this demand perspective, features of the Spanish institutional setting would help to decrease controlling shareholder's demand for audit coverage.

From a supply-side perspective, Simunic (1980) conjectures that audit fees incorporate both audit effort and audit risk premium and the scale of agency conflicts could have an impact on both (e.g., Barroso et al., 2018; Fan & Wong, 2005; LaFond & Roychowdhury, 2008). Accordingly, some studies have pointed out the need for auditors to expand the scope of their audit for firms with greater agency conflicts because of

increased audit risk and auditor business risk (e.g., Houston et al., 1999; Khalil et al., 2008; LaFond & Roychowdhury, 2008). However, in competitive audit markets, the low investor protection and litigation risk that characterize the Spanish setting (e.g., Djankov et al., 2008; La Porta et al., 1998) provide no incentives for auditors to incorporate agency conflicts associated with RPTs into audit pricing who, in contrast, seem more sensitive towards auditee needs.

Considering all the above, the lower incentives that dominant shareholders have for audit coverage mainly drive audit fees in the Spanish setting and therefore, we predict a negative effect of RPTs on audit fees. Consequently, we state our hypothesis as follows:

H1: As the amount of RPTs increases, external audit fees decrease.

3. Research design

3.1 Data

The sample consists of Spanish listed companies during the period 2005-2017. Our sample period starts in 2005 because International Financial Reporting Standards (IFRS) were adopted that year. We obtained financial data from the Osiris database by Bureau van Dijk Electronic Publishing (BvDEP). The rest of the data was collected from the Annual Corporate Governance Report published by the Spanish Stock Exchange Commission (CNMV, Comisión Nacional del Mercado de Valores). To avoid any influence of outliers, variables were winsorized at the 1% and 99% level. The final sample consists of 1,011 firm-year observations, corresponding to 97 non-financial Spanish firms listed on the electronic market at the end of 2017.

3.2 Related party transactions

According to Order EHA/3050/2004, in the annual corporate governance report (ACGR) Spanish listed firms must disclose different information regarding RPTs, such as the type

of transaction and the related party involved (significant shareholders, directors and officers, affiliates not included in the consolidation process and other related parties). We hand-collected this information from the ACGR. In line with previous literature (e.g., Al-Dhamari et al., 2018; Habib et al., 2017), we define the variable RPT as the aggregated monetary value of a firm's RPTs deflated by the firm's total assets.

3.3 Variables and model

In line with previous literature (e.g., DeFond et al., 2000; Eshleman & Guo, 2014; Habib et al., 2015; Kohlbeck & Mayhew, 2017; Seetharaman et al., 2002), our dependent variable is the natural logarithm of external audit fees (FEE) obtained from the annual corporate governance reports published by the Spanish Security Exchange Commission. To test our hypothesis, we estimate the following equation:

$$FEE_{it} = \alpha_o + \alpha_1 RPT_{it} + \alpha_2 OWNER_{it} + \alpha_3 DIVERG_{it} + \alpha_4 LOSS_{it} + \alpha_5 VAR\_ROA_{it} + \alpha_6 INVRECEIV_{it} + \alpha_7 LEV_{it} + \alpha_8 QUICK_{it} + \alpha_9 EBIT_{it} + \alpha_{10} SIZE_{it} + \alpha_{11} FOREIGN_{it} + \alpha_{12} CI_{it} + \alpha_{13} SHARE_{it} + \alpha_{14} BIG4_{it} + \alpha_{15} CHANGE_{it} + \eta_k + \lambda_j + \varepsilon_i \quad \text{Eq. (1)}$$

In Eq. 1, the effect of a firm's RPTs on audit fees is captured by the coefficient α1. We also include a set of control variables that previous literature considers to be potential determinants of audit fees. To control for ownership concentration, we include the major shareholder's voting rights level (OWNER). According to the demand perspective, large shareholders focus more on direct monitoring due to the availability of private communication channels, which reduces their demands for audit assurance (Chan et al., 1993; Firth, 1997). However, from a supply perspective, once a controlling owner obtains effective control of the firm, any increase in voting rights does not further entrench the controlling owner, although their higher cash flow rights in the firm mean that it will cost more to divert the firm's cash flows for private gain (Fan and Wong, 2002). In this setting, there is less need for auditors to expand the scope of their audit or

increase a risk premium in the final fee. Consequently, due to the existence of opposing forces, we do not predict a particular sign regarding this relation.

We also include the controlling shareholder's voting-cash flow wedge (DIVERG) to proxy for controlling shareholder entrenchment. From the demand perspective, the higher the wedge, the lower the controlling shareholder's demands for audit quality to avoid outside interference as a way to protect said shareholder's private benefits (Hu et al., 2012). However, from a supply perspective, the increase in agency conflicts might be reflected in the final fee. As a consequence, we do not predict a particular sign for the coefficient of this variable either.

We also control for client risk and client complexity (De Fuentes & Sierra-Grau, 2015; Desender et al., 2013; Fan & Wong, 2005; Hay et al., 2006; Kohlbeck & Mayhew, 2017; Sierra-García et al., 2019; Simunic, 1980; US GAO, 2008). We include a set of variables related to the auditee's financial status to control for client risk. We expect clients with losses (LOSS), greater changes in return on assets (VAR_ROA), a higher amount of account receivables and inventory (INVRECEIV), and higher leverage (LEV) to be riskier and, consequently, to show greater audit fees. Moreover, we expect a higher level of firm liquidity (QUICK) and auditee profitability (EBIT) to reduce audit risk and, consequently, audit fees. As regards complexity, we predict higher audit fees for larger firms (SIZE) and for firms with foreign sales (FOREIGN).

The model also includes a set of specific audit firm control variables (e.g., De Fuentes & Sierra-Grau, 2015; Desender et al., 2013; Eshleman & Guo, 2014; Hay et al., 2006; Kohlbeck & Mayhew, 2017; Sierra-García et al., 2019; US GAO, 200). We expect a positive effect of client significance for the auditor (CI), industry specialization (SHARE), and audit firm size (BIG4) on audit fees. Finally, we expect a negative effect

of auditor change (CHANGE) on audit fees. We define all the variables in the Appendix (Table A1).

4. Empirical results

4.1 Descriptive statistics

Table 1 shows the descriptive statistics for all the variables included in the regressions. The average audit fee (FEE) is 6.187 and the average RPT is 0.048. Interestingly, the average major shareholder's voting rights level (OWNER) in our sample is nearly 30%. We are therefore exploring the relation between RPTs and audit fees in a context where, on average, firms have a controlling owner who retains effective control of the firm. Table 2 includes the correlation matrix. Since some correlation values are above 0.5, in Table 3 we calculate the Variance Inflation Factor (VIF) to test whether multicollinearity is a problem in our analysis. The highest VIF value is 2.36, which is well below 5, indicating that multicollinearity is not a concern in our study (Studenmund, 1997).

[Table 1 near here]

[Table 2 near here]

[Table 3 near here]

4.2 Multivariate test

Our model might be affected by endogeneity that could stem from unobserved heterogeneity and simultaneity. Unobserved heterogeneity arises because certain variables related to specific firm characteristics, such as firm culture or firm strategy, might affect the effect of RPTs on audit fees. Simultaneity may occur if our explanatory variable (RPT) is also a function of our dependent variable (FEE). In this sense, previous studies (Bennouri et al., 2015) find that the presence of Big 4 auditors affects RPTs. Although Bennouri et al. (2015) focus on Big 4 auditors and do not directly examine audit

fees, the presence of Big 4 auditors has been shown to increase audit quality and, consequently, audit fees (e.g., Chan et al., 1993; Francis, 1984; Palmrose, 1986; Simon & Francis, 1988). Thus, since it is possible that RPT could be a function of audit fees, we use a two-stage least squares (2SLS) approach with firm fixed effects to address this source of endogeneity (simultaneity). In the first stage, we regress RPTs on a set of instrumental variables, while in the second stage we regress audit fees on the fitted value of the RPTs obtained in the first stage. The most critical aspect of using this approach involves selecting the appropriate instruments. Since previous literature has shown that some ownership characteristics might affect RPTs (e.g., Elistratova et al., 2016; Ryngaert & Thomas, 2012), we use the following variables as instruments: DIROWNER (percentage of director ownership), and FAM (a dummy variable that takes the value 1 if the controlling shareholder of the firm is a family, and 0 otherwise). We also include the control variables from Eq. 1 [1]. The results of the second stage (Model 1. Table 4) evidence that RPTs reduce audit fees ($\alpha 1 = -7.737$, $t = -2.636$). This result is consistent with features of the Spanish institutional setting decreasing auditor tendency to incorporate agency conflicts related to RPTs in audit pricing and alternatively reflecting lower dominant owner demands for audit quality as RPTs increase.

Specifically, our results differ from those reported by Habib et al. (2015) in the Chinese context, with said authors evidencing a positive effect of RPTs on audit fees. Moreover, the authors find that this positive effect is conditioned by the adoption of CAS 36, which requires firms to recognize the difference between RPT price and arm's length market price as capital reserve on the balance sheet. The authors attribute their findings to RPTs increasing audit risk and to auditors being likely to incorporate agency conflicts related to RPTs in audit pricing. Since Habib et al. (2015) find a non-significant effect of RPTs on audit fees in the pre-CAS period, their findings suggest that institutional features

and, in particular the regulatory environment, might affect auditor willingness to incorporate agency conflicts related to RPTs into the final fee.

In contrast, in a continental European setting, we show that auditors are less likely to incorporate RPTs into the audit fee and, on the other hand, are more sensitive to their auditee's needs. Furthermore, our results also differ from those of Al-Dhamari et al. (2018) who find no significant effect of RPTs on audit fees in Malaysia. Finally, our results partially concur with those obtained by Kohlbeck and Mayhew (2017) in the US context. While previous authors evidence that firms with RPTs attain lower audit quality, they find a positive effect of Tone RPTs associated with subsequent restatements on audit fees. However, while previous authors attribute their results of a negative effect of Tone RPTs on audit quality to lower demands for monitoring by management, in line with the literature on private control benefits, Jorgensen and Morley (2017) question previous authors' findings and consider them "surprising". As they point out, in a high litigation environment such as the US, they would expect auditors to increase audit effort when they observe Tone RPTs, since they increase the riskiness of the audit and consequently, in the previous authors' view, it seems unlikely that auditors would be willing to carry out less work where a risk factor such as Tone RPTs is present.

As regards the control variables, the results are generally consistent with our expectations and with prior research. According to the previous literature, client with losses present higher audit fees. Moreover, as the client significance for the auditor (CI), leverage (LEV), size (SIZE) or the industry specialization (SHARE) increases, audit fees also increase. However, contrary to our predictions and in line with Kohlbeck and Mayhew (2017), we find that audit fees drop as VAR_ROA increases. We consider the possibility that firms experiencing VAR ROA could be reluctant to hire BIG 4 auditors, what leads to lower audit fees. In addition, we fail to reject the over-identifying

restrictions test (Sargan p-value = 0.922), which indicates that our instruments are jointly exogenous.

Since the 2SLS estimator yields consistent coefficients by reducing efficiency, especially in the presence of heteroskedasticity, we finally use a more efficient approach; namely, the generalized method of moments (GMM), which is robust to the presence of heteroskedasticity (Baum et al., 2003). Moreover, the GMM estimator uses instrumental variables that are retrieved from the lagged values, thereby eliminating the need to find appropriate external instruments (Roodman, 2009).

More specifically, we apply the two-step GMM estimator by using the xtabond2 module in Stata provided by Roodman (2009). Model 2 (Table 4) reports the results of the GMM estimator. In line with our previous expectations, we find that RPTs reduce audit fees ($\alpha 1 = -0.831$, $t = -2.818$). Since the results obtained with the two-step GMM estimator can be considered consistent only if the instruments are valid and if there is no second-order autocorrelation, we first test the validity of the instruments by using the Hansen test. The null hypothesis shows the validity of the instruments. We then test for the existence of second-order autocorrelation. Since we cannot reject the null hypothesis, namely, the non-existence of autocorrelation, we may conclude that the results obtained with the two-step GMM estimator are robust. Finally, we use the Chow test to check the existence of a possible structural change over the period. The Chow test allows us to determine whether our regression coefficients are different for split data sets (Chow, 1960). It tests whether one regression line or two separate regression lines best fit a split set of data. We have considered two potential breaking points, which represent the most substantial changes in the Spanish audit regulation within the studied period: years 2010 and 2016. Thus, the first point is the approval of the Law 12/2010, which replaced Auditing Law 19/1988 and transposed into the Spanish legal system the European

Directive 2006/43/EC. The second point corresponds to the entry into force of the Law 22/2015, which transposed into the Spanish legal system the Directive 2014/56/EU of the European Parliament and of the Council, of 16 April 2014. The results show there is no structural change over the periods considered [2].

[Table 4 near here]

4.3 Sensitivity analysis

In order to test the robustness of our results, we extend our analysis in two different ways. Firstly, since some previous studies (e.g., Kohlbeck & Mayhew, 2017) show that the mere presence of RPTs may affect audit fees, in Table 5 (Model 3) we test our hypothesis by using a dummy variable (RPT_DUMMY) that takes the value 1 if the firm discloses at least one RPT during the year, and 0 otherwise. Secondly, in order to address possible sample selection bias we use the Heckman (1976) two-stage model. Following this methodology, in the first stage we run a Probit model to approach the likelihood that a firm commits to RPTs and we obtain the inverse Mills ratio (IMR) [3]. In a second stage, the IMR is included in the regression as a control variable to correct the potential bias caused by self-selection (Model 4 in Table 5). Overall, the results from models 3 and 4 are consistent with those obtained in Table 4.

[Table 5 near here]

4.4 Further analysis

Previous studies have classified RPTs according to two different criteria: the related party involved in the transaction and the type of transaction (e.g., Habib et al., 2015; Kohlbeck & Mayhew, 2010, 2017). Consequently, in order to determine whether our results are sensitive to previous classifications, we follow Kohlbeck and Mayhew (2017) and classify RPTs according to the type of transaction and the related party involved (Table

6). In line with previous authors, we then classify RPTs in two categories (Table 7); namely, RPTs that are more likely to capture normal business activities (Business), and RPTs that are more likely to capture opportunistic insider behaviour (Tone) [4].

[Table 6 near here]

[Table 7 near here]

Thus, in Model 5 (Table 8) we re-run Eq. 1, considering the variables RPT_BUSINESS and RPT_TONE. In Model 6 (Table 8), we re-run Eq. 2, considering the variables RPT_BUSINESS_DUMMY and RPT_TONE_DUMMY. Finally, in models 7 and 8 (Table 8), we re-run Eq. 3, considering the variables RPT_BUSINESS_DUMMY and RPT_TONE_DUMMY [5]. In all the regressions, the results are consistent with our main findings and provide further evidence of a negative effect of RPTs on audit fees. Therefore, our results are not sensitive to the type of transaction or to the related party involved [6].

[Table 8 near here]

Finally, since our results on a negative effect of RPTs on audit fees might be mainly driven by the auditee's lower demands for audit assurance, in an effort to endow our findings with greater robustness, we test whether RPTs reduce the likelihood of appointing a BIG4 audit in the Spanish context. In this sense, previous studies have considered BIG4 to proxy for audit quality (e.g., Collier & Gregory, 1996; Choi & Wong, 2007; Desender et al., 2013). In Model 9 (Table 9), we therefore run a Probit model with instrumental variables (DIROWNER, FAM) [7]. Our results evidence that the higher the RPTs the less likely a BIG4 audit is to be appointed ($\alpha 1 = -6.953$, $t = -5.489$). This result is in line with our main finding and reinforces our interpretation concerning the fact that

the negative effect of RPTs on audit fees might be explained by lower demands for audit quality as RPTs increase.

[Table 9 near here]

5. Concluding remarks

RPTs have played a major role in the collapse of several large companies, and have sparked interest in corporate governance issues and, particularly, in financial reporting and audit policies. Previous studies have revealed that auditors take RPTs into consideration in their risk assessment process (e.g., Al-Dhamari et al., 2018; Bennouri et al., 2015; Fang et al., 2018; Habib et al., 2015). Additionally, the audit function might also be affected by demand forces (e.g., Abbott et al., 2003; Carcello et al., 2002; Knechel & Willekens, 2006; Kohlbeck & Mayhew, 2017).

The current work examines the effect of RPTs on audit fees in a continental European setting. Our results show a negative effect of the amount involved in RPTs on external audit fees. We attribute these findings to features of the institutional setting providing no incentives for auditors to incorporate agency conflicts associated to RPTs in the audit pricing, choosing rather to adapt to their clients' demands. Therefore, since features of the Spanish institutional setting help to reduce dominant owner demand for audit coverage, our results show that major shareholders' lower demands for audit coverage are the main driver of audit fees in the Spanish context.

We contribute to the existing literature in several ways. First, we add to the scant number of studies exploring the role of auditors in the presence of RPTs (e.g., Bennouri et al., 2015; Fang et al., 2018; Jiang et al., 2010) and particularly to the very limited empirical evidence concerning the influence of RPTs on audit fees (Al-Dhamari et al., 2018; Habib et al., 2015; Kohlbeck & Mayhew, 2017). In this sense, Jorgensen and Morley (2017) advocate more research in the field to clarify the underlying mechanisms

involved, highlighting the importance of exploring further the effect of RPTs on audit quality in different institutional settings to help explain the real motivations of agents whose actions drive statistical outcomes. In this context, some of the proven incentives that help maintain high audit quality in countries with a long auditing tradition, such as reputation loss and litigation risk, seem to be weak in the Spanish case (Ruiz-Barbadillo et al., 2004). As the litigation environment weakens, auditors are more likely to adjust to clients' needs (Hwang & Chang, 2010). The low litigation risk and poor investor protection that characterize the Spanish setting provide no incentives for auditors to increase audit effort and/or to incorporate any risk premium associated to agency conflicts in the final fee as RPTs increase. In this context, auditors might well be expected to be more captive to the customer and competitive market when pricing their services. Our results in this regard are in line with previous expectations. In addition, we offer novel evidence on the interactions between RPTs and audit fees in a setting where state ownership is practically non-existent, and where low investor protection and low litigation risk might shift auditor focus away from clients' business risk and towards their needs (Hwang & Chang, 2010). Finally, we contribute to the scarce literature on the determinants of audit fees in the Spanish context (De Fuentes & Pucheta-Martínez, 2009; De Fuentes & Sierra-Grau, 2015; Desender et al., 2013; Monterrey-Mayoral & Sánchez-Segura, 2007; Sierra-García et al., 2019) by showing a new driver of audit fees in the considered context.

Our results may also have implications for policymakers and regulators attempting to enhance investor confidence, particularly in a context where the main agency conflict derives from the expropriation of minority shareholders by controlling owners, since they must be aware that audit assurance conveys lower profits and higher costs as RPTs increase. Furthermore, one interesting result derived from the current work

is that recent European audit reform brought no significant difference, since we find a negative effect of RPTs on audit fees, both before and after implementation of the reform. These results are particularly important in light of the recent European Commission announcement of upcoming reform in auditing regulation. Furthermore, our results also prove important for investors by showing that, in the considered setting, as RPTs increase, auditors seem more likely to accommodate to their clients' need when pricing their services.

Our paper is not without limitations. For example, with regard to the effect of RPTs on audit fees, we have not considered interactions between audit and non-audit fees. Finally, corporate governance studies could add to this line of research by showing how certain corporate governance mechanisms might affect the effect of RPTs on audit fees. We leave these inquiries for future research.

Notes

1. The results of the first stage of the 2SLS approach are included in the Appendix (Table A 2)
2. The results of the Chow tests are available upon request.
3. The estimation model and the results are included in the Appendix (Table A 3).
4. See the Appendix (Table A 4) for a more comprehensive understanding of the classification of RPTs proposed by Kohlbeck and Mayhew (2017).
5. Since we need to calculate the inverse Mills ratio (IMR) per variable, two regressions need to be run. The Appendix (Table A 3) also includes the first stages for models 7 and 8.
6. Following Kohlbeck and Mayhew (2017), we have also run the main regressions considering two subsamples: (1) major shareholder and directors, and (2) affiliates. We find that RPTs are negatively related to audit fees in both subsamples. Results are available upon request.
7. We include a set of control variables considered by previous literature (Bona et al., 2019; Fan & Wong, 2005).

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Appendix

Table A 1. Variable definitions

FEE	The natural log of total audit fees
RPT	The aggregated monetary value of a firm's RPTs deflated by total assets
RPT_ DUMMY	Dummy variable that takes a value of 1 if the firm discloses at least one RPT during the year, and 0 otherwise
RPT_BUSINESS	The aggregated monetary value of a firm's business RPTs deflated by total assets
RPT_TONE	The aggregated monetary value of a firm's tone RPTs deflated by total assets
RPT_BUSINESS_DUMMY	Dummy variable that takes a value of 1 if the firm discloses at least one business RPT during the year, and 0 otherwise
RPT_TONE_DUMMY	Dummy variable that takes a value of 1 if the firm discloses at least one tone RPT during the year, and 0 otherwise
OWNER	Percentage of the major shareholder's voting rights
DIVERG	Degree of divergence between the dominant owner's voting and cash flow rights
LOSS	Dummy variable that takes the value of 1 if net income is negative, and 0 otherwise
VAR_ROA	Variance of annual return on assets over the previous year
INVRECEIV	Ratio of inventory and receivables to total assets
LEV	Ratio of total debt to total assets
QUICK	Ratio of current assets minus inventory to current liabilities
EBIT	Ratio of earnings before interest and taxes to total assets at year-end
SIZE	The natural logarithm of the market value of equity
FOREIGN	Dummy variable that takes a value of 1 if the firm reports foreign earnings, and 0 otherwise
CI	Percentage of the company's audit fees and its auditor's total audit fees in the industry market
SHARE	Percentage of the total amount of audit fees corresponding to an auditor in a particular industry and all audit fees in the same industry.
BIG4	Dummy variable that takes the value of 1 if the firm is audited by Deloitte, Price Waterhouse Cooper, Ernst &Young or KPMG, and 0 otherwise.
CHANGE	Dummy variable that takes a value of 1 if the firm changes auditor during the year, and 0 otherwise
FAM	Dummy variable that takes the value of 1 if the controlling shareholder of the firm is a family, and 0 otherwise
DIRINDEP	Percentage of independent directors
DIROWNER	Percentage of director ownership
BOARDSIZE	Number of members on the board
RANDD	Research and development expenditures to total assets
IND_ROA	Return on assets minus industry median
ROA	Return on assets

Table A 2. First-stage of Model 1

	First-stage of Model 1
DIROWNER	0.001***
	(2.788)
FAM	-0.001
	(-0.702)
OWNER	0.001**
	(2.264)
DIVERG	-0.001
	(-0.026)
LOSS	0.021**
	(2.208)
VAR_ROA	-0.001
	(-1.083)
INVRECEIV	0.115***
	(2.665)
LEV	0.076**
	(2.529)
QUICK	0.018***
	(2.613)
EBIT	-0.050
	(-0.802)
SIZE	-0.004
	(-0.744)
FOREIGN	-0.111***
	(-4.943)
CI	0.001**
	(2.007)
SHARE	0.001**
	(2.377)
BIG4	-0.115***
	(-4.367)
CHANGE	0.019*
	(1.723)
Constant	0.137
	(1.550)
Year effect	*Yes*
Industry effect	*No*
F-statistic	3.960**
N	1011

***, **, *: statistically significant at p .01, p .05 and p .10, respectively. In parentheses, t-statistics based on robust standard errors.

Table A 3. First stage of models 4, 7, and 8

Eq. A 1.:

$$RPT\_DUMMY_{it} = \alpha_o + \alpha_1 FAM_{it} + \alpha_2 DIRIND_{it} + \alpha_3 DIROWNER_{it} + \alpha_4 BOARDSIZE_{it} + \alpha_5 OWNER_{it} + \\ + \alpha_6 DIVERG_{it} + \alpha_7 SIZE_{it} + \alpha_8 LEV_{it} + \alpha_9 RANDD_{it} + \alpha_{10} IND\_ROA_{it} + \eta_k + \lambda_j + \varepsilon_i$$

	First stage of Model 4	First stage of Model 7	First stage of Model 8
FAM	0.027	0.046	-0.091
	(0.220)	(0.400)	(-0.780)
DIRINDEP	-0.009***	-0.009***	-0.004
	(-2.610)	(-2.780)	(-1.060)
DIROWNER	0.007**	0.005	0.013***
	(2.130)	(1.400)	(3.910)
BOARDSIZE	0.065***	0.040**	0.036**
	(3.260)	(2.140)	(1.970)
OWNER	0.012***	0.012***	-0.004
	(2.980)	(3.340)	(-1.080)
DIVERG	0.025***	0.016*	0.011
	(2.880)	(1.940)	(1.510)
SIZE	0.045	0.087***	0.147***
	(1.310)	(2.610)	(4.320)
LEV	0.550**	0.170	0.808***
	(2.000)	(0.660)	(3.140)
RANDD	-3.959	2.684	-8.606*
	(-0.880)	(0.610)	(-1.840)
IND_ROA	-0.812	-0.662	-1.658***
	(-1.460)	(-1.210)	(-2.900)
Constant	-0.174	-0.909*	-2.414***
	(-0.340)	(-1.890)	(-4.780)
Year effect	*Yes*	*Yes*	*Yes*
Industry effect	*Yes*	*Yes*	*Yes*
LR statistic	268.430***	249.810***	218.890***
N	1011	1011	1011

The dummy variables η_k and λ control for year and industry effects, respectively.
ε_i is the error term for firm i in year t.
***, **, *: statistically significant at p .01, p .05 and p .10, respectively. In parentheses, t-statistics base
robust standard errors.

Table A 4. Classification of related party transactions

Type of transaction	Major shareholders and directors	Affiliates
Loans/Borrowings	Tone	Business
Guarantees	Tone	Business
Consulting arrangements/legal or investment services	Tone	Tone
Leases	Business	Business
Related business activities	Business	Business
Unrelated business activities	Tone	Tone
Stock transactions	Tone	Business

Table 1. Descriptive Statistics

Variables	Mean	SD	25th percentile	Median	75th percentile
FEE	6.187	1.586	4.989	6.056	7.329
RPT	0.048	0.122	0.000	0.003	0.033
OWNER	29.802	19.493	14.320	24.390	44.768
DIVERG	3.674	6.408	0.000	0.000	5.440
LOSS	0.194	0.396	0.000	0.000	0.000
VAR_ROA	-0.814	6.503	-0.668	-0.066	0.200
INVRECEIV	0.243	0.170	0.104	0.219	0.359
LEV	0.311	0.190	0.152	0.295	0.447
QUICK	1.383	0.733	0.929	1.192	1.608
EBIT	0.090	0.089	0.041	0.080	0.124
SIZE	13.342	2.013	11.807	13.195	14.771
FOREIGN	0.915	0.278	1.000	1.000	1.000
CI	31.344	27.826	13.566	21.073	35.992
SHARE	29.940	15.578	17.352	26.737	42.215
BIG4	0.940	0.235	1.000	1.000	1.000
CHANGE	0.081	0.273	0.000	0.000	0.000

Table 2. Correlation Matrix

	RPT	*OWNER*	*DIVERG*	*LOSS*	*VAR_ROA*	*INVRECEIV*	*LEV*	*QUICK*
FEE	-0.076**	0.043	0.014	-0.105***	0.031	-0.267***	0.405***	-0.288***
RPT		0.155***	0.006	0.059**	0.022	-0.046	0.089***	-0.082***
OWNER			0.303***	0.027	-0.001	-0.080***	0.069**	0.067**
DIVERG				0.005	0.000	-0.135***	0.005	-0.046
LOSS					-0.219***	-0.091***	0.094***	-0.113***
VAR_ROA						0.036	-0.004	0.032
INVRECEIV							-0.496***	0.286***
LEV								-0.182***

	EBIT	*SIZE*	*FOREIGN*	*CI*	*SHARE*	*BIG4*	*CHANGE*
FEE	0.113***	0.754***	0.197***	0.019	0.200***	0.288***	-0.063**
RPT	0.107***	0.014	-0.111***	0.104***	-0.021	-0.159***	0.052*
OWNER	0.034	0.033	0.037	-0.039	0.067**	-0.080***	0.040
DIVERG	0.011	0.042	0.018	0.072**	-0.001	-0.071**	0.043
LOSS	-0.409***	-0.393***	-0.087***	0.097***	-0.010	-0.170***	0.008
VAR_ROA	0.126***	0.103***	-0.008	0.035	-0.087***	-0.020	0.045
INVRECEIV	0.081***	-0.248***	0.194***	-0.209***	-0.121***	0.023	-0.020
LEV	0.125***	0.264***	0.099***	0.147***	0.115***	-0.021	0.003
QUICK	0.053*	-0.177***	-0.013	-0.055*	-0.103***	-0.060**	-0.013
EBIT		0.373***	0.191***	-0.119**	-0.092***	0.177***	-0.029
SIZE			0.145***	0.009	0.159***	0.284***	-0.058*
FOREIGN				-0.119***	-0.159***	-0.005	-0.004
CI					-0.561***	-0.570***	0.046
SHARE						0.388***	-0.052*
BIG4							-0.051*

Table 3. Multicollinearity test

RPT	1.13
OWNER	1.18
DIVERG	1.05
LOSS	1.44
VAR_ROA	1.07
INVRECEIV	1.64
LEV	1.55
QUICK	1.17
EBIT	1.50
SIZE	1.87
FOREIGN	1.28
CI	2.36
SHARE	1.89
BIG4	1.71
CHANGE	1.01

Table 4. Related-party transactions and audit fees

Eq. 1:

$$FEE_{it} = \alpha_o + \alpha_1 RPT_{it} + \alpha_2 OWNER_{it} + \alpha_3 DIVERG_{it} + \alpha_4 LOSS_{it} + \alpha_5 VAR\_ROA_{it} + \alpha_6 INVRECEIV_{it} + \\ + \alpha_7 LEV_{it} + \alpha_8 QUICK_{it} + \alpha_9 EBIT_{it} + \alpha_{10} SIZE_{it} + \alpha_{11} FOREIGN_{it} + \alpha_{12} CI_{it} + \\ + \alpha_{13} SHARE_{it} + \alpha_{14} BIG4_{it} + \alpha_{15} CHANGE_{it} + \eta_k + \lambda_j + \varepsilon_i$$

		2SLS	**GMM**
		Second-stage	
	Predicted Sign	**Model 1**	**Model 2**
RPT	-	-7.737***	-0.831***
		(-2.636)	(-2.818)
OWNER	?	0.004	-0.002
		(-0.775)	(-0.786)
DIVERG	?	-0.005	-0.012**
		(-0.775)	(-2.082)
LOSS	+	0.323***	0.182*
		(3.271)	(1.803)
VAR_ROA	+	-0.007*	0.001
		(-1.583)	(0.131)
INVRECEIV	+	0.553	0.787**
		(1.112)	(2.616)
LEV	+	0.776***	0.086
		(2.383)	(0.358)
QUICK	-	0.074	-0.569***
		(0.963)	(-6.154)
EBIT	-	0.297	-0.357
		(0.545)	(0.669)
SIZE	+	0.193***	0.275***
		(3.933)	(6.362)
FOREIGN	+	-0.403	-0.132
		(-1.084)	(-0.604)

CI	+	0.006**	0.011***
		(1.887)	(4.118)
SHARE	+	0.012***	0.016***
		(2.283)	(3.876)
BIG4	+	-0.381	1.276***
		(-0.956)	(5.949)
CHANGE	-	0.106	-0.224**
		(0.985)	(-2.313)
Constant			1.816***
			(2.821)
Year effect		*Yes*	*Yes*
Industry effect		*No*	*Yes*
Hansen			55.510
			(0.456)
m2 test			-1.500
			(0.132)
Sargan test: p value		0.922	
Endogeneity test: p-value		0.000	
z1 test			29.030***
z2 test			43.090***
z3 test			8.430***
N		1011	1011

The dummy variables η_k and λ_j control for year and industry effects, respectively.
ε_i is the error term for firm i in year t.
Hansen, test of over-identifying restrictions.
m2, statistic test for lack of second-order serial correlation in the first-difference residual.
z1, Wald test of the joint significance of the reported coefficients.
z2, Wald test of the joint significance of time dummies
z3, Wald test of the joint significance of industry dummies.
***,**,*: statistically significant at p .01, p .05 and p .10, respectively. In parentheses, t-statistics base robust standard errors.

Table 5. Related-party transactions and audit fees. Sensitivity analysis

Eq. 2:

$$FEE_{it} = \alpha_o + \alpha_1 RPT\_DUMMY_{it} + \alpha_2 0WNER_{it} + \alpha_3 DIVERG_{it} + \alpha_4 LOSS_{it} + \alpha_5 VAR\_ROA_{it} + \alpha_6 INVRECEIV_{it} + \\ + \alpha_7 LEV_{it} + \alpha_8 QUICK_{it} + \alpha_9 EBIT_{it} + \alpha_{10} SIZE_{it} + \alpha_{11} FOREIGN_{it} + \alpha_{12} CI_{it} + \\ + \alpha_{13} SHARE_{it} + \alpha_{14} BIG4_{it} + \alpha_{15} CHANGE_{it} + \eta_k + \lambda_j + \varepsilon_i$$

Eq. 3:

$$FEE_{it} = \alpha_o + \alpha_1 RPT\_DUMMY_{it} + \alpha_2 OWNER_{it} + \alpha_3 DIVERG_{it} + \alpha_4 LOSS_{it} + \alpha_5 VAR\_ROA_{it} + \alpha_6 INVRECEIV_{it} + \\ + \alpha_7 LEV_{it} + \alpha_8 QUICK_{it} + \alpha_9 EBIT_{it} + \alpha_{10} SIZE_{it} + \alpha_{11} FOREIGN_{it} + \alpha_{12} CI_{it} + \\ + \alpha_{13} SHARE_{it} + \alpha_{14} BIG4_{it} + \alpha_{15} CHANGE_{it} + \alpha_{16} IMR + \eta_k + \lambda_j + \varepsilon_i$$

	Predicted Sign	**Model 3**	**Model 4**
RPT_DUMMY	-	-0.268**	-0.245**
		(-2.404)	(-2.243)
OWNER	?	-0.002	-0.011***
		(-0.544)	(-2.999)
DIVERG	?	-0.023**	-0.020***
		(-2.614)	(-3.688)

LOSS	+	0.284**	0.237***
		(2.168)	(2.722)
VAR_ROA	+	-0.010*	-0.020***
		(-1.835)	(-3.658)
INVRECEIV	+	0.840**	0.832**
		(2.344)	(2.533)
LEV	+	0.266	0.180
		(0.603)	(0.462)
QUICK	-	-0.592***	-0.348***
		(-4.987)	(-5.581)
EBIT	-	0.390	-0.069
		(0.697)	(-0.138)
SIZE	+	0.335***	0.393***
		(5.055)	(8.390)
FOREIGN	+	-0.293	-0.155
		(-1.201)	(-1.048)
CI	+	0.004*	0.005*
		(1.875)	(1.933)
SHARE	+	0.005*	0.013***
		(1.667)	(2.928)
BIG4	+	0.576**	0.141
		(2.254)	(0.797)
CHANGE	-	-0.240*	-0.135
		(-1.807)	(-1.255)
IMR	?		-0.968***
			(-4.093)
Constant		2.860***	0.842
		(2.795)	(1.088)
Year effect		*Yes*	*Yes*
Industry effect		*Yes*	*Yes*
Hansen		37.140	46.720
		(0.791)	(0.484)
m2 test		-1.520	-1.330
		(0.127)	(0.183)
z1 test		15.020***	26.970***
z2 test		20.130***	26.510***
z3 test		3.320***	6.250***
N		1011	1011

The dummy variables η_t and λ_i control for year and industry effects, respectively.
ε_{it} is the error term for firm i in year t.
Hansen, test of over-identifying restrictions.
m2, statistic test for lack of second-order serial correlation in the first-difference residual.
z1, Wald test of the joint significance of the reported coefficients.
z2, Wald test of the joint significance of time dummies
z3, Wald test of the joint significance of industry dummies.
***, **, *: statistically significant at p .01, p .05 and p .10, respectively. In parentheses, t-statistics base
robust standard errors.

Table 6. The monetary value (in thousands of €) of transactions by related party and type of transaction

RPT type	Major shareholders and directors	Affiliates
Loans/Borrowings	131,000,000	3,271,000
Guarantees	17,400,000	7,433,000
Consulting arrangements/legal or investment services	14,600,000	156,100
Leases	588,300	23,500
Related business activities	94,900,000	11,100,000
Unrelated business activities	15,900,000	1,873,000
Stock transactions	105,000,000	1,065,000

Table 7. Tone and Business classification

RPT type	Thousands of €
Business	118,270,000
Tone	285,400,000

Table 8. Related-party transactions and audit fees. Further analysis

	Predicted	Model 5	Model 6	Model 7	Model 8
RPT_BUSINESS	?	-1.289**			
		(-2.301)			
RPT_TONE	?	-1.890**			
		(-2.055)			
RPT_BUSINESS__DUMMY	?		-0.203*	-0.518**	
			(-1.868)	(-2.293)	
RPT_TONE_DUMMY	?		-0.230**		-0.233**
			(-2.429)		(-2.169)
OWNER	?	0.003	-0.006**	-0.14**	-0.008**
		(0.806)	(-2.251)	(-2.063)	(-2.250)
DIVERG	?	-0.016	-0.034***	-0.032**	-0.026**
		(-1.456)	(-2.903)	(-2.187)	(-2.585)
LOSS	+	0.264*	0.709***	0.090	0.062
		(1.680)	(7.739)	(0.467)	(0.622)
VAR_ROA	+	-0.022***	-0.017***	-0.001	-0.015****
		(-3.961)	(-4.195)	(-0.002)	(-3.039)
INVRECEIV	+	1.916***	-0.533	0.445	0.349
		(3.134)	(-1.382)	(0.910)	(0.760)
LEV	+	1.495	0.107	0.246	0.216
		(0.896)	(0.420)	(0.466)	(0.632)
QUICK	-	-0.352**	-0.064	-0.355**	-0.153
		(-2.624)	(-1.160)	(-2.375)	(-1395)
EBIT	-	0.424	1.769***	0.512	1.283**
		(0.444)	(3.545)	(0.553)	(2.132)
SIZE	+	0.516***	0.490***	0.152**	0.390***

		(11.106)	(11.940)	(2.151)	(7.106)
FOREIGN	+	-0.297	-0.130	-0.445	-0.058
		(-1.591)	(-0.859)	(-1.184)	(-0.244)
CI	+	0.016***	0.009***	0.018***	0.010***
		(3.063)	(2.648)	(3.280)	(2.913)
SHARE	+	0.021***	0.012***	0.028***	0.020***
		(2.901)	(2.949)	(4.588)	(3.984)
BIG4	+	1.278***	0.728***	1.041**	0.696***
		(3.281)	(2.711)	(2.559)	(2.924)
CHANGE	-	-2.505**	-0.567**	-0.445*	-0.209*
		(-2.185)	(-4.674)	(-1.666)	(-1.783)
IMR	?			-0.222	-0.916***
				(-1.729)	(-3.480)
Constant		2.126***	-0.882	3.957***	0.838
		(2.178)	(-1.060)	(2.992)	(0.762)
Year effect		*Yes*	*Yes*	*Yes*	*Yes*
Industry effect		*Yes*	*Yes*	*Yes*	*Yes*
Hansen		34.990	47.080	27.250	35.570
		(0.564)	(0.767)	(0.787)	(0.842)
m2 test		-1.160	-1.610	-1.420	-1.490
		(0.247)	(0.108)	(0.154)	(0.137)
z1 test		39.030***	30.760***	12.280***	19.760***
z2 test		65.000***	62.830***	12.400***	20.210***
z3 test		10.960***	11.460***	3.880***	3.060***
N		1011	1011	1011	1011

The dummy variables η_i and λ_t control for year and industry effects, respectively.
ε_{it} is the error term for firm i in year t.
Hansen, test of over-identifying restrictions.
m2, statistic test for lack of second-order serial correlation in the first-difference residual.
z1, Wald test of the joint significance of the reported coefficients.
z2, Wald test of the joint significance of time dummies
z3, Wald test of the joint significance of industry dummies.
***, **, *: statistically significant at p 0.01, p 0.050 and p 0.100, respectively. In parentheses, t-statistics based on robust standard errors.

Table 9. Related-party transactions and BIG4. Further analysis.

Eq. 4:

$$BIG4_{it} = \alpha_o + \alpha_1 RPT_{it} + \alpha_2 OWNER_{it} + \alpha_3 DIVERG_{it} + \alpha_4 BOARDSIZE_{it} + \alpha_5 SIZE_{it} + \alpha_6 LEV_{it} + \alpha_7 ROA_{it} + \eta_k + \lambda_j + \varepsilon_i$$

	Model 9
RPT	-6.953***
	(-5.489)
OWNER	0.005
	(1.136)
DIVERG	-0.020**
	(-2.024)
BOARDSIZE	0.119***
	(3.445)
SIZE	0.182**
	(2.140)
LEV	0.055
	(0.194)
ROA	1.999***
	(3.205)
Constant	-1.682
	(-0.613)
Year effect	*Yes*
Industry effect	*Yes*
Log pseudo-likelihood	572.001
Wald χ2	260.420***
Test Wald of exogeneity	6.190**
N	1011

The dummy variables η_k and λ_j control for year and industry effects, respectively.
ε_i is the error term for firm i in year t.
***, **, *: statistically significant at p .01, p .05 and p .10, respectively. In parentheses, t-statistics based on robust standard errors.