





#### **Opinion-shopping**

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## Opinion-shopping: firm versus partner-level evidence

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# **Opinion-shopping: firm** *versus* **partner-level evidence**

### BEATRIZ GARCÍA OSMA<sup>a</sup>, BELÉN GILL-DE-ALBORNOZ NOGUER<sup>b\*</sup>, ELENA DE LAS HERAS CRISTÓBAL<sup>c</sup> and SIMONA RUSANESCU<sup>d</sup>

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Employing Lennox's (2000) methodology on a uniquely long time series of Spanish companies' data, we find evidence of successful audit opinion-shopping through the firm switching decision. However, in contrast to Chen et al. (2016) in the Chinese setting, we find no evidence of successful opinion-shopping at the partner level. This supports the thesis that the audit market characteristics that are key to promote or deter opinion shopping might differ at the firm and partner level *within* a country, with consequences for audit quality. In addition, we provide evidence on the strategies that companies use to secure more favourable opinions. The results suggest that companies may prefer to opinion shop at the partner level, which is consistent with the argument that the costs and benefits associated with opinion-shopping are different at these two levels, and lead to different outcomes.

**Keywords:** audit opinion-shopping; audit firm switches; audit partner switches; modified audit opinion

JEL classification: M42; M48

#### 1. Introduction

Opinion-shopping may occur whenever an audit client dismisses (or retains) its incumbent auditor with the intention of obtaining a more favourable audit opinion (Lennox 2003). For decades, this phenomenon has been a concern for regulators (EC 2010; SEC 1988; U.S. Senate 1976). As DeFond and Zhang (2014) claim, analysing different settings is important to identify the market characteristics that promote or deter opinion-shopping behaviour. Indeed, successful opinion-shopping hinges crucially on two requirements that depend on market characteristics: (1) *ceteris paribus* incentives, there should be sufficient heterogeneity in audit quality, so that companies are able to find a more lenient auditor; and (2) the existent institutions (e.g. ownership structure, or internal controls) facilitate the switch of interest.

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So far, the academic evidence is limited and mostly focused on the firm-level; although there are claims that opinion-shopping may also happen at the partner level (PCAOB 2011: 9).<sup>1</sup> At the firm level, the literature suggests that successful opinion-shopping is more likely in settings with weak investor protection and inefficient enforcement mechanisms (DeFond et al. 2000; Chan et al. 2006), as well as in competitive audit markets (Newton et al. 2016). At the partner level, opinion-shopping has been studied only in China, where Chen et al. (2016) provide the first evidence. The Chinese audit market is big and dispersed, audit partners are relatively less experienced (Ke et al. 2015), and firm internal control mechanisms are weak; therefore, fierce competition among audit partners exists (Chen et al. 2016). The uniqueness of the audit Chinese setting, also characterized by high political intervention and strong business-government relationships (see, e.g. Chan et al. 2006),<sup>2</sup> provides opportunities for conducting novel research. However, it also compromises the generalizability of reported findings (Lennox et al. 2016).

In this paper, we exploit the Spanish setting where, in contrast to China, the characteristics of the market differ at the firm and partner level. At the firm level, although the concentration of the Spanish audit market in the big firms is higher than in China, the competition amongst firms is also intense (Ruiz-Barbadillo et al. 2016). In addition, there is a weak public oversight system for statutory audits (García-Osma et al. 2017), overall weak institutions (La Porta et al. 2000), and no substantive changes in the enforcement mechanisms have been experienced in the last decades (Christensen et al. 2013). These characteristics encourage opinion-shopping at the firm level. However, at the partner level the picture is substantially different. As opposed to the large Chinese market, like most European countries, the Spanish market is concentrated in a few geographically close offices. Also, audit firms have strong internal control mechanisms, which promote monitoring among partners; and the existing legislation and ownership structure of audit firms combines to significantly increase litigation risk for audit partners, who are jointly and severally liable in the case of audit failures that involve any partner of the firm. These characteristics of the Spanish setting at the partner level deter within-firm opinion shopping since competition amongst partners within the same audit firm is likely non-existent. This contrasts to the Chinese setting described by Chen et al. (2016) where partners do not face risk derived from other partners' performance within the firm. In this regard, while the Chinese setting has specific cultural and institutional characteristics that make it unique (Greif and Tabellini, 2010), Spain resembles other EU countries, where the requirements in terms of internal controls and external supervision of audit firms established by the EU Directive 2006/43 also apply (European Commission, 2010). Moreover, Spain is the fourth largest economy of the Euro zone (CIA 2014); and the partner identity is public since mandatory audits were established in 1988, which provides us with a uniquely long time-series of data.<sup>3</sup>

A further contribution of our study is that because we examine both firm- and partner-level opinion shopping, we are among the few studies that explore the contrasting firm *versus* partner effects of auditing (Bamber and Bamber 2009). We argue that there are at least three salient elements associated with opinion-shopping that make it a particularly interesting context to

<sup>&</sup>lt;sup>1</sup>We use the terms company and firm to refer respectively to the audit client and the audit firm.

<sup>&</sup>lt;sup>2</sup>As noted in Gul et al. (2010), domestic auditors used to be affiliated with local governments (or with government-related institutions, such as universities). The Auditor Disaffiliation Program (ADP) introduced in 1997 tried to sever these political ties; however, the evidence in Yang et al. (2001), and Wang et al. (2008) suggests that political influence over local auditors still exists after ADP.

<sup>&</sup>lt;sup>3</sup>In some member states, like the Netherlands or the UK, partner signature is mandatory only after it was established by article 28 of the 2006 Directive, which member states were required to adopt into their local laws at or before June 2008 (Blay et al., 2014).

explore these differential effects. First, opinion-shopping at the partner level likely benefits from lower visibility. Many jurisdictions require companies and/or auditors to inform about firm switches and the reasons that motivate them, while partner switches are less visible.<sup>4</sup> The second element relates to the relative net benefits of the switch. Switching benefits the company similarly at either level if it results in a more favourable opinion. However, switches are not without costs, and these are likely higher at the firm level because client-specific knowledge that is key to conduct the audit is lost in the switch, while the learning curve about the client's operations is less steep when only the partner changes (AICPA 1978, 1992; Bamber and Bamber 2009; GAO 2004). The third element refers to the structure of the audit market, which is not necessarily the same at the firm- and partner- levels.

The specificities of our setting, together with the contrasting effects of the switching decision at the firm *versus* the partner levels, lead us to formulate two main predictions. First, the differences in market features at the firm- and partner- levels suggest that there should be lower opportunities for successful opinion-shopping at the partner level. Therefore, we expect a higher incidence of opinion-shopping at the firm level relative to the partner level. Second, we predict a pecking order in the preferences of clients. In particular, because of its lower costs and visibility, we expect that partner-level opinion-shopping is preferred.

The results are consistent with our predictions. Using Lennox's (2000) methodology, we find successful opinion-shopping at the firm level. However, in contrast with Chen et al. (2016), our results indicate that, on average, partner-level opinion-shopping is not successful. The results hold using alternative definitions of the opinion shopping variables and after including a large set of covariates, like proxies of accounting quality and corporate governance structure. Regarding the opinion shopping strategies, we follow Chen et al. (2016) to identify companies that likely attempt to opinion shop, and we find that partner-level opinion shoppers have lower subsequent probability of firm switching. In contrast, the probability of partner switching is not related to the output of previous firm level attempts. These results are consistent with our second prediction: clients appear to attempt partner-level opinion shopping first.

We conduct several additional tests. First, we compare pre- and post-switch opinions, and see that firm switching positively relates to the probability of opinion upgrading (i.e. getting a clean report following a modified one). On the contrary, partner switching is negatively related with opinion upgrading. Second, we find that successful opinion-shopping at the firm level links with poorer subsequent earnings quality, while this is not the case of companies identified as opinion shoppers at the partner level.

We contribute to the literature in several ways. First, we add to the international research on opinion-shopping, where evidence is still scarce (DeFond and Zhang 2014), particularly at the partner level, where the only evidence is for the case of China, which may not generalize (Lennox et al. 2016). International evidence is necessary to identify the market characteristics that promote or deter opinion-shopping. Our evidence therefore adds to the emerging research studying partner effects in non-US samples (e.g. Garcia-Blandon & Argilés-Bosch, 2016; 2017, 2018; Gómez-Aguilar et al. 2018). Second, we respond to the calls for additional work on the differential effects of audit firm and partner characteristics on audit quality (Bamber and Bamber 2009; DeFond and Zhang 2014). This is the first study that analyses opinion-shopping at both firm and partner levels. We show that the auditor switching decision

<sup>&</sup>lt;sup>4</sup>For example, U.S. SEC Regulation S-K 304 requires registrants to provide specific disclosures when there is a firm switch. Similar requirements exist in Spanish standards, while no requirements exist for partner switches.

has different effects on audit quality at both levels. Opinion-shopping is pervasive at the firm level but not at the partner level, suggesting that the audit market structure is key in explaining audit quality. Additionally, analysing both levels provides novel evidence on the strategies used to secure more favourable audit opinions. As pointed by Dogson et al. (2020), we view audit partner transition as a complex process where auditors and clients gather information about preferences and expectations, leading to potentially optimal matches. Our results suggest that companies consider their opinion shop opportunities both at the firm and partner level, and that they first attempt switching partners. We thus add to the line of research which highlights the importance of studying the interplays between audit firm and partner effects (Huang et al. 2015). Our evidence suggests that audit markets may differ at the firm-and partner-level *within* a country, with consequences for audit quality. This is relevant for regulatory bodies, which must carefully articulate their regulatory efforts, keeping track of these two spheres.

#### 2. The audit institutional setting in Spain

Audits are mandatory for medium- and large-sized companies since Spain joined the EU (Law 19/1988). The Companies Law establishes that shareholders are responsible for appointing the external auditor, although managers effectively control the process, as is common in other countries (Dhaliwal et al. 2015). The Audit Law imposed mandatory firm rotation every nine years. Since then, the profession has witnessed several changes regarding rotation requirements, which we represent chronologically in Figure 1. In 1995, even before it could be enforced (see Carrera et al. 2007), the rotation rule was dropped by the Limited Responsibility Companies Law (Law 2/1995). Consequently, auditor rotation was *de facto* unregulated until the enactment of the Financial Law in 2002 (Law 44/2002). This law established both a partner-level and team-level mandatory rotation rule every seven years, slightly changed by a reform in 2010 (Law 12/2010), which only mandated partner rotation. Finally, the current Audit Law, enacted in July 2015 (Law 22/2015), mandates again firm rotation (every ten years) and retains mandatory partner rotation (now every five years), in accordance with EC Regulation 537/2014 (EC 2014). These rules are in place since 2017.



Figure 1. Auditor rotation requirements in Spain. The figure illustrates the main regulatory regimes in Spain since auditing was first regulated in 1988.

#### 2.1. Auditor reporting

Auditors issue a clean opinion whenever the financial statements show the true and fair view of a company's financial situation without any reservation. Otherwise, the opinion is modified, and the reasons explained.<sup>5</sup> Additionally, the auditor could issue an adverse opinion if the financial statements do not reflect the true and fair view; or a disclaimer of opinion when she is unable to give an opinion due to lack of information. Notwithstanding this, adverse opinions and disclaimers of opinion are rare, particularly among listed companies.

Prior work looks at the costs of qualified audit reports in Spain. This literature suggests that lenders and investors penalize companies that receive modified opinions. Spanish companies, as in other European countries, rely heavily on debt financing (Cascino et al. 2014), and thus, it is unsurprising that audit reports particularly impact lenders' decision-making (Durendez 2003; Durendez and Sánchez 2008; Pucheta and Vico 2008). Additionally, although early studies fail to find evidence of market reactions to modified reports (Del Brio 1998; Pucheta et al. 2004), recent research indicates that companies that receive qualified reports are penalized by capital markets (De Andrés et al. 2007; Martínez-Blasco et al. 2016).

#### 2.2. Audit market structure

Given clients' incentives, audit market characteristics play an important role in facilitating or constraining opinion-shopping. Next, we review the Spanish market to develop predictions on the opportunities available to opinion shop, which differ at the firm- and partner- levels.

#### 2.2.1. Between and within-firm heterogeneity

At the firm level, there is a high market concentration in the big firms, which has increased over time, as occurs in most European markets.<sup>6</sup> Despite concentration, Ruiz-Barbadillo et al. (2016) conclude that firm-level competition is high, which is reflected in the variation of market shares over time. Another sign of competition is the low audit fees.<sup>7</sup> For example, the audit work in 2014 was paid on average at only 67 EUR per hour (ICJCE 2014). Indeed, Spain has one of the lowest EU audit fees to turnover ratios, ranked 15 out of 19 countries studied in Le Vourc'h and Morand (2011: 147).

The prior literature on the market structure at the partner level in our setting is limited, and the work that exists does not provide conclusive evidence on audit partner effects (see, e.g. García-Blandón & Argilés-Bosch, 2016; 2017; 2018; Gómez-Aguilar et al., 2018).<sup>8</sup> Therefore,

<sup>&</sup>lt;sup>5</sup>As pointed out by DeFond and Zhang (2014), modified opinions are typically used in the literature as an alternative to GC in jurisdictions outside the U.S. (e.g., Vanstraelen 2000; Chan and Wu 2011).

<sup>&</sup>lt;sup>6</sup>Le Vourc'h and Morand (2011) report a mean EU Hirschman-Herfindahl Index by turnover of 2,709 (4,050 for Spain) in 2009, where HHI<1,000, 1,000<HHI<2,000, and HHI>2,000 indicate low, moderate, and high concentration, respectively. This is corroborated in our data: in 1995, 83.7 percent of our sample was audited by a big firm, up to 94 percent by 2017.

<sup>&</sup>lt;sup>7</sup>Companies provide audit fee data from 2003 onwards. We hand-collected this information for about 60% of our sample and find that the median of the ratio audit fees over sales remains around 0.01% for the period 2003-2016.

<sup>&</sup>lt;sup>8</sup>The work of Garcia-Blandón and Archilés-Bosch (2017) could be suggestive of partner effects. They study the effect of firm and partner tenure on audit quality, measured using the client's discretionary accruals. They find that, separately considered, neither firm nor partner tenure seem to play a relevant role as determinants of audit quality. However, the interaction of the two factors, firm- and partner- tenure, shows stronger effects on audit quality than both forms of tenure separately considered. Although jointly with the firm effect, their findings could also suggest the existence of a partner effect, i.e., partner tenure matters.

we briefly describe the market at the partner level in Table A.I.1. of Appendix I. As shown in Panels A and B, we identify 312 partners in our sample of 2,589 firm-year observations of non-financial companies during the period 1995-2016.<sup>9</sup> 244 of which work for big firms. The number of big-firms' partners is stable, while the number of non-big firms' partners considerably decreases over time, corroborating the increasing market concentration.<sup>10</sup> An interesting characteristic of the market are withdrawal rates, shown in Panel C. Around 68 percent of the partners identified (214) do not audit any company of the sample in 2016. We calculate the duration of these partners as the difference between the last and the first years that the partner audits a company in the sample plus one (PDuration). On average, partners stay 9.6 years auditing companies in the sample. This could be a sign of competition, since the professional career is usually longer, and it is difficult maintaining the position in the market of listed companies. It could also reflect voluntary withdrawals, since audit partners are well prepared and highly reputed professionals, who typically get better positions after a few years of practice, especially those working for the big firms and auditing listed companies (Fajardo 2002). To cast light on this, we investigate the professional situation of the 214 partners that left the sample before 2016. As presented in Panel D, more than 78 percent of the big firm partners who withdrew from the sample before 2016 were registered as non-practicing in 2017; while only 35.6 percent of the non-big firm partners were in the same situation. Next, we look for public and self-reported information of these partners and found reliable information for 76 of them (results un-tabulated): 5 had died; and 4 had retired; while the rest had other (better) occupations like managers of audit firms (26), members of boards and/or executives in other companies (37), or independent professionals (4). This evidence suggests that non-mandatory partner switches often relate to voluntary withdrawals, providing companies with an opportunity to exert pressure to appoint a more lenient partner. This is consistent with the view that auditors take into consideration the clients' inputs when assigning a new partner, such that partner assignment is 'typically not random' (Dogson et al. 2020: 91).<sup>11</sup> Another feature of the market is that partners are industry-specialized, which is consistent with the work of García-Blandón and Argilés-Bosch (2017).<sup>12</sup> Industry specialization is usually viewed as increasing audit quality. The descriptive evidence provided in Panel E indicates that most partners audit in just one industry, and only one partner has audited companies in all sample industries. Further, as shown in Panel F, the partners auditing more than one industry usually have a high proportion of their clients in one industry.

Two fundamental underlying assumptions to test for opinion-shopping at the partner level are that (i) sufficient heterogeneity exists in audit partner quality, and that (ii) this heterogeneity can be assessed by market participants.<sup>13</sup> Industry-specialization of the partner is visible to all market

<sup>&</sup>lt;sup>9</sup>The analyses included in the Appendix are based on the same sample as the subsequent empirical analyses (see Table 1 and section 4.1. for further detail on the sample selection process).

<sup>&</sup>lt;sup>10</sup>All the auditor switches included in the sample are non-mandatory. We found no cases of big firm to nonbig firm switches, and only one big firm partner later created his own (non-big) firm.

<sup>&</sup>lt;sup>11</sup>Dogson et al. (2020) conduct semi-structured interviews with audit partners and explores the process of replacing the audit partner. They document that replacing the audit partner is a complex process that involves internal planning and multiple steps, where a variety of high-ranking individuals gather information about the client's preferences and expectations.

<sup>&</sup>lt;sup>12</sup>Industry considerations are fundamental. According to its transparency report, PwC is internally organized by sectors (PwC 2016), and KPMG has industry experts for the more significant sectors (KPMG 2016). Deloitte and EY also assign teams to audits considering their industry expertise and knowledge (EY 2016: 13; DT 2016: 6). <sup>13</sup>In essence, each audit firm can act as a market, as each partner must allocate their audit knowledge and

<sup>&</sup>lt;sup>13</sup>In essence, each audit firm can act as a market, as each partner must allocate their audit knowledge and effort to a limited number of clients. Given the evidence in Dogson et al. (2020) and Chen et al. (2016), it seems reasonable to assume that competition among partners for certain clients may exist in some settings.

Table 1. Sample selection process.

	14
Audit sample	
Firm and partner data plus audit opinion in <i>t</i> and <i>t</i> -1 of non-financial companies with listed equity.	4,250
Period 1990-2016.	
- Observations of years 1990–1994	
(deleted for the firm and partner tenure measurement)	(638)
- Observations with financial data not available or not comparable	(631)
- Observations audited by independent partners	(41)
- Observations audited by non-big firms with only one partner in the sample	(151)
- Forced firm switches	
(mergers and acquisitions of audit firms)	(83)
- Mandatory partner rotations	
(partner switchers after 2002 where the salient partner's tenure $>=7$ )	(93)
- Non-compliers with the mandatory rotation rules	
(non-partner switchers after 2002 where the partner's tenure >7)	(24)
Total sample	2,589
Voluntary partner switches	(315)
Firm level opinion shopping sample	2.274
Voluntary firm switches	(165)
Partner level opinion shopping sample	2,424

participants. Our evidence of industry specialization is supportive of this view, as this is also a dimension that clients can easily observe. To provide further evidence on this issue, in Table A.I.2, we replicate Gul et al. (2013: 2008). We find that there is a significant partner effect above and beyond the client- and firm- effects. Recent studies provide similar evidence in Taiwan (Chi et al. 2009; Chi and Chin 2011), Sweden (Zerni 2012), and China (Knechel et al. 2015, Hsieh and Lin 2016). Overall, our evidence indicates that differences in audit quality exist across partners. Given heterogeneous partner quality in the market, opportunities exist to match clients and partners, both for opportunistic and optimal reasons. In other words, because not all clients are equal, the fact that partners are also not equal may lead to optimal outcomes due to good partner-client matches, but also, to sub-optimal outcomes due to bad matches.

#### 2.2.2. Audit firms ownership and management rules

Chen et al. (2016) build their argumentation around the idea that the risk faced by partners is minimal and, thus, there are low incentives for partners to monitor each other. They further argue that the Chinese audit market is populated by firms with weak internal quality controls. However, Ke et al. (2015) find that big 4 firms in China assign their audit partners with less experience to companies that are listed only in China, and Lennox et al. (2016: 545), acknowl-edge that the 'findings for China may not generalize to other countries.' Indeed, that setting is unique and many European economies, like Spain, are drastically different.

Specifically, the audit firms under study differ from the Chinese setting in at least three main features. First, they are owned by the partners (not only active ones, but also recently retired ones).<sup>14</sup>

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<sup>&</sup>lt;sup>14</sup>As examples, according to their transparency reports of 2016, current partners own over 50 percent of stock of big firms, from a maximum of 90.45 percent in PwC, to a minimum of 54.04 percent in KPMG (Deloitte at 63.39 percent and EY at 62.53 percent) (Deloitte 2016; PwC 2016).

This is a salient feature in terms of legal responsibility. In case of audit failure, the signing partner and the firm are 'jointly and severally liable' (Audit Law, art. 26.3). This ownership structure creates incentives for partners to monitor each other (Levin and Tadelis 2005). This also likely means that partners who are close to retirement are not affected by horizon problems and do not become more agreeable later in their careers. Second, their offices are geographically close, and prior work shows that geographic proximity increases audit partner monitoring efficiency (Francis et al. 2017). Third, they have strong internal controls. In this regard, as early as in 1991, the Technical Auditing Standards required the implementation of internal controls and established that audit corporations would supervise them. This requirement was further developed by the Institute of Chartered Accountants (ICAC) (Resolution 16/03/1993). Since then, several regulations have established minimum requirements throughout Europe in terms of internal controls and their external supervision. A key regulation is the EU Directive 2006/43, which introduced the compulsory external review of internal controls by independent bodies, at least every six years. According to the transparency reports prepared by big audit firms, reviews of internal controls and procedures, with particular emphasis on evaluating partner rotation and independence, are conducted on an annual basis, with specialized internal teams reviewing all the procedures and interfacing with external experts to detect and resolve any internal control weaknesses.

#### 3. Related literature and hypotheses

Because of the expected negative consequences of modified reports (Bamber and Stratton 1997; Chen et al. 2013; Choi and Jeter 1992; Firth 1980; Gul 1987; Kausar et al. 2009; Taffler et al. 2004), managers are predicted to pressure auditors to issue clean opinions; and, if that fails, they might switch auditors to try to obtain a clean opinion (Lennox 1998; Teoh 1992). This is known as opinion-shopping behaviour, which impairs auditor independence if the companies' pressure leads the auditor to issue a more favourable opinion than she would have issued otherwise. Despite some evidence that it does not necessarily impair auditor independence and audit quality (Lu 2006), regulators worldwide have recurrently discussed the need to implement measures that reduce opinion-shopping (EC 2010; PAOBC 2011, 2013; US Senate 1976). Most literature focuses on this phenomenon at the firm level, but recent research suggests that it could also happen at the partner level. Next, we review this literature and develop our hypotheses.

#### 3.1. Firm level opinion shopping

Modified opinions are associated with subsequent firm switches (Chow and Rice 1982; Citron and Taffler 1992; Craswell 1988; DeFond and Subramanyam 1998; Krishnan 1994; Krishnan and Stephens 1995; Smith 1986), suggesting that companies may change auditors to avoid modified reports (Dye 1991; Matsumura et al. 1997). Consistent with this view, prior work shows that managers attempt to avoid modified reports by switching to local or small firms, which are more likely to issue clean reports (Chan et al. 2006; Davidson et al. 2006; DeFond et al. 2000; Gómez-Aguilar and Ruiz-Barbadillo 2003). However, this does not necessarily mean that auditors acquiesce to opinion-shopping. Indeed, there is no clear evidence that companies get more favourable opinions *after* the auditor switches (Chow and Rice 1982; Smith 1986).

The work of Lennox (2000) represents a turning point in this literature. He defines opinion-shopping as both switching and retaining strategies that minimize the probability

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of receiving a modified report. This approach allows questioning the conclusion that opinionshopping is futile as derived from the lack of evidence in studies comparing pre- and postswitching opinions, and it has been successfully used to analyse opinion-shopping in various settings.<sup>15</sup> For example, Lennox (2003) and Carcello and Neal (2003) provide evidence consistent with audit opinion shopping in the U.S. during pre-SOX years; Newton et al. (2016) show that clients engage in internal control opinion shopping activities; and Chung et al. (2019) find that distressed companies successfully engage in opinion shopping to avoid going concern audit opinions.

Opinion-shopping hinges critically on two conditions. The first one is that there is sufficient heterogeneity in audit quality. Faced with heterogeneous audit quality, companies can identify more lenient auditors, as is the case in our setting. The second condition is that companies can influence the appointment of auditors, i.e. once a more lenient auditor is identified, the existing institutions facilitate the switch of interest. Accordingly, firm level opinion shopping is likely in settings characterized by low investor protection and weak enforcement mechanisms, which is the case of Spain. Also, market competition has been found to be a key aspect that promotes opinion-shopping as competition increases the probability of auditor switching or the threat of auditor switching (PAOBC, 2011; Newton et al. 2016).

In sum, given the characteristics of the market under study, with high between firm competition and weak institutions and enforcement mechanisms (as described in section 2.2.1.), we expect that firm-level opinion shopping is pervasive, and formulate our first hypothesis as follows:

H1: Companies successfully engage in firm-level opinion-shopping.

#### 3.2. Partner level opinion shopping

The evidence of opinion-shopping at the firm level cannot be extrapolated to the partner level. Key market features that determine the likelihood that auditors give in to clients' pressures are not necessarily the same at the firm and partner levels. The seminal study on opinion-shopping at the partner level, namely Chen et al. (2016), uses the Lennox's methodology and shows that companies successfully pressure audit firms into removing non-acquiescent partners in China. These authors suggest that opinion-shopping occurs at the partner level because the market is dispersed (i.e. offices are geographically far from each other), and firm-level internal control mechanisms are weak, lowering the incentives of partners to monitor one another. As described in section 2, these two characteristics are not present in the Spanish market, which is thin and concentrated in a reduced number of geographically close offices and where audit firms have strong internal control mechanisms that promote monitoring among partners. In fact, Chen et al. show that the pervasiveness of partner-level opinion-shopping is higher when firms are organized as corporations than when they adopt the partnership model of ownership, which resembles the ownership model of the audit firms in Spain, owned by partners.

Therefore, despite the existing partner heterogeneity, the characteristics of the Spanish market do not favour competition among partners, on the contrary they create incentives for

<sup>&</sup>lt;sup>15</sup>Therefore, recent opinion shopping literature implicitly builds on the notion studied in early research that modified opinions are associated with subsequent firm switches, in that the methodology to detect opinion shopping proposed by Lennox (2000) models the switching decision because of the probability of obtaining a clean audit report, that, in turn, has prior opinions as a major determinant.

monitoring among them. Consequently, we argue that it is unlikely that auditors give in to the clients' attempts to opinion shop within the same audit firm. This should limit shopping for clean opinions at the partner level. We formulate our second hypothesis as follows:

H2: Companies do not successfully engage in partner-level opinion-shopping.

#### 3.3. Firm versus partner level opinion-shopping

We expect that, from the client's perspective, the net benefits of opinion shopping at the partner level are greater than at the firm level, for at least two reasons. First, the visibility of the auditor switch is greater at the firm level.<sup>16</sup> Even when the partner identity is public, partner switches do not garner as much attention from market participants as firm switches. Auditor switches can have adverse capital market effects (e.g. Einchenseher et al. 1989; Fried and Schiff 1981; Kim and Park 2006; Smith and Nichols 1982). To the extent that partner switches are opaque, companies might prefer to shop for a more favourable opinion within the same firm, thereby avoiding these adverse market effects of the switch while still receiving the benefit (the greater probability of a clean opinion). According to the recent work of Dogson et al. (2020: 90), partner transitions are complex and time-intensive, such that partners likely 'begin *auditioning* for the next engagement partner role well in advance of the actual transition.' The lack of clear guidance in auditing standards on how to manage and implement rotations provides 'an opportunity for firms to seek client input during the rotation process.' Opaqueness would be even greater when partners rotate because of internal firm procedures, partner voluntary withdrawals, retirement, illness, etc.<sup>17</sup> In those cases, managers do not actively seek the switch, but they can still influence the outcome, effectively using it to find a more lenient partner, under the cover of what can be presented to capital markets not as an attempt to opinion-shop, but rather, as a rotation that is not initiated to replace a conservative auditor. Such within-firm switches are not uncommon in long-term client-firm relationships, which may span decades, and they provide opportunities to search for a partner that better fits managerial needs. Companies may also pressure the firm to retain their current partner or team members; opacity being always greater when managers' opinion-shop by not switching auditors. This is even truer at the partner level. Under Spanish law, partner retention is not discussed in the Annual General Meeting, while firm retention decisions must be a point in the agenda.

The second consideration relates to the costs associated with the switch, which are expected to be lower at the partner level. The salient cost associated with a switch is the loss of client-specific knowledge developed over auditor tenure (Beck and Wu

<sup>&</sup>lt;sup>16</sup>As an example, on 2015 December 4th, Spanish newspapers reported that Telefónica, one of the largest telecom companies in the world, would rotate their audit firm (EY), in 2017 to comply with the mandatory rotation rules. The company invited bids by PwC, Deloitte and KPMG (Navas 2015). Telefónica changed its EY's partner in 2010, and we are not aware of any public announcements, or media attention.

<sup>&</sup>lt;sup>17</sup>In our setting, these events are endogenous in that our partners choose when to retire, and this is unlikely to come as a surprise/shock to neither the partner nor the client. In fact, even at the time of first engaging the partner, horizon concerns are likely discussed, given that auditor engagement is expected to last, at least, for three years. However, these events are opaquer because there is need to rotate the auditor, and therefore, any client unhappiness with the current partner need not be explained away, in the manner it would be needed if rotation happened before scheduled. In our setting, few rotations would be truly exogenous (see details of our anecdotal hand-collected evidence on Appendix I, where we detect some cases of deaths that took place *after* retirement.)

2006).<sup>18</sup> As stated in Bamber and Bamber (2009), a significant part of this knowledge resides on the audit team, the audit procedures, the audit methodology and the working papers created in prior engagements, all of which are generally available to the partners of the same firm. When the firm switches, the costs of creating these intangible resources are split between the client and the firm, meaning that it is costlier to switch firms than partners not only for the auditor but also for the client.

Thus, *ceteris paribus*, given its higher net benefits, companies may first attempt to opinionshop at the partner level. Differently stated, if managers can equally influence partner and firm changes, it is likely that they would prefer to change the partner. This may happen, for example, if the current partner retires or leaves the firm and the company must either (i) choose a new partner in the current firm, or (ii) find a new firm-partner combination. Admittedly, it is unlikely that the client chooses (i) with the same probability than (ii).<sup>19</sup> This is because the option to change the partner (option i) would be less costly and visible, and would give the manager two opportunities to find a more lenient auditor: first, accept a new partner within the firm, retaining the firm for an audit cycle, and then, if the new partner is not as lenient as expected, the client could still find a new firm-partner combination. This argument implies a certain strategy and timing and leads us to expect that firm switching activity increases when the company has fewer opportunities to opinion shop at the partner-level. Accordingly, we formulate the following hypothesis:

H3: The probability of a firm switch increases as partner-level opinion-shopping opportunities decrease.

#### 4. Research design

Following Lennox (2000), we compare the predicted probabilities of receiving a modified opinion under different switching decisions. Opinion-shopping is consistent with a company switching (retaining) auditors when the expected probability of receiving a modified opinion is lower if switching (retaining) than if retaining (switching). This methodology is implemented in two stages. In the first stage, we estimate the audit reporting model as specified in equation (1):

$$\Pr(OP_{i,t} = 1) = \alpha_0 + \alpha_1 LagOP_{i,t} + \alpha_2 SwitchVar_{i,t} + \alpha_3 SwitchVar_{i,t} * LagOP_{i,t} + \alpha_4 Roa_{i,t} + \alpha_5 Loss_{i,t} + \alpha_6 Leverage_{i,t} + \alpha_7 CR_{i,t} + \alpha_8 ListAge_{i,t} + \alpha_9 Size_{i,t} + \alpha_{10} ArInv_{i,t} + \sum_{j=11}^{18} \alpha_j SwitchVar_{i,t} * X_{i,t} + Year effects$$
(1)

+ Industry effects,

All the variables are defined in Appendix II. Model (1) is a probit regression that we estimate first separately at the firm and partner levels, and second including the two auditor switching variables.  $OP_{i,t}$ , equals 1 when company *i* receives a modified opinion in year *t*, and 0 otherwise. All non-clean reports are considered modified. The auditor switching variable, *SwitchVar*<sub>*i,t*</sub>, is

<sup>&</sup>lt;sup>18</sup>Most prior work links longer tenures with higher competence (e.g., Johnson et al. 2002; Myers et al. 2003).

<sup>&</sup>lt;sup>19</sup>We expect that with probability p the client retains the firm and chooses a new partner, and with probability g, it looks for another firm-partner combination, where p > g, and p + g = 1.

defined as  $SwitchP_{i,t}$  or  $SwitchF_{i,t}$ , which equal 1 when company *i* in year *t* switches the partner or the firm respectively, and 0 otherwise. The sample does not contain observations where the partner remains and the firm switches. Therefore, the reference group are cases where neither the partner nor the firm switch.

Model (1) includes the controls in Chen et al. (2016),<sup>20</sup> capturing the main drivers of auditor's opinions (see Habib 2013). We control for the persistence in audit opinion with the prioryear audit opinion (*LagOP*) (Monroe and Teh 1993; Krishnan et al. 1996; Lennox 1999). The company's performance is controlled with *Roa* calculated as net income over total assets; and *Loss*, a dummy variable that equals 1 when the company has an operating loss, and 0 otherwise. Poorly performing companies are more likely to receive a modified opinion (DeFond et al. 2002). We additionally control for liquidity and financial condition with *Leverage* (total debt over total assets), *CR* (current assets over current liabilities), *ListAge* (number of years since the company's equity is listed), *ArInv* (accounts receivable plus inventory over total assets), and *Size* (natural logarithm of sales). Large, established companies with more cash, greater liquidity and lower leverage have more resources to stave off bankruptcy, and are less likely to receive a modified opinion (DeFond et al. 2002; Carey and Simnet 2006). The model includes year- and industryfixed effects. We cluster standard errors by company to control for time series dependence (Gow, Ormazabal and Taylor 2010).

The interaction term between the auditor switching variables and *LagOP* tests whether the switching significantly affects the persistence of the audit opinion; and the interaction terms between the auditor switching variables and the control variables (*SwitchVar* \* X) test whether the association between the control variable (X) and the probability of receiving a modified opinion significantly differs between the switching and the non-switching companies.

Following Lennox (2000) and Chen et al. (2016), we then calculate two pairs of opinionshopping variables, *OpnShopF / OpnShopP* and *OpnShopF2 / OpnShopP2*, from the estimation of model (1) both at the firm and partner levels separately and including the two auditor switching variables. The first pair of variables are calculated as the difference between the predicted modified opinion probabilities conditioned on the switching decision. Thus, OpnShopF is the difference between the predicted probability of receiving a modified opinion conditioned on a firm switch occurring, and the predicted probability of receiving a modified opinion conditioned on not switching the auditor,<sup>21</sup> OpnShopP is calculated identically but considering partner-level switching (SwitchP). The second pair of opinion shopping variables are calculated the difference between the predicted response as variables. i.e.  $OpnShopF2_{i,t} = OP_{i,t}^{*1F} - OP_{i,t}^{*0F}$  and  $OpnShopP2_{i,t} = OP_{i,t}^{*1P} - OP_{i,t}^{*0P}$ .<sup>22</sup> The intuition underlying this approach is that opinion-shopping occurs if companies: (1) switch auditors when the probability of receiving a modified opinion is lower if switching; and (2) do not switch when the probability of receiving a modified opinion is lower if retaining. These variables

<sup>&</sup>lt;sup>20</sup>We do not include stock performance and related-party lending because this data is available only for a small subsample; and cash flow from operations (CFO) because the cash flow statement is available only after 2005 for consolidated financial statements, and 2008 for individual financial statements. Results including a measure of CFO obtained indirectly from the balance sheet and income statement data, over total assets, are qualitatively the same.

total assets, are qualitatively the same. <sup>21</sup>That is,  $OpnShopF_{i,t}$  equals to  $Pr(\widehat{OP}_{i,t} = 1 SwitchF_{i,t} = 1) - Pr(\widehat{OP}_{i,t} = 1 | SwitchF_{i,t} = 0)$  when the model is estimated separately at the firm level, or to  $Pr(\widehat{OP}_{i,t} = 1 | SwitchF_{i,t} = 1 \& SwitchP_{i,t} = 0)) - Pr(\widehat{OP}_{i,t} = 1 | SwitchF_{i,t} = 0 \& SwitchP_{i,t} = 0)$  when we estimate only one audit reporting model. For clarity, note that clients may retain the same partner during an audit firm switch (see, e.g., Cheng et al. 2019).

<sup>&</sup>lt;sup>22</sup>The relation between the predicted response variable and the corresponding predicted probability is as follows:  $[\Pr(\widehat{OP}_{i,t} = 1) | SwitchVar_{i,t} = d] = \Phi[OP_{i,t}^{*dVar}]$ , where d = 0 or 1 and Var = F or P.

increase (decrease) as the probability of getting a modified opinion by switching (retaining) auditor increases. Accordingly, a company that tries to opinion-shop would prefer switching the more negative the opinion shopping variable is and would prefer retaining the auditor as it gets more positive. Therefore, if opinion-shopping is a pervasive activity, the relation between the opinion-shopping variable and the observed auditor switching activity should be negative. This is tested in the second stage of Lennox's methodology, where we estimate the probit regression presented in model (2).

$$SwitchVar_{i,t} = \alpha_0 + \alpha_1 OpnShopVar_{i,t} + \alpha_2 Roa_{i,t} + \alpha_3 Loss_{i,t} + \alpha_4 Leverage_{i,t} + \alpha_5 CR_{i,t} + \alpha_6 ListAge_{i,t} + \alpha_7 Size_{i,t} + \alpha_8 ArInv_{i,t} + \alpha_9 Growth_{i,t} + \alpha_{10} TenureP_{i,t} + \alpha_{11} TenureF_{i,t} + \alpha_{12} Pexper_{i,t} + \alpha_{13} CIAF_{i,t}$$
(2)  
+  $\alpha_{12} CIAP_{i,t} + Year effects + Industry effects + \varepsilon_{i,t}$ 

Successful opinion-shopping would be consistent with a negative and significant  $\alpha_1$  in model (2). Following Lennox (2000) and Chen et al. (2016), this model includes controls for the client's characteristics (*Roa, Loss, Leverage, CR, ListAge, Size, ArInv*, and *Growth*); and for factors representing switching costs, including: the tenure of both the partner and the audit firm, calculated as the number of years since the firm, or the partner, audits the company up to year *t*-1 (*TenureF* and *TenureP*); *Pexper* a dummy variable that equals 1 if the partner is an industry expert, and 0 otherwise. We consider a partner to be an expert in a specific industry and year combination if she audits at least three companies within that industry-year; and two variables, *CIAF* and *CIAP*, that represent the importance of the client for the audit firm and partner, respectively. Switching costs increase with tenure because knowledge of the client increases with tenure; and they also increase as the importance of the client for the auditor increases. In contrast, if the new partner is an industry expert the switching costs are lower (Chi and Chin 2011; Hsieh and Lin 2016).

#### 4.1. Sample selection

Table 1 summarizes our sample selection process. We focus on non-financial companies with listed equity. Audit partner identity is hand-collected from the audit reports. The initial sample with available data on audit firm and partner and auditor opinion consists of 4,250 company-year observations for the period 1990-2016. To obtain reliable measures of tenure, we discard the first five years of data (638 observations) and base our subsequent tests on the 22-year period 1995-2016.<sup>23</sup> We lose 631 observations in the merge of the auditing and financial data, which comes from SABI (Bureau Van Dijk). For the sake of comparability with prior opinion

<sup>&</sup>lt;sup>23</sup>This sample represents a high percentage of the target population, namely non-financial Spanish companies with listed equity. To illustrate, in December 2015 the number of non-financial Spanish companies with listed equity was 111, 103 of which are included in our sample. The sample is larger than in other studies at the partner level based on Spanish non-financial listed companies, which focus on shorter periods: García-Blandón and Archilés-Bosch (2016) use a sample of 747 observations, belonging to 83 companies, for the nine-year period 2002-2010; García-Blandón and Archilés-Bosch (2017) use a sample of 680 observations, belonging to 102 companies, for the period 2005-2011; and García-Blandón and Archilés-Bosch (2018) employ a sample of 816 observations, belonging to 101 companies, for the period 2005-2013; finally, Castillo-Merino et al. (2020) use a sample of 1,063 firm-years belonging to a range between 97 and 110 unique firms for the period 2005 and 2016.

shopping studies we additionally eliminate: (1) observations audited by independent partners (i.e. who do not work for any audit firm) or by non-big firms with only one partner auditing in the sample (41 and 151 observations respectively); (2) 83 observations with forced firm switches derived from audit firm mergers and acquisitions; (3) 93 observations with mandatory partner rotation (partner switchers after 2002 where the salient partner's tenure is higher than 6); and (4) 24 observations where the mandatory rotation rules are broken. This process results in a final sample of 2,589 observations belonging to 270 individual companies. The sample contains 315 partner switches and 165 firm switches, all non-mandatory. Thus, when model (1) is estimated separately at the firm and partner levels, the partner or firm switches are eliminated accordingly and the sample consists of 2,274 and 2,424 observations respectively.

#### 5. Main results and discussion

Modified opinions and switching rates over the sample period are plotted in Figure 2; while the descriptive statistics of our main research variables are presented in Table 2. The sample contains 463 observations where the audit report is modified (17.9 percent).<sup>24</sup> As expected, this rate is higher in earlier years and during the crisis, in line with prior work in Spain (e.g. Ruiz-Barbadillo et al. 2006).<sup>25</sup> Partner switches are more common than firm switches, consistent with firm switches being costlier. The average switching rates, 7.3 (13.0) percent at the firm (partner) level, are lower than the 12 and 36 percent shown by Chen et al. (2016) in the Chinese market, further suggesting that significant differences exist between the two markets.<sup>26</sup>

To reduce the impact of outliers, we winsorize all continuous variables at 1 and 99 percent.<sup>27</sup> Sample firms are large, listed companies, with mean (median) sales of 2,053.6 (235.5) million euros. On average, they are financially healthy and profitable. We also observe that the average partner (firm) tenure is 3.338 (6.588) years. Table 3 presents the Pearson correlations. Spearman correlations offer similar results. Firm switching (*SwitchF*) is positively and significantly correlated with both *OP* and *LagOP* ( $\rho = 0.07$  and  $\rho = 0.09$ ), while partner switching (*SwitchP*) is not significantly correlated with the audit opinion.

#### 5.1. Audit reporting model

We present the results of the audit reporting model estimation in Table 4. In column (1) we show the baseline model. Columns (2) and (3) show the results obtained when model (1) is estimated separately at the firm and partner levels; and column (4) shows the results including the two auditor switching variables. Audit opinions are strongly persistent, as *LagOP* is positive and significant in all the estimations. In columns (2) and (4) we see that the interaction of *SwitchF* and

<sup>&</sup>lt;sup>24</sup>Only one firm-year observation is classified as adverse/disclaimer of opinion. These modified opinions belong to 129 individual companies. Therefore, 47.8% of the individual companies in the sample presented at least one modified audit opinion.

<sup>&</sup>lt;sup>25</sup>The rates of modified opinions in other studies in the Spanish setting are comparable: 18 percent in García-Blandón and Archilés-Bosch (2016) in the period 2002-2010; and 14 percent in García-Blandón and Archilés-Bosch (2017) and García-Blandón and Archilés-Bosch (2018) in the periods 2005–2011 and 2005–2013 respectively.

<sup>&</sup>lt;sup>26</sup>In their sample of Spanish non-financial listed companies with financial problems for the period 1998-2010, Gómez-Aguilar et al. (2018) report the same firm switching rate (7.3 percent), but a higher partner switching rate (23.6 percent). However, their study does not exclude mandatory rotations. <sup>27</sup>Results are qualitatively the same if we do not winsorize. The mean of the Variance Inflation Factors

<sup>&</sup>lt;sup>27</sup>Results are qualitatively the same if we do not winsorize. The mean of the Variance Inflation Factors (VIF) in the estimation of our models is between 3.84 and 8.27, indicating that multicollinearity is not a concern.



Figure 2. Auditor switching and modified opinion rates per year. The graph plots the rates of partner and firm switching as well as the rate of modified opinions per year over the sample period (1995-2016).

Variable	Ν	Mean	Median	Std. Dev.	P25	P75
OP	2,589	0.179	0.000	0.383	0.000	0.000
SwitchF	2,274	0.073	0.000	0.259	0.000	0.000
SwitchP	2,424	0.130	0.000	0.336	0.000	0.000
Roa	2,589	0.036	0.037	0.085	0.009	0.070
Loss	2,589	0.141	0.000	0.348	0.000	0.000
Leverage	2,589	0.567	0.587	0.224	0.418	0.727
CR	2,589	2.124	1.261	4.029	0.939	1.822
ListAge	2,589	14.348	13.000	7.261	9.000	20.000
Sales (thousand $\epsilon$ )	2,589	2,053,662	235,540	6,524,024	48,607	953,178
Size	2,589	12.229	12.370	2.432	10.792	13.767
ArInv	2,589	0.326	0.300	0.222	0.140	0.485
Growth	2,589	0.159	0.060	0.626	-0.033	0.172
TenureP	2,589	3.338	3.000	2.277	1.000	5.000
TenureF	2,589	6.588	6.000	4.573	3.000	9.000
Pexper	2,589	0.032	0.000	0.175	0.000	0.000
CI <sub>AF</sub>	2,589	0.103	0.031	0.223	0.017	0.054
$CI_{AP}$	2,589	0.629	0.515	0.325	0.335	1.000

Table 2. Descriptive statistics of research variables.

Variable definitions are in Appendix II.

*LagOP* is negative and significant. This is in line with Lennox (2000) and suggests that a firm switch reduces the persistence of the audit opinion, consistent with opinion-shopping activity. However, in contrast with Chen et al. (2016), we do not observe the same result at the partner

Table 3. Correlations matrix.

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1)	OP	1.00																
(2)	LagOP	0.61	1.00															
(3)	SwitchF	0.07	0.09	1.00														
(4)	SwitchP	0.01	-0.01	-0.10	1.00													
(5)	Roa	-0.31	-0.22	-0.02	0.01	1.00												
(6)	Loss	0.31	0.25	-0.01	0.01	-0.50	1.00											
(7)	Leverage	0.23	0.18	0.03	0.04	-0.26	0.11	1.00										
(8)	CR	-0.08	-0.07	-0.02	-0.03	0.01	0.07	-0.44	1.00									
(9)	ListAge	0.00	-0.02	0.02	0.00	-0.12	0.06	0.16	-0.07	1.00								
(10)	Sales	-0.09	-0.11	-0.03	0.02	0.05	-0.09	0.15	-0.08	0.21	1.00							
(11)	Size	-0.12	-0.14	-0.03	0.03	0.12	-0.27	0.47	-0.41	0.19	0.50	1.00						
(12)	ArInv	0.16	0.16	-0.01	0.00	0.02	0.01	0.17	-0.06	-0.10	-0.15	-0.05	1.00					
(13)	Growth	0.00	-0.02	0.03	-0.00	0.16	-0.10	-0.03	0.00	-0.12	-0.01	-0.02	0.02	1.00				
(14)	TenureP	-0.02	-0.03	0.02	0.03	0.01	-0.04	-0.14	0.12	-0.04	-0.05	-0.09	0.04	-0.01	1.00			
(15)	TenureF	-0.06	-0.09	0.04	-0.03	0.01	-0.02	0.01	0.00	0.38	0.03	0.08	0.01	-0.06	0.23	1.00		
(16)	Pexper	0.11	0.10	0.03	0.03	-0.07	0.11	-0.07	0.09	-0.01	-0.06	-0.24	-0.02	-0.03	-0.07	-0.04	1.00	
(17)	$CI_{AF}$	-0.01	-0.02	-0.01	-0.03	-0.04	0.10	-0.27	0.29	-0.07	-0.08	-0.40	-0.06	0.00	0.11	-0.01	0.27	1.00
(18)	$CI_{AP}$	-0.03	-0.05	0.01	0.02	-0.04	0.06	-0.08	0.04	0.09	0.09	-0.05	-0.11	-0.02	0.00	0.05	0.08	0.29

The table shows Pearson correlations between each pair of research variables. Correlations in bold are statistically significant at least at 5 percent level. Variables definitions are in Appendix II.

Variables	(1) <i>OP</i>	(2) <i>OP</i>	(3) <i>OP</i>	(4) <i>OP</i>	
Constant	-2.108***	-2.295***	-2.557***	-2.368*	**
	[-4.864]	[-5.412]	[-5.832]	[-5.60	1]
LagOP	1.739***	1.818***	1.803***	1.806**	**
	[15.821]	[15.062]	[15.194]	[15.05:	5]
SwitchF		0.608		0.574	
		[0.802]		[0.758	]
SwitchP			1.671*	1.671*	k
			[1.809]	[1.802	]
Roa	-2.741***	-2.951***	-2.954***	-2.950*	**
_	[-4.990]	[-4.774]	[-4.727]	[-4.75	4]
Loss	0.497***	0.497***	0.488***	0.494**	**
-	[4.312]	[3.908]	[3.855]	[3.909	]
Leverage	1.044***	1.152***	1.201***	1.171**	**
	[3.234]	[3.454]		[3.485	ן איני איני
CR	-0.041**	-0.049**	-0.046**	-0.04/	**
T	[-2.046]	[-2.4/1]	[-2.456]	[-2.50	3] /*
ListAge	-0.05/***	-0.03/*	-0.038*	-0.03	·* (]
C:	[-2.694]	[-1.696]	[-1.648]	[-1.66	5]
Size	0.356*	0.236	0.257	0.234	1
4 T	[1./22]	[1.021]	[1.086]	[1.006	]
Arinv	0.009	0.002	0.006	0.004	1
	[1.233]	[0.295]	[0.///]	[0.343	] CuitelD
Switch Var*LagOP		0.027***	0.240	<i>SWIICHF</i> 0.010***	SwiichP
Swiichvar Lagor		-0.927	[1 015]	-0.910 [-3.076]	[1 017]
SwitchVar*Roa		1 038	_0.154	1 117	-0.216
Switchvar Roa		[0 679]	[-0.093]	[0 726]	[-0.129]
SwitchVar*Loss		0 604	-0.088	0 644	-0.103
Switchruf 2035		[1 537]	[-0.281]	[1 638]	[-0.332]
SwitchVar*Leverage		_1 288**	-0.024	-1 338**	-0.025
Switchruf Deverage		[-2 017]	[-0.042]	[-2 088]	[-0.044]
SwitchVar*CR		0.031	-0.046	0.031	-0.047
		[1,528]	[-0.619]	[1,525]	[-0.613]
		[1.020]		[1.020]	[ 0.015]

Table 4. Audit reporting models.

(Continued)

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Table 4. Continued.

Variables	(1) <i>OP</i>	(2) <i>OP</i>	(3) <i>OP</i>	(4) <i>OP</i>	
SwitchVar*ListAge		0.040	-0.153**	0.042	0.013
-		[1.256]	[-2.403]	[1.355]	[0.681]
SwitchVar*Size		-0.018	0.387	-0.013	-0.152**
		[-0.304]	[0.777]	[-0.211]	[-2.378]
SwitchVar*ArInv		1.051**	0.013	1.007*	0.398
		[2.046]	[0.703]	[1.959]	[0.800]
Year & industry effects	Yes	Yes	Yes	Ye	s
N. Observations	2,589	2,274	2,424	2,58	39
LR $\chi 2$	833.85***	667.83***	837.21***	859.32	2***
Pseudo-R <sup>2</sup>	0.413	0.421	0.436	0.42	29

Column (1) shows the results of estimation of model (1) excluding the auditor switching variables. Columns (2) and (3) show the results of the model estimated separately at the firm and partner level respectively. Column (4) presents the results of the model including firm and partner switching variables together. *Z*-statistics, corrected by time series dependence, appear below the estimated coefficients. The variables definitions are in Appendix II. Statistical significance is indicated by \* p-value < 0.1, \*\* p-value < 0.05, and \*\*\* p-value < 0.01.

	7	9	1

Panel A: Firm level switching		
	Prior opinion modified	Prior opinion clean
N	431	1,843
Mean $Prob(OP = 1   SwitchF = 1)$	56.7	16.8
Mean Prob( $OP = 1 \mid SwitchF = 0$ )	65.9	5.8
Diff test ( <i>t</i> -statistic)	-11.8***	39.6***
Panel B: Partner level switching		
	Prior opinion modified	Prior opinion clean
N	434	1,990
Mean $Prob(OP = 1   SwitchP = 1)$	74.6	6.7
Mean $Prob(OP = 1   SwitchP = 0)$	65.7	5.9
Diff test ( <i>t</i> -statistic)	20.1***	6.9***
Panel C: Firm and partner switching		
	Prior opinion modified	Prior opinion clean
N	487	2,102
(i) Mean $Prob(OP = 1   SwitchF = 1 \& SwitchP = 0)$	57.8	16.9
(ii) Mean $Prob(OP = 1   SwitchF = 0 \& SwitchP = 1)$	75.4	6.8
(iii) Mean $Prob(OP = 1   SwitchF = 0 \& SwitchP = 0)$	66.3	5.9
Diff test ( <i>t</i> -statistic):		
(i) versus (ii)	-25.6***	42.0***
(i) versus (iii)	-11.6***	44.5***
(ii) versus (iii)	22.3***	7.6***

Table 5. Mean predicted probabilities of modified opinion conditioned on the auditor switching decision.

This table shows the mean predicted probabilities of getting a modified opinion in year *t* if the opinion in year *t*-1 is modified or clean conditioned on the auditor switching decision, both at the firm and partner levels. Opinion-shopping variables are obtained from the estimation of the audit reporting model at the firm and partner level separately (Panels A and B), and including the firm and partner switching variables together (Panel C). We report the *t*-statistics of the *t*-tests which null is that the corresponding pair of mean predicted probabilities are equal. The variables definitions are in Appendix II. Statistical significance (two tail tests) is indicated by \* *p*-value < 0.1, \*\* *p*-value < 0.05, and \*\*\* *p*-value < 0.01.

level since the interaction of *SwitchP* and *LagOP* is not significant in columns (3) and (4). This indicates that partner switching does not affect the persistence of the audit opinion. As per the control variables, the results are consistent with the prior literature.

From the estimations of model (1) we compute the predicted probabilities of obtaining a modified opinion conditioned on the different auditor switching scenarios. The mean values of these predicted probabilities are reported in Table 5, where Panels A and B show the results derived from two separate estimations, while Panel C shows the results obtained when we estimate only one audit reporting model. Regarding the firm-level evidence, when the prior year opinion is modified, companies receive modified reports with significantly lower probability if they switch the firm than if they do not (56.7 vs. 65.9 percent, t-stat = -11.8). In contrast, when the prior year opinion is clean, companies receive modified opinions with significantly lower probability if they do not switch the firm than if they do (5.8 vs. 16.8 percent, t-stat = 39.6). At the partner level we observe a different pattern. When the opinion in t-1 is modified, companies receive a modified report in t with significantly lower probability if they change the partner (65.7 vs. 74.6 percent, t-stat = 20.1). When the opinion in t-1 is clean, we also observe that companies receive a modified report with significantly lower probably if the partner does not switch,

Variable	Ν	Mean	Median	Std. Dev.	P25	P75
<b>OpnShopF</b>	2,274	0.071	0.057	0.151	0.010	0.132
OpnShopP	2,424	0.022	0.000	0.067	-0.012	0.040
OpnShopF2	2,274	0.485	0.518	0.625	0.126	0.848
OpnShopP2	2,424	0.020	0.002	0.380	-0.227	0.274
Panel B: Measu	res obtained fr	om estimation	of one auditor r	eporting model		
<b>OpnShopF</b>	2,589	0.074	0.060	0.150	0.012	0.133
OpnShopP	2,589	0.024	0.001	0.068	-0.012	0.044
OpnShopF2	2,589	0.487	0.512	0.621	0.129	0.846
OpnShopP2	2,589	0.031	0.016	0.379	-0.217	0.284

Table 6. Descriptive statistics of opinion shopping variables.

The variables definitions are in Appendix II.

although in this case the difference between both scenarios is smaller (5.9 vs. 6.7 percent, t-stat = 6.9). The results in Panel C lead to the same conclusions.

Overall, this is consistent with successful firm-level but not partner-level opinion-shopping. While we cannot observe client's attempts to switch or negotiations that may ultimately be unsuccessful, the univariate evidence suggests that opinion-shoppers would choose to change the firm more frequently when the prior year report is modified, while they would not choose to change the partner, which is consistent with our predictions in H1 and H2. The descriptive statistics of the opinion shopping variables obtained in this step are presented in Table 6. Next, we present the results of the auditor switching models' estimation (model (2)), where these variables are included as explanatory variables.

#### 5.2. Auditor switching models

Table 7 shows the results of estimating model (2). Panel A shows the results where the opinionshopping variables are calculated from estimating the audit reporting model separately at the firm and partner levels, while Panel B presents the results using the variables obtained from the estimation of only one audit reporting model. Both panels offer similar results. In the firm switching models, the coefficients of OpnShopF and OpnShopF2 are negative and statistically significant at the 1 percent level, indicating that as the difference between the probabilities of getting a modified report if switching and if not switching increases (i.e. as OpnShopF increases, and the switching is not favourable) the probability of observing a firm switch decreases. In other words, the observed firm switching (or retention) behaviour minimizes the probability of getting a modified audit report. Consistent with H1, this is evidence of successful opinion-shopping activity at the firm level. In contrast, the coefficients of OpnShopP and OpnShopP2, although negative, are not statistically significant in any of the four estimations. Thus, in support of H2, we do not find evidence of successful opinion-shopping through partner-switching decisions.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup>In a non-tabulated additional analysis, we also examine the effect the IFRS adoption in opinion shopping activity. We replicate the results of Table 7 after including in the model a dummy variable equalling 1 for observations where the IFRS accounting model is used, and 0 otherwise, and its interaction with the opinion shopping variables. Results (non-tabulated) indicate that the change reduced the partner-level opinion shopping activity, while it did not affect firm-level opinion shopping activity.

Our tests may suffer from omitted variables problems, particularly related to other auditor switching costs drivers. To alleviate these concerns, we carried out a sensitivity tests in a reduced sample, where we include in model (2) several proxies of the company's corporate governance structure as additional regressors. We hand-collected the data from the corporate governance reports, available from 2002 onwards in the CNMV webpage, for the following variables: *BOARDSIZE*: logarithm of the number of board members; *%INSTDIR*: proportion of

Variables	(1) SwitchF	(2) SwitchF	(3) SwitchP	(4) SwitchP
Constant	-0.212	-0.107	-1.118***	-0.783
<i>OpnShopF</i>	[-0.467] -1.606***	[-0.238]	[-2.835]	[-0.980]
OpnShopF2	[-4.287]	-0.486***		
<i>OpnShopP</i>		[-4.309]	-0.640	
OpnShopP2			[-0.918]	-0.291 [-0.703]
Roa	0.062	0.342	0.679	0.552
Loss	-0.024	-0.100	0.101	0.085
Leverage	-0.130 [-0.452]	-0.413	0.357*	0.362*
CR	-0.014	0.006	-0.014	-0.024
ListAge		0.005	-0.001	0.001
Size	$-0.099^{***}$	$-0.095^{***}$	-0.031	-0.063
ArInv	0.433*	0.495**	-0.037	0.053
Growth	0.115**	0.116** [2.047]	-0.011	-0.008
TenureP	0.038**	0.038**	0.045***	0.045***
TenureF	0.023**	0.025**	-0.015*	-0.015*
Pexper	0.100	0.077	0.380	0.377
$CI_{AF}$	-0.344	-0.339	$-0.425^{**}$	-0.435**
CI <sub>AP</sub>	[-1.586] 0.050 [0.353]	[-1.532] 0.051 [0.364]	[-2.230] 0.198* [1.761]	[-2.240] 0.193* [1.732]
Year & industry effects	Yes	Yes	Yes	Yes
Observations LR $\chi^2$ Pseudo R <sup>2</sup>	2,274 118.22*** 0 091	2,274 117.90*** 0.091	2,424 54.84** 0.029	2,424 55.32** 0.029

Table 7. Auditor switching models.

Panel A: Opinion shopping variables derived from model (1) estimated separately at the firm and partner levels

Variables	(1) SwitchF	(2) SwitchF	(3) SwitchP	(4) SwitchP
Constant	-0.301	-0.200	-1 203***	-0.633
Constant	[-0.683]	[-0.459]	[-3.150]	[-0.813]
OpnShopF	-1.687***	[	[]	[]
	[-4.674]			
OpnShopF2		-0.500***		
		[-4.600]	0.070	
OpnShopP			-0.8/0	
OnnShonP?			[-1.230]	-0.460
Oprishopi 2				[-1 138]
Roa	0.039	0.335	0.657	0.458
	[0.066]	[0.552]	[1.321]	[0.898]
Loss	0.005	-0.077	0.119	0.092
	[0.032]	[-0.543]	[1.084]	[0.810]
Leverage	-0.213	-0.504*	0.295	0.307
_	[-0.778]	[-1.716]	[1.538]	[1.581]
CR	-0.013	0.008	-0.014	-0.031
	[-1.010]	[0.550]	[-1.102]	[-1.339]
ListAge	0.001	0.006	-0.000	0.004
	[0.181]	[0.764]	[-0.046]	[0.552]
Size	-0.096***	-0.090***	-0.025	-0.079
	[-3.642]	[-3.367]	[-1.051]	[-1.166]
ArInv	0.435*	0.494**	-0.023	0.130
	[1.928]	[2.150]	[-0.118]	[0.488]
Growth	0.114**	0.115**	-0.023	-0.020
	[2.018]	[2.040]	[-0.444]	[-0.382]
IenureP	$0.032^{*}$	$0.032^{*}$	0.041**	0.040**
TomunoF	[1.095]	[1.001]	[2.405]	[2.301]
Tenurer	[2 475]	[2 633]	-0.017 [_1 003]	[_2 002]
Perner	0.041	0.027	0 358	0 356
Техрег	[0 247]	[0 162]	[1 583]	[1 555]
$CL_{4E}$	-0.278	-0.274	-0.391**	-0.404**
	[-1.378]	[-1.329]	[-2.124]	[-2.144]
$CI_{AP}$	0.031	0.033	0.193*	0.186*
211	[0.227]	[0.242]	[1.775]	[1.727]
Year & industry effects	Yes	Yes	Yes	Yes
Observations	2.589	2.589	2.589	2.589
LR $\chi 2$	118.39***	116.21***	54.49*	53.57*
Pseudo R <sup>2</sup>	0.089	0.087	0.027	0.027

#### Table 7. Continued

Panel B: Opinion shopping variables derived from model (1) including firm and partner switching variables together

This table shows the results of the estimation of model (2). Panel A shows the results considering the opinion shopping variables derived from the estimation of model (1) separately at the firm and partner level; while Panel B shows the same but the opinion-shopping variables are obtained from the estimation of just one auditor reporting model. *Z*-statistics, corrected by time series dependence, are reported below the estimated coefficients. The variables definitions are in Appendix II. Statistical significance is indicated by \* *p*-value < 0.1, \*\* *p*-value < 0.05, and \*\*\* *p*-value < 0.01.

institutional directors in the board; *%INDEPDIR*: proportion of independent directors in the board; *BOARDACTIVITY*: logarithm of the number of meetings of the board; *%VOTINGDIR*: percentage of voting rights of the board members. Our results (non-tabulated) are qualitatively

the same. Similarly, results do not change if we include in this model a categorical variable obtained from the Bureau van Dijk independence indicator that proxies for ownership concentration, nor if we include the accruals quality measures, *Abacc1* or *Abacc2*, defined in Appendix II.

#### 5.3. Opinion shopping strategies

We have predicted, under H3, that companies likely prefer to opinion shop at the partner level. This implies that firm switching would be less likely when the company successfully shops at the partner-level, which our results thus far suggest occurs only in rare cases. To provide evidence on this hypothesis, we identify partner level opinion-shoppers, and look at their subsequent firm switching activity. Following Chen et al. (2016), we define the dummy variable OpnShopClientP, which equals 1 if a company obtains a clean audit opinion and either there is a partner switch when the value of OpnShopP is -1% or less, or there is no partner switch when OpnShopP is 1% or higher, and 0 otherwise. This proxy identifies cases where the company obtains a clean opinion after a switch/retain partner decision that is consistent with opinion-shopping. It is an ex-post measure of successful opinion shopping, as evidenced by a subsequent clean opinion. All other cases (OpnShopClientP = 0) are therefore indicative of situations where the company did not attempt a retain/switch partner decision that is consistent with opinion shopping, or the decision did not meet with *ex-post* success (i.e. the opinion was not clean in the following period). The mean of the variable OpnShopClientP is 0.268, meaning that almost 27 percent of the sample observations likely are successful opinion shoppers at the partner level.

We expect a negative association between being a partner-level opinion shopper and subsequent audit firm non-mandatory switching activity. We therefore include the lag of *OpnShop-ClientP* as an independent variable in a probit regression where the dependent variable is the current firm switching activity (*SwitchF*). The regression also includes *OpnShopF*, and the set of controls used in model (2). Column (1) of Table 8 presents the results. *OpnShopClientP* is defined from the *OpnShopP* variable derived from the estimation presented in column (3) of Table 4.<sup>29</sup> Given that *OpnShopClientP* and *OpnShopF* are highly positively correlated,<sup>30</sup> in these estimations we orthogonalize them using the modified Gram-Schmidt procedure of Golub and Van Loan (1996). We observe a negative and significant coefficient on *OpnShop-ClientP*<sub>t-1</sub>. This indicates that companies that opinion shop at the partner level each year have a significantly lower probability of switching the firm in the subsequent year. Overall, the results suggest that companies may attempt to opinion shop first at the partner level, and switch (do not switch) the firm when they are unsuccessful (successful).

We further investigate this result by looking at opinion shopping both by actively switching ('active opinion shopping'), and by retaining the auditor ('passive'). To do so, we split *OpnShop-ClientP* into two components: *ActiveOpnShopClientP*, a dummy variable equaling 1 for companies that obtain a clean audit opinion, they switch the partner, and the value of *OpnShopP* is -1% or less, and 0 for clients that are not classified as partner-level opinion shoppers; and *PassiveOpn-ShopClientP*, which is a dummy variable equaling 1 for clients that get a clean opinion, do not switch the partner and *OpnShopP* is 1% or higher; and 0 for clients that are not classified as

<sup>&</sup>lt;sup>29</sup>Results are qualitatively the same if: (a) we define the partner level opinion shopper clients using *Opn-ShopP2*; and (b) we consider the opinion shopping variables derived from the estimation of model (1) that includes both partner and firm switching variables (column (4) of Table 4).

<sup>&</sup>lt;sup>30</sup>Both Pearson and Spearman correlations are higher than 0.4.

Variables	(1) SwitchF	(2) SwitchF	(3) SwitchF	(4) SwitchP
Constant	-0.169	0.295	-0.298	-1.075**
OpnShopClientP <sub>t-1</sub>	[-0.322] -0.140** [-2.560]	[0.460]	[-0.546]	[-2.343]
ActiveOpnShopClientP <sub>t-1</sub>	[]	-0.058		
PasiveOpnShopClientP <sub>t-1</sub>		[-0.802]	-0.136**	
OpnShopF	$-0.223^{***}$	$-0.310^{***}$	[-2.393] -0.222*** [ 3.665]	
$OpnShopClientF_{t-1}$	[-3.017]	[-4.435]	[-3.005]	-0.033
OpnShopP				[-0.804] -0.039 [-0.687]
Control variables	Yes	Yes	Yes	Yes
Year & industry effects	Yes	Yes	Yes	Yes
Observations	1,795	1,230	1,729	1,971
LR χ2	117.39***	107.51***	110.90***	48.56
Pseudo R <sup>2</sup>	0.095	0.115	0.092	0.026

Table 8. Opinion-shopping strategies.

Column (1) shows the results of a probit regression where the probability of a firm switch is expressed as a function of *OpnShopClientP<sub>t-1</sub>*, *OpnShopF*, and the set of control variables included in model (2); while columns (2) and (3) show the same substituting the variable *OpnShopClientP* with each of its two components: *ActiveOpnShopClientP* and *PassiveOpnShopClientP*. Finally, column (4) shows the results of a probit regression where the probability of a partner switch is expressed as a function of *OpnShopClientF<sub>t-1</sub>*, *OpnShopP*, and the set of control variables are omitted for the sake of brevity. The variables definitions are in Appendix II. Statistical significance is indicated by \* *p*-value < 0.1, \*\* *p*-value < 0.05, and \*\*\* *p*-value < 0.01.

partner-level opinion shoppers.<sup>31</sup> As expected, because of the low switching rates, the number of active opinion shoppers is lower than the passive ones. For *OpnShopP* derived from the estimation in column (3) of Table 4, out of the 651 observations defined as partner level opinion shoppers, only 91 are active. Columns (2) and (3) of Table 8 include the results.<sup>32</sup> The evidence suggests that the results in column (1) are mainly driven by passive opinion shoppers, which also benefits from lower visibility, in line with our argumentation. *ActiveOpnShopClientP* is also

<sup>&</sup>lt;sup>31</sup>In Chen et al. (2016), the percentage of partner level opinion shoppers is lower than ours 8.68%, while 36.8% of all their observations experience a partner switch, which triples our rate. In our sample, 13% (87%) are cases of active (passive) opinion shopping. The rate of active opinion shopping is closer to the rate of partner level opinion shoppers reported in Chen et al. (2016). Given their rate of audit partner changes, active opinion shopping appears to be more common in China than in our setting, where passive opinion shopping dominates. This difference highlights and is consistent with our argumentation thus far that audit firm internal controls are greater in Spain, and thus, audit partners offer more homogenous audit quality. Companies are likely to *already* have the lenient partner, or alternatively, it is not likely that a more lenient partner can be found within the firm, and thus, by retaining the audit partner, the client obtains the more favourable opinion possible within that firm. This would also indicate that if the client is dissatisfied with audit quality, to find an auditor of different quality, it will have to switch the firm.

<sup>&</sup>lt;sup>32</sup>Results using the rest of the opinion shopping measures lead to the same conclusions. We also orthogonalize *ActiveOpnShopClientP* and *PasiveOpnShopClientP* with *OpnShopF* using the modified Gram-Schmidt procedure of Golub and Van Loan (1996).

negative, but not statistically significant at conventional levels (*t*-stat = -0.802), which is likely due to the relatively low number of cases classified as such.

In column (4) of Table 8, we complete the analysis by identifying firm level opinion-shoppers (*OpnShopClientF*) and looking at their subsequent partner switching activity (*SwitchP*). We see that the success of opinion shopping attempts at the firm level does not relate to subsequent partner switching activity. In other words, when firm switching/retaining decisions do not favour the company it is unlikely that it looks for and finds a more lenient partner *within* the same audit firm. This is because the firm switching decision involves both a firm and partner choice, i.e. when a company changes firms, it also switches audit partners. In that decision, it is likely that not only the firm but also the partner is carefully chosen, to obtain the most lenient firm-partner combination possible. This makes it unlikely that a more lenient firm-partner switch ing the firm, we do not find evidence that this is followed by a partner switch either. This is consistent with our argument that monitoring between partners in firms organized as partnerships prevents successful opinion-shopping at the partner level in our setting.

Finally, as an additional test to better understand client strategies, we use the partner individual audit quality measures derived from the results of Table A.I.2. to classify partner switches depending on the quality of the prior and incumbent partners, and/or on the relation between the level of quality of both partners. Non-tabulated tests reveal no evidence of significant changes in audit partner quality in switches: neither of audit firms internally switching the partner in search of expertise (which would likely lead to a higher quality partner), nor of clients attempting to use the switch to find a lower quality (and perhaps more lenient) partner. This reinforces our conclusion of no evidence of opinion-shopping at the partner level.

#### 6. Additional analyses

#### 6.1. Auditor switching and changes in auditor opinion

Finding no evidence of more favourable opinions after a switch does not preclude opinion-shopping, as it may be also achieved by retaining the auditor (Lennox 2000); however, finding evidence of more favourable opinions after a switch does indicate opinion-shopping. We test this possibility in Table 9, where we compare pre- and post-switch audit opinions by running a probit regression analysis (model 3) of the probability of a change in audit opinions. Although opinion shopping only relates to opinion upgrades (a change from a modified to a clean report), for the sake of completeness we also study opinion downgrades (*vice versa*). A changes specification allows us to make inferences about causality and reduces the omitted-variable bias.

$$OP\_Up_{i,t} \text{ (or } OP\_Down_{i,t}) = \alpha_0 + \alpha_1 SwitchVar_{i,t} + \alpha_2 \Delta Roa_{i,t} + \alpha_3 \Delta Leverage_{i,t} + \alpha_4 \Delta CR_{i,t} + \alpha_5 \Delta Size_{i,t} + \alpha_6 \Delta ArInv_{i,t} + \alpha_7 \Delta CIAF_{i,t} + \alpha_8 \Delta CIAP_{i,t} + \alpha_9 Loss_{i,t} + \alpha_{10} LagLoss_{i,t} + \alpha_{11} Big_{i,t} + \alpha_{12} LagBig_{i,t} + \alpha_{13} Pexper_{i,t} + \alpha_{14} LagPexper_{i,t}$$
(3)  
+  $\alpha_{15} TenureP_{i,t} + \alpha_{16} TenureF_{i,t} + Year effects + Industry effects,$ 

where,  $OP_Up_{i,t}(OP_Down_{i,t})$  is a dummy that equals 1 when a company had a modified (clean) report in year *t*-1 and a clean (modified) report in year *t*, and 0 otherwise. In the estimations where

Variables	(1) <i>OP_Up</i>	(2) <i>OP_Up</i>	(3) OP_Down	(4) OP_Down
Constant	-2.132***	-2.053***	-2.179***	-2.161***
SwitchF	[-6.126] 0.408** [2.533]	[-5.879]	[-6.405] 0.244 [1.286]	[-6.333]
SwitchP	[2.333]	$-0.276^{*}$ [-1.848]	[1.200]	0.025 [0.184]
$\Delta Roa$	-0.063	-0.056	0.150	0.151
$\Delta Leverage$	0.093	0.129	$-1.619^{***}$	-1.610***
$\Delta CR$	$-1.566^{***}$	$-1.658^{***}$	0.992***	0.966***
$\Delta Size$	0.019	0.018	-0.009	-0.008
$\Delta ArInv$	-0.418	-0.432	-0.064	-0.038
$\Delta CI_{AF}$	-0.576	-0.903	-0.735	-0.995*
$\Delta CI_{AP}$	$-0.486^{***}$	$-0.551^{***}$	0.044	0.040
Loss	0.079	0.063	0.503***	0.495***
LagLoss	0.333**	0.341**	0.051	0.060
Big	-0.530 [-1.049]	-0.668	-0.370 [-0.941]	-0.439
LagBig	0.727	0.853	0.558	0.620
Pexper	-0.061 [-0.194]	-0.060 [-0.190]	0.524*	0.512
LagPexper	0.558*	0.571*	-0.361* [-1.754]	-0.354*
TenureP	0.043**	0.045**	0.024	0.025
TenureF	$-0.032^{***}$ [-3.002]	$-0.032^{***}$ [-2.951]	[-0.007] [-0.674]	-0.006 [-0.595]
Period & industry effects	Yes	Yes	Yes	Yes
Observations LR $\chi^2$ Pseudo R <sup>2</sup>	2,344 156.27*** 0.088	2,344 153.99*** 0.086	2,344 81.83*** 0.069	2,344 79.29*** 0.067

Table 9. Auditor switching and changes in the auditor's opinion.

The table shows the results of the estimation of model (3) with  $OP_Up$  (columns (1) and (2)) and  $OP_Down$  (columns (3) and (4)) as the dependent variable. Z-statistics, corrected by time series dependence, are reported below the estimated coefficients. The variables definitions are in Appendix II. Statistical significance is indicated by \* for *p*-value < 0.10; \*\* for *p*-value < 0.05; and \*\*\* for *p*-value <0.01.

 $OP\_Up$  is the dependent variable, reported in columns (1) and (2), the coefficient of *SwitchF* is positive and significant at 5 percent level, while the coefficient of *SwitchP* is negative and significant at 10 percent level. New audit firms seem more prone to issue a clean report if the company received a modified opinion from the prior audit firm. However, results suggest the opposite at the partner level: new partners seem less prone to issue a clean report if the client

Variables	(1) Abacc1	(2) Abacc1	(3) SP_SL	(4) SP_SL
Constant	-0.015	0.003	-1.516	0.301
<i>OpnShopClientF</i>	[-1.040] 0.009*** [3.017]	[0.208]	[-1.460] 1.201*** [3.794]	[0.320]
SwitchF	0.006		0.840	
<b>OpnShopClientP</b>		0.001 [0 394]	L 3	0.352
SwitchP		0.000		0.091
Leverage	-0.038***	-0.044***	-1.154	-1.951***
ArInv	0.013	0.011	-0.698	-0.287
Growth	[1.582] 0.021	[1.394] 0.015	[-1.041] 1.016	[-0.475] 0.402
Size	[1.558] 0.000	[1.1/5] 0.002	-0.515	[0.498] -0.584
Big	$\begin{bmatrix} 0.0/7 \end{bmatrix}$ -0.001	[0.559] -0.000	$\begin{bmatrix} -1.131 \end{bmatrix}$ -0.099	$\begin{bmatrix} -1.3 / \\ 0.060 \end{bmatrix}$
$CI_{AF}$	0.001	0.001	0.195**	[0.364] 0.154**
CI <sub>AP</sub>	[0.929] 0.015* [1.703]	[0.997] 0.014 [1.596]	[2.307] 0.276 [0.516]	[2.034] 0.367 [0.761]
Year & industry effects	Yes	Yes	Yes	Yes
Observations <i>F</i> statistic or LR $\chi 2$	1,894 2.16***	2,021 1.87***	171 45.47**	191 32.89
Pseudo R <sup>2</sup>	0.048	0.048	0.216	0.143

Table 10. Opinion shopping and earnings quality

The table shows the results of the estimation of model (4) with *Abacc1* (columns (1) and (2)) and *SP\_SL* (columns (3) and (4)) as the dependent variable. When the dependent is *Abacc1* we estimate by ordinary least squares while we estimate a probit regression when it is *SP\_SL*. *Z*-statistics, corrected by time series dependence, are reported below the estimated coefficients. The variable definitions are in Appendix II. Statistical significance is indicated by \* for *p*-value < 0.10, \*\* for *p*-value < 0.05, and \*\*\* for *p*-value < 0.01.

received a modified opinion from the prior partner. Again, this evidence suggests differential behaviour at the firm and partner level, consistent with our predictions. As expected, in the  $OP\_Down$  models, neither the coefficient of *SwitchF* nor that one of *SwitchP* are significantly different from cero at conventional levels. Results for the control variables are in line with prior work.

These results offer novel insights into auditor switching decisions. Again, these findings highlight the importance of the market specificities to explain the results. Prior research provides no evidence that post-switch opinions are more favourable. Lennox (2000) indicates that this is because pre-switch opinions are not good proxies for the reports that companies had received under opposite switching decisions. This is not likely the case in our setting, where the persistence of the audit opinion is higher than in other settings. For example, in the UK, Lennox (2000) reports a correlation between *OP* and *LagOP* of 40 percent, while in our sample it is 61 percent. Overall, the results support prior findings indicating that successful opinion-shopping occurs at the firm level, while the evidence at the partner level is consistent with a fresh eyes effect.

#### 6.2. Opinion shopping and earnings quality

We next examine whether companies that successfully engage in opinion shopping also report poorer earnings quality. We estimate the model presented in expression (4).

$$EQ_{i,t} = \alpha_0 + \alpha_1 OpnShopClientVar_{i,t} + \alpha_2 SwitchVar_{i,t} + \alpha_3 Leverage_{i,t} + \alpha_4 ArInv_{i,t} + \alpha_5 Growth_{i,t} + \alpha_6 Size_{i,t} + \alpha_7 Big_{i,t} + \alpha_8 CIAF_{i,t} + \alpha_9 CIAP_{i,t} + Year effects + Industry effects + \varepsilon_{i,t},$$
(4)

where we use two proxies of earnings quality (*EQ*): signed abnormal accruals (*Abacc1*), estimated for each industry and year combination using the cross-sectional version of the Dechow and Dichev (2002) model as suggested by McNichols (2000);<sup>33</sup> and the incidence of small profits relative to small losses (*SP\_SL*), which we proxy with a dummy variable equalling 1 if the company reports *Roa* between 0 and 1 percent, and 0 if the company reports *Roa* between -1 percent and 0. All the variables are defined in Appendix II.

Table 10 shows the results. Sample size is reduced when using Abacc1 as the dependent variable because of additional data requirements to estimate this variable, and when using  $SP\_SL$  because this analysis is focused on the subsample of observations where we observe small profits or small losses. We see that companies identified as opinion shoppers at the firm level have significantly higher discretionary accruals and significantly higher incidence of small profits with regard to small losses. This suggests that opinion-shopping at the firm level is successful and links with poorer subsequent earnings quality. In turn, companies identified as opinion shoppers at the partner level do not have poorer accruals quality, nor higher incidence of small profits regarding small losses.

#### 7. Conclusions

We examine firm- and partner-level opinion-shopping. We find strong evidence of successful firm-level opinion-shopping. Additionally, we show that firm switches positively relate to upgrades in the audit opinion. In contrast, we find no evidence of opinion-shopping at the partner level. Our results at the partner level likely reflect within-firm partner rotation practices which are effective in improving audit quality. New audit partners are more conservative and less prone to issue a clean report if a colleague modified the report in the previous year. We also provide evidence on the strategies followed by companies to get more favourable audit opinions. Successful partner-level opinion shoppers have significantly lower probability of subsequently switching the firm, while partner-level switching activity is not associated with the output of prior firm-level opinion-shopping. Future research, perhaps based on case studies, on within-firm partner rotation practices may prove fruitful in pushing forward the field.

Our results have implications for regulators, suggesting that conclusions from the firm-level research on audit quality cannot be extrapolated to the partner level, and that firm and partner level regulations should not be used as substitutes. In fact, we observe opposite effects of auditor switches at the firm and partner level. This evidence is important for standard setters in many countries who, oftentimes, justify regulating at the partner level because of the unconvincing evidence on the firm level effects (e.g. GAO 2004). Additionally, our results at the partner level contrast with those found in the Chinese setting by Chen et al. (2016). We argue

<sup>&</sup>lt;sup>33</sup>Results are similar if we use the absolute value of *Abacc1* or *Abacc2*, defined in Appendix II.

that differences in audit markets characteristics are key to explain these differences, and that within a single institutional setting, differences between the firm and partner audit markets may exist. High competition among firms, weak investors' protection and enforcement mechanisms appear to create incentives for audit firms to give in to the clients' pressure, while the incentives of auditors to compete within the firm are associated with market dispersion and size, ownership and organizational structures of the audit firms. Regulatory bodies should be aware that each audit market has specific characteristics that result in specific problems, which may require different regulations. Avenues for further research include analysing international samples, where country-specific factors can be teased out and better understood. This might allow to further explore the effects of regulatory changes, like the IFRS adoption, on opinion shopping behaviour.

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#### Appendices

#### Appendix I: the Spanish audit market of listed companies at the partner level

This appendix provides novel evidence on the Spanish audit market at the partner level. Table A.I.1. provides evidence on several features of the market structure at the partner level. We use the same sample as in the subsequent empirical analyses of the study, which consists of 2,589 firm-year observations belonging to 270 individual non-financial listed companies (see Table 1 and section 4.1. for further detail). In turn, Table A.I.2. replicates the analysis reported in Table 3 of Gul et al. (2013: 2008). The sample employed in this analysis is reduced because of the data requirements to estimate the different accounting quality measures, and its size varies depending on the model.

#### Table A.I.1. Market structure at the partner level.

Panels A and B present the number of partners and clients identified each year over the sample period; panels C and D offer evidence on the withdrawal rates. Panel C shows the descriptive statistics of the variable *PDuration*, calculated for all the partners that left the sample before 2015 as the difference between the last and first years that she audits any company in the sample plus one. In turn, panel D offers evidence on whether these partners were active as auditors or not at January 2017 (by looking at the Official Registry of Auditors (ROAC)) where all practising auditors must be registered). Finally, panels E and F provide evidence on the industry specialization of the partners.

	Big firms		Non big	g firms	A	1
Year	Partners	Clients	Partners	Clients	Partners	Clients
1995	71	113	19	22	90	135
1996	73	127	18	22	91	149
1997	72	129	21	25	93	154
1998	76	129	22	26	98	155
1999	56	103	18	21	74	124
2000	70	127	16	19	86	146
2001	71	125	18	20	89	145
2002 <sup>b</sup>	44	68	18	22	62	90
2003 <sup>b</sup>	58	90	10	11	68	101
2004	68	111	11	13	79	124
2005 <sup>c</sup>	12	15	3	3	15	18
2006	65	106	15	19	80	125
2007	73	102	13	16	86	118
2008 <sup>c</sup>	71	96	10	13	81	109
2009	76	110	12	13	88	123
2010	69	99	10	12	79	111
2011	74	105	11	12	85	117
2012	69	101	13	15	82	116
2013	73	99	10	12	83	111
2014	71	97	9	11	80	108
2015	73	104	5	5	78	109
2016	66	96	5	5	71	101
Total	244 <sup>d</sup>	242	68	53	312	270

#### Panel A: Number of partners and clients. 1995-2016.<sup>a</sup>

	A	4	CI	L	D	Г	E	Y	KPN	ΔG	Pv	v	Pw	С
Year	Partners	Clients												
1995	24	48	8	11	3	6	11	13	13	19	12	16		
1996	24	54	6	9	4	9	12	16	14	20	13	19		
1997	27	58	6	9	4	8	11	16	12	18	12	20		
1998	27	59	6	9	5	7	12	14	12	18	14	22		
1999	28	65			5	9	10	11	12	17			1	1
2000	26	62			4	7	11	11	10	15			19	32
2001	28	59			4	8	10	11	13	19			17	28
2002					5	7	10	11	12	18			17	32
2003					29	46	8	10	9	13			12	21
2004					29	54	11	14	13	17			15	26
2005					3	4	3	4	1	1			5	6
2006					26	51	14	16	10	15			15	24
2007					30	47	15	19	10	13			18	23
2008					29	44	14	16	9	12			19	24
2009					34	51	11	14	11	16			20	29
2010					31	45	9	12	11	15			18	27
2011					31	43	11	14	11	16			21	32
2012					26	43	13	16	9	13			21	29
2013					30	40	12	14	10	16			21	29
2014					29	38	14	16	11	20			17	23
2015					29	40	14	19	10	18			20	27
2016					26	35	15	24	9	15			16	22
Total	41 <sup>d</sup>	90	11 <sup>d</sup>	15	75 <sup>d</sup>	105	51 <sup>d</sup>	56	39 <sup>d</sup>	53	16 <sup>d</sup>	27	58 <sup>d</sup>	72

AA: Arthur Andersen; CL: Coopers and Lybrand; DT: Deloitte and Touch; EY: Ernst and Young; KPMG is KPMG; Pw: Pricewaterhouse, and PwC: Pricewaterhousecoopers.

<sup>a</sup> The number of clients per year at the beginning of the period is higher than at the end. This is because the drop of firm-year observations related to mandatory rotation of partners and firms (see Table 1) concentrates after 2002.

<sup>b</sup> The number of partners and clients considerably reduces in 2002–2003 due to the elimination of observations with forced firm switches because of the disappearing of Arthur Andersen and mergers of audit firms (see Table 1).

<sup>c</sup> The significant decrease in both the number of partners and clients in 2005 is because 2005 was the first year when consolidated financial statements of listed companies had to be prepared according to the IFRS adopted by the EU; and, as indicated in Table 1, we eliminate 2005 observations of companies with consolidated financial statements to ensure data comparability with prior year information. The same occurs in 2008 for the companies that only report individual financial statements, because Spanish local standards changed in 2008 to adapt the IFRS model.

<sup>d</sup>The sum of the total individual partners identified in each big firm (41 + 11 + 75 + 51 + 39 + 16 + 58 = 291) is higher than the total individual partners in the whole sample (244). This is because some partners worked for two different big firms over the sample period because of the mergers and acquisitions between audit firms.

Panel C: Partner's duration (partners not auditing companies after 2015, N = 214)							
				PDurati	on		
Type of firm	N Partners	Mean	Median	Min	Q1	Q3	Max
Big	155	10.1	10.0	1.0	5.0	15.0	21.0
Non-big	59	8.1	7.0	1.0	3.0	13.0	25.0
All	214	9.6	9.0	1.0	5.0	14.0	25.0

Panel D: Professional situation in February 2017 of partners that left the sample before 2015

	Activ	Active 2017		Non active 2017		
Type of firm	Ν	%	Ν	%	Total	
Big	33	21.3	122	78.7	155	
Non-big	38	64.4	21	35.6	59	
All	71	33.2	143	66.8	214	

Panel E: Number of partners by number of industries audited

Auditing companies in	Number of partners	% of sample observations
1 industry	173	26.57
2 industries	80	31.44
3 industries	45	27.11
4 industries	13	13.90
5 industries	1	0.97

Dartnors		Avera	age % of the clients audited i	n	
auditing in	the first industry with more clients	the second industry with more clients	the third industry with more clients	the fourth industry with more clients	the fifth industry with more clients
2 industries	68.0	26.8	-	-	
3 industries	54.3	26.0	14.6	-	
4 industries	46.7	26.6	12.2	7.3	-
5 industries	36.0	24.0	16.0	12.0	12.0

Panel F: Sample of partners that audit in more than one industry (N = 139)

#### Table A.I.2. Evidence on individual auditor fixed effects.

This table reports the results of the OLS estimation of the following model:

$$EQ_{i,t} = \beta X_{it} + \sum \alpha_t Year_t + \sum \gamma_i Client_i + \sum \kappa_j Firm_j + \sum \delta_l Partner_l + \varepsilon_{it}$$

where *i*, *t*, *j*, and *l* index clients, fiscal years, audit firms, and individual auditors, respectively; *EQit* is one of the following audit-quality measures: the abnormal accruals estimated using the modified version of the Dechow and Dichev (2002) model as suggested by McNichols (2000) (*Abacc1*), the absolute value of *Abacc1* (|*Abacc1*|), the abnormal accruals estimated using the cross sectional version of the Jones model, as suggested by DeFond and Jiambalvo (1994) (*Abacc2*), the absolute value of *Abacc2* (|*Abacc2*|),<sup>34</sup> a measure of audit reporting aggressiveness (*ARAgg*) estimated following Gul et al. (2013: 2000), and the presence of small profits, an indicator variable equaling 1 if *Roa* is between 0 and 1 percent, and 0 otherwise (*SP\_SL*); *Xit* is a vector of time-varying client and auditor variables that may affect audit quality (see Appendix II for the variables definitions);  $\Sigma Year$  is a set of jear indicators;  $\Sigma Client_i$  is a set of client indicators;  $\Sigma Firm_j$  is a set of audit firm indicators;  $\Sigma Partner_l$  is a set of individual auditor indicator variables; and  $\varepsilon_{it}$  is the error term. The *F*-statistics are from the *F*-tests that examine the joint significance of fixed effect coefficients. The Vuong  $\chi^2$  statistics are from Vuong's (1989) likelihood ratio tests of whether changes in the model R<sup>2</sup> after the inclusion of fixed effects are statistically significant. In Panels B to D,  $\Delta R^2$  and  $\% \Delta R^2$  statistics are computed as:  $\Delta R^2 C_{\rm CF} = R^2_{\rm Full} - R^2_{w/o} C_{\rm CF}$ ;  $\% \Delta R^2 C_{\rm CF} = (R^2_{\rm Full} - R^2_{w/o} C_{\rm F})/(R^2_{w/o} C_{\rm F}) = (R^2_{\rm Full} - R^2_{w/o} A_{\rm F})/(R^2_{w/o} A_{\rm F})/(R^2_{w/o} A_{\rm F})$  and  $R^2_{w/o} A_{\rm P}$  are the adjusted R<sup>2</sup> of the model without client, audit firm, and individual audit partner fixed effects respectively.

Variables	Abacc1	Abacc1	Abacc2	Abacc2	ARAgg	SP
Roa	0.260***	-0.013	-0.158*	-0.121**	-0.270*	-0.112
	[5.948]	[-0.436]	[-1.878]	[-2.145]	[-1.680]	[-1.036]
Loss	-0.023***	0.008	$-0.050^{***}$	-0.014	0.044	0.061**
	[-3.049]	[1.584]	[-3.998]	[-1.639]	[1.357]	[2.299]
Turnover	-0.004	0.001	0.016	0.010	-0.043	-0.033
	[-0.432]	[0.164]	[0.841]	[0.758]	[-1.036]	[-1.362]
Size	-0.005	-0.009*	0.015	-0.010	0.018	0.001
	[-0.619]	[-1.799]	[1.175]	[-1.147]	[0.827]	[0.062]
Leverage	-0.044	0.046**	-0.059	0.084***	-0.057	0.049
0	[-1.561]	[2.444]	[-1.485]	[3.180]	[-0.696]	[0.910]
$PSize_{AF}$	0.000	-0.000	-0.000	0.000*	0.000	0.000
	[0.480]	[-0.198]	[-0.454]	[1.693]	[0.035]	[0.724]
$PSize_{AP}$	0.000	0.000	0.000	-0.000	-0.000	-0.000
	[0.645]	[0.072]	[0.478]	[-1.398]	[-0.421]	[-0.633]
$CI_{AF}$	0.178**	-0.162***	0.170	0.089	-0.303	0.411*
	[2.350]	[-4.951]	[0.776]	[0.693]	[-1.282]	[1.684]
$CI_{AP}$	0.010	0.002	0.027	-0.009	-0.017	-0.037
711	[0.955]	[0.240]	[1.321]	[-0.687]	[-0.319]	[-1.031]
TenureF	-0.000	-0.001	-0.004**	-0.001	0.003	0.009***
	[-0.006]	[-1.448]	[-2.217]	[-0.703]	[0.472]	[3.061]

Panel A: Regression results

(Continued)

<sup>34</sup>We use both signed and the absolute value of abnormal accruals because both measures have been used in the literature as proxies for earnings management.

Panel A: Regression results						
Variables	Abacc1	Abacc1	Abacc2	Abacc2	ARAgg	SP
TenureP	-0.000	-0.000	-0.000	-0.002**	-0.005	-0.003
	[-0.029]	[-0.273]	[-0.152]	[-2.038]	[-0.900]	[-1.006]
Year, client, audit firm and audit partner effects	Yes	Yes	Yes	Yes	Yes	Yes
$R^2$	35.78%	24.63%	19.40%	35.31%	44.67%	32.83%
N Observations	1,536	1,536	2,137	2,137	1,982	2,160
Panel B: Testing the signific	ance of client	fixed effects				
F-statistic	1,37***	2,56***	1,23**	2,20***	3,90***	2,53***
$\Delta R^2$ IA	9,72%	17,07%	9,08%	14,30%	22,41%	15,36%
Vuong's $\chi^2$ statistic	216,47***	394,42***	228,22***	426,89***	673,87***	444,95***
$\% \Delta R^2 _{CF}$	37,30%	69,31%	88,10%	68,08%	100,63%	87,98%
Panel C: Testing the signific	cance of audi	t firm fixed ef	ffects			
F-statistic	0,26	0,59	0,97	1,49***	0,78	1,36***
$\Delta R^2$ IA	0,05%	0,11%	0,38%	0,61%	0,13%	0,58%
Vuong's $\chi^2$ statistic	1,27	2,95	10,08***	20,19***	4,74*	18,63***
$\% \Delta R^2_{AF}$	0,15%	0,27%	2,00%	1,77%	0,30%	1,80%
Panel D: Testing the signifi	cance of audi	t partner fixed	d effects			
F-statistic	1,32**	2,02***	1,67	3,36***	2,23***	3,10***
$\Delta R^2$ IA	6,83%	8,89%	5,86%	6,56%	9,21%	6,69%
Vuong's $\chi^2$ statistic	155,14***	217,96***	150,03***	206,56***	305,15***	205,04***
$\% \Delta \bar{R^2}_{AP}$	23,57%	27,09%	43,32%	22,84%	25,97%	25,59%

Continued.

#### Appendix II: variables definitions

Variable	Definition
Abacc1	The residuals of the following model, estimated by year and industry: $Acc_{i,t} = \alpha_0 + \alpha_1 \Delta REV_{i,t} + \alpha_2 PPE_{i,t} + \alpha_3 CFO_{i,t-1} + \alpha_4 CFO_{i,t} + \alpha_5 CFO_{i,t+1} + \varepsilon_{i,t}$ Where: <i>Acc</i> are total accruals, calculated as the change in current assets except cash and cash equivalents less the change in current liabilities, less the depreciation expense; $\Delta REV$ is the change in revenues; PPE is the level of gross property, plant and equipment; <i>CFO</i> is the cash flow from operations, calculated as net earnings minus
Abacc2	The residuals of the following model, estimated by year and industry: $Acc_{i,t} = \alpha_0 + \alpha_1 \Delta REV_{i,t} + \alpha_2 PPE_{i,t} + \varepsilon_{i,t}$ Where: Acc are total accruals, calculated as the change in current assets except cash and cash equivalents less the change in current liabilities, less the depreciation expense; $\Delta REV$ is the change in revenues: and PPE is the level of gross property, plant and equipment
ActiveOpnShopP	Dummy equaling 1 for clients that obtain a clean audit opinion, switch the partner, and the value of <i>OpnShopP</i> is –1% or less, and 0 otherwise; <i>ActiveOpnShopClientP</i> is set to missing when <i>PassiveOnnShopClientP</i> is 1, and <i>viceversa</i> .
ArInv	Accounts receivable plus inventory over total assets.

(Continued)

8	1	3

Continued.	
Variable	Definition
ARAgg	Audit reporting aggressiveness, calculated as the difference between the predicted probability of MAO and the actual value of MAO, where the predicted probability of MAO is derived from the annual estimation of the following logistic regression:
	$\Pr(OP_{i,t} = 1) = \beta_0 + \beta_1 Roa_{i,t} + \beta_2 Loss_{i,t} + \beta_3 Leverage_{i,t} + \beta_4 CR_{i,t}$
	$+ \beta_5 Size_{i,t} + \beta_6 ArInv_{i,t} + Industry effects + \eta_{i,t}$
Big	Dummy equalling 1 when the audit firm is a big international firm, 0 otherwise.
$CI_{AF}$	Client importance at the audit-firm level, measured as client's logarithm of total assets divided by $PSize_{AF}$ .
$CI_{AP}$	Client importance at the individual auditor level, measured as client's logarithm of total assets divided by $PSize_{AP}$
CR	Current ratio, calculated as current assets over current liabilities.
Growth	Annual sales growth rate.
LagX	Represents the one-year lagged value of the corresponding variable X.
Leverage	Total debt over total assets. In the case of outliers (i.e. firms in technical bankruptcy, where total debt is greater than total assets), we set this ratio to 1.
ListAge	Number of years since the company's equity is listed.
Loss OpnShopP	The difference between the predicted probability of receiving a modified opinion conditioned on a partner switch within the same firm occurring and the predicted probability of receiving a modified opinion conditioned on not switching the auditor.
OpnShopP2	The same as <i>OpnShopP</i> calculated using predicted response variables instead of predicted probabilities.
OpnShopF	The difference between the predicted probability of receiving a modified opinion conditioned on a firm switch occurring and the predicted probability of receiving a modified opinion conditioned on not switching the auditor.
OpnShopF2	The same as <i>OpnShopF</i> calculated using predicted response variables instead of predicted probabilities.
<i>OpnShopClientP</i>	Dummy equalling 1 if a company obtains a clean audit opinion and either there is a partner switch when the value of $OpnShopP$ is $-1\%$ or less, or there is no partner switch when $OpnShopP$ is $1\%$ or higher, and 0 otherwise.
<i>OpnShopClientF</i>	Dummy equalling 1 if a company obtains a clean audit opinion and either there is a firm switch when the value of $OpnShopF$ is $-1\%$ or less, or there is no firm switch when $OpnShopF$ is $1\%$ or higher, and 0 otherwise.
OP	Dummy equalling 1 when there is a modified opinion, 0 otherwise.
OP_Up	Dummy equalling 1 when there is an upgrading in the opinion (i.e. $LagOP = 1$ and $OP = 0$ ), 0 otherwise.
OP_Down	Dummy equalling 1 when there is a downgrading in the opinion (i.e. $LagOP = 0$ and $OP = 1$ ), 0 otherwise.
PartnerCI	The weight of a client's total assets over the total assets of all clients audited by the same audit partner.
PasiveOpnShopP	Dummy equaling 1 for clients that get a clean opinion, do not switch the partner and <i>OpnShopP</i> is 1% or higher; and 0 for clients that are not classified as partner-level opinion shoppers.
Pexper	Dummy equalling 1 when the audit partner is an expert in the company's industry, 0 otherwise. A partner is an expert if he/she audits at least three companies in the same company's industry in a given year.
$PSize_{AF}$	Client portfolio size of the audit firm, measured as the sum of the logarithm of total assets of the firm clients in a particular year.
$PSize_{AP}$	Client portfolio size of an individual auditor, measured as the sum of the logarithm of total assets of the partner clients in a particular year.
Roa	Return on assets, calculated as net income over total assets.

Definition
Dummy equalling 1 when there is a non-mandatory partner switch within the same audit firm (i.e. a within firm auditor switch), 0 otherwise.
Dummy equalling 1 when there is a non-mandatory audit firm switch, 0 otherwise.
Total sales.
Logarithm of total sales.
Dummy variable equalling 1 if the company reports <i>Roa</i> between 0 and 1 percent, and 0 if the company reports <i>Roa</i> between -1 percent and 0.
Audit partner tenure with the company up to t-1, in number of years.
Audit firm tenure with the company up to t-1, in number of years.
Annual change in the corresponding variable X.

Continued.