*Three essays on the effects of foreign direct
investment on the host-country companies:
An analysis in the private setting*

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To my family

Thesis overview

Foreign direct investment (FDI) has grown exponentially during the last decades: it represented 5.81 percent of the world GDP in 1980, while in 2015 it accounted for 34.62 percent.¹ The 2011 report of the United Nations Conference on Trade and Development points out that in 2010 the value-added generated by multinational corporations (MNCs) represented more than a quarter of global GDP, while their foreign affiliates accounted for more than 10 percent of global GDP and one third of the world exports (UNCTAD, 2011). In this context of globalization, the economic effects of FDI are of great interest to firms, either investors in foreign countries or receivers of FDI flows; regulators, who establish FDI policies; and the remaining economic agents, such as employees, investors and creditors, whose welfare is affected by FDI.

The academic literature has analyzed both the home- and host-country economic effects of FDI. Likewise, the analysis of these effects has been conducted at the macroeconomic level, where the line of research that relates FDI with economic growth receives much attention (e.g.: Alfaro, Chanda, Kalemli-Ozcan, & Sayek, 2004; Forte & Moura, 2013; Xu, 2000), as well as from the microeconomic perspective, where research is focused on the firm-level effects. This thesis, fitted within the finance and accounting area, adopts the microeconomic perspective and focuses on the FDI effects on the host-country firms.

We analyze the Spanish setting, where some studies that relate FDI to various macroeconomic indicators have been conducted (e.g.: Durán-Herrera et al., 2007; Myro, 2015), but prior evidence at the firm-level is virtually nonexistent. Since its openness to the outside world in the 1960s, Spain has been a net recipient of foreign investment. In 2016, it is the 14th country in the world and the 7th in the European Union (EU) as per FDI inflows (CIA, 2016), and the 9th most open economy according to the OECD's FDI

¹ See <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx>.

regulatory restrictiveness index.² During these five decades, Spain has become a developed country, and its volume of investment abroad is also substantial, being the 14th largest foreign investor in the world (CIA, 2016). By looking at one host-country, we keep constant the institutional, cultural and regulatory environment affecting the FDI recipients. As in the rest of the EU member states, despite complying with the general framework established in the EU Directives and Regulations, the Spanish accounting, taxation, auditing and other corporate regulations remain local for private companies, which are the focus of this thesis.

By focusing on privately held companies, we contribute to the understanding of a setting scarcely investigated to date, in spite of its economic importance. Private firms are predominant in most economies (Berzins, Bøhren, & Rydland, 2008), and are the main FDI receivers. They account for more than 75 percent of GDP in the EU (EcoDA, 2010: 6). In Spain, 99.9 percent of the companies are private (Chislett, 2015: 36), like in other European countries (ECB, 2013: 66). The primary reason for the shortage of research in the setting of private firms is the scarce availability of financial data (Hope & Vyas, 2017). The Spanish setting has the advantage that private companies are required to file their financial statements with a public register; and, currently, there are databases that provide enough historical accounting information for large samples. The results obtained from the analysis of listed firms cannot be extrapolated to private firms, since there is evidence that these two types of companies differ substantially along a number of important factors that determine two of the effects of FDI we are interested in, namely performance (Akguc, Choi, Kim, & McKenzie, 2014; Allee, Badertscher, & Yohn, 2015) and financial reporting quality (Arnedo, Lizarraga, & Sánchez-Alegría, 2007; Ball & Shivakumar, 2005; Burgstahler, Hail, & Leuz, 2006).

² See <http://stats.oecd.org/Index.aspx?datasetcode=FDIINDEX#>.

The thesis consists of three independent papers, each of them making a contribution towards the achievement of the above mentioned general objective. In the first paper we analyze the relation of foreign shareholding with the company's performance; while the last two studies focus on the relation between foreign ownership and the quality of the accounting information produced by the company.

All the three papers are empirical, using statistical and econometric methods for the analysis of archival data. The samples used consist of firms that are required to audit their financial statements and are subsidiaries of foreign or local groups (i.e., firms where there is a parent company that owns at least 50.01 percent of the voting rights). Focusing on subsidiaries allows us to isolate the analyses of foreign ownership as a determinant of performance and financial reporting quality from the effect of controlling shareholding, which literature has previously linked to both the firm-characteristics analyzed and the experimental variable of interest (i.e., foreign ownership) (e.g.: Chen, Elder, & Hung, 2010; Gagnon & Anderson, 1988; Gugler, 2001).

Our primary source of information is the SABI database, a Bureau van Dijk database which provides comprehensive information of a large number of Spanish companies. However, the preparation of the samples used in the empirical analyses required a significant effort of compiling and coding information. On the one hand, SABI offers only the most recent information available on the ownership structure of a firm, so we had to manually gather the information on each subsidiary's controlling shareholder/s during the sample period, which begins in 1997 because data before that year is scarce and ends in 2013 because of the significant effort needed in data gathering. In particular, we used the group's and the subsidiary's corporate websites and the Factiva database, which is an international news database produced by Dow Jones, to identify the date when each parent company became the controlling shareholder of the corresponding subsidiary.

We also collected information on each parent company's country of origin and listing status during the period analyzed. On the other hand, for the analysis carried out in the last paper, we used information on the underlying reason/s for issuing a modified audit opinion (i.e., non-clean, thereafter MAO). SABI provides the text of the audit report where the auditor explains why s/he issued an MAO, so we carefully read each specific paragraph of the 4,951 MAOs in order to identify and codify the reason/s giving rise to them.

The first paper fits within the line of research that analyzes the effect of the internationalization of the ownership structure on firm performance. The studies in this line of research do not provide conclusive evidence. Some studies present evidence supporting the thesis that the subsidiaries of foreign MNCs are more profitable, productive, or efficient than those having local control (e.g.: Conyon, Girma, Thompson, & Wright, 2002; Piscitello & Rabbiosi, 2005; Wei, Xie, & Zhang, 2005). Others document the existence of important costs associated with the geographical distance and the foreigners' lack of knowledge of the local environments which can be obstacles in the governance and good functioning of subsidiaries located abroad (e.g.: Buckley & Carter, 2002; Buckley & Casson, 1998; Tomassen & Benito, 2009). Such costs result in a lower performance relative to companies under local control (Barbosa & Louri, 2005; Kim & Lyn, 1990), despite the fact that foreign investors tend to buy the best companies (positive selection) (Arnold & Javorcík, 2009; Guadalupe, Kuzmina, & Thomas, 2012).

The results of the empirical analysis carried out indicate that foreign group subsidiaries have higher sales turnover ratios than subsidiaries of local groups, but they generate lower profits and similar operating cash flows (CFOs) per euro invested. Additionally, we find that foreign-owned firms lose their sales advantage at the operating income level, and that this has to do with the higher wages expense they incur relative to

local group subsidiaries. Additionally, we find that, when the foreign controlling shareholders are headquartered in a more productive country than Spain, the negative relation between foreign shareholding and firm profitability is mitigated. Our results are consistent with the internalization theory (Coase, 1937) according to which foreign group subsidiaries take advantage of the proprietary intangible assets received from their parent companies, generating higher sales turnover ratios than their local group competitors. Nonetheless, our results also support the allegedly higher governance costs of foreign-owned subsidiaries, which lose their sales advantage at the operating profit and CFO level because of higher wages expense. The higher personnel expenses of foreign group subsidiaries are compatible with the documented higher frequency of expatriate employees hired by these companies. For example, MNCs tend to appoint managers from the country of origin of the parent company to make sure that everything is done 'in the group's best interests' (e.g.: Harzing, 2001; Tung, 1982 & 1987).

The second and third papers contribute to the accounting research stream concerned with the determinants of financial reporting quality in private companies. High quality accounting information contributes to the efficient allocation of the scarce economic resources (Akerlof, 1970), and for this reason it is essential to know what factors influence financial reporting quality, so that standards and policies can be drawn up to improve the accounting system (Watts & Zimmerman, 1986).

Foreign ownership is one of the factors potentially related to financial reporting quality. Thus, one of the potential effects of FDI on the host-country has to do with its impact on the accounting system, in particular on the financial reporting quality of the host-companies. In some studies, the presence of foreign investors is associated with higher accounting quality (e.g.: An, 2015; Ben-Nasr, Boubakri, & Cosset, 2015; Beuselinck, Blanco, & García-Lara, 2017; Khanna & Palepu, 2000). However, there is

also evidence suggesting that, while improving the quality of the financial information systems attracts FDI flows into a country/company, foreign investment does not improve the quality of the accounting information of local firms (e.g.: Beuselinck, Cascino, Deloof, & Vanstraelen, 2017; Bradshaw, Bushee, & Miller, 2004; Ferreira & Matos, 2008). Nonetheless, extent studies mainly focus on listed companies, and results cannot be extrapolated to the private setting.

Financial reporting quality is a context-specific construct that can be approached from various perspectives. In general, when talking about the quality of the accounting information reference is made to the need that this information is useful in the decision-making process (Dechow, Ge, & Schrand, 2010; Francis, Olsson, & Schipper, 2008; Schipper & Vincent, 2003). Therefore, not all the measures of reporting quality used in the literature intend to capture the same dimension of quality. In fact, there is evidence that the correlation between different proxies used in literature is not necessarily positive (e.g.: Dechow et al., 2010). Considering this, in each of the two papers related to this line of research we adopt a different approach to measure financial reporting quality.

In the second paper, we focus on the relation between foreign ownership and the propensity of the company to carry out earnings management practices, defined as the discretionary use of the managers' professional judgment to alter earnings, and other accounting numbers (e.g.: Healy & Wahlen, 1999). Insofar as these practices give decision-makers a distorted picture of the company's financial situation and earnings, they make information less useful for decision-making, and therefore of lower quality.³

³ There are studies suggesting that indeed the earnings management practices are carried out for opportunistic purposes, and make accounting figures more opaque (e.g.: Healy, 1985; Holthausen, Larker, & Sloan, 1995; Leuz, Nanda, & Wysocki, 2003; Teoh, Welch, & Wong, 1998). However, there is also a line of research that suggests the possibility that certain practices of accounting manipulation, such as income smoothing, are in fact an instrument that managers use to signal private information to outsiders regarding the future prospects of the company (e.g.: Dichev & Tang, 2009; Tucker & Zarowin, 2006).

We proxy earnings management by discretionary accruals (e.g.: Dechow & Dichev, 2002; Dechow, Sloan, & Sweeney, 1995; Jones, 1991). We find that firms with foreign controlling shareholders have higher magnitudes of discretionary accruals than subsidiaries of local groups. In addition, when looking only at the subsidiaries that change from local to foreign control or vice-versa, we observe that the magnitude of discretionary accruals is significantly higher in the years under foreign control. Furthermore, our results indicate that the negative relation between foreign control and financial reporting quality is driven by the subsidiaries of groups where the parent company is headquartered in a country with higher institutional quality than Spain, which is consistent with the literature on the earnings management strategies within MNCs (e.g.: Beuselinck, Cascino, et al., 2017). Additionally, we discard an alternative explanation for our results, namely the informational disadvantage of foreign controlling shareholders with respect to their local counterparts. Such informational disadvantage should be mitigated with the controlling shareholder's tenure, but our results reveal that the foreign parent company's tenure has a negative incremental effect on the subsidiary's financial reporting quality, which is inconsistent with the argument.

In the last paper, we measure financial reporting quality from the auditor's perspective. Several papers use the likelihood of receiving an MAO as an inverse measure of reporting quality, since the external auditor is precisely a professional in charge of assessing the quality of the financial statements (e.g.: Chen, He, Ma, & Stice, 2016). This approach differs from that used in the second paper. First, because the measures of accruals quality are obtained from the researcher's analysis of the accounting numbers reported by the company, while the audit opinion is the outcome of an external professional assessment. Second, because the detailed analysis of the audit opinion that we carry out allows to capture different dimensions of financial reporting quality. Thus,

while prior research typically has used a dichotomous classification of the audit opinion based on whether the opinion is clean or modified, in this paper we carry out an in-depth analysis of the reasons underlying MAOs which allows to classify them into three broad categories: (1) related to infringements of recognition and measurement standards (i.e., GAAP violations); (2) related to lack of transparency (i.e., omitted information and/or scope limitations); and (3) related to uncertainties, including going concern uncertainties (GCUs). Of these three types of reasons for MAOs, only the GAAP violations may capture the same dimension of reporting quality as that analyzed in the second paper, namely earnings management practices; although this is also unlikely, given that, in general, earnings management practices do not imply GAAP violations (e.g.: DeFond & Zhang, 2014; Healy, 1985), and in that case the auditor must not issue an MAO.

The results show that companies with foreign controlling shareholder are more likely to receive MAOs. This is compatible with at least two alternative arguments. Firstly, considering the results of our second paper, MAOs could be capturing earnings management practices, and therefore the results are simply showing the auditors' reporting earnings management. However, when looking at the specific reasons for issuing MAOs, we see that the incidence of the type of MAOs that more likely capture earnings management (i.e., GAAP violation related MAOs) is not significantly different between subsidiaries of foreign and local groups. This is inconsistent with the argument previously mentioned, and rather supports the view that MAOs do not highlight earnings management practices (e.g.: Bradshaw, Richardson, & Sloan, 2001; Butler, Leone, & Willenborg, 2004; Herbohn & Rangunathan, 2008; Tsipouridou & Spathis, 2014). Even though foreign group subsidiaries are more prone to engaging in earnings manipulation (paper 2), their accounting practices do not infringe the accounting standards to a greater

extent than local group subsidiaries. Jointly, these findings suggest that subsidiaries of foreign groups are better able to manage earnings within GAAP.

The second line of argumentation that leads to predict a higher frequency of MAOs in foreign group subsidiaries relates to their documented lower dependence of external financing (Nguyen, 2013; Nguyen & Rugman, 2015; Wang & Wang, 2015), which implies that they suffer to a lower extent the, also documented, negative consequences of MAOs (e.g.: Chen et al., 2016; Choi & Jeter, 1992; Dopuch, Holthausen, & Leftwich, 1986; Karjalainen, 2011). In other words, foreign-owned companies have less incentives to avoid MAOs than local group subsidiaries. The type of MAOs that partly drive the positive association of foreign ownership and the probability of receiving an MAO are those associated with lack of transparency (i.e., omitted information and/or scope limitations). We argue that the differences in the cost-benefit relation of avoiding MAOs between foreign and locally-owned subsidiaries could in turn depend on the reason for issuing an MAO, and therefore underlie the results. It could be the case that the costs of producing additional accounting information to avoid MAOs for opacity reasons might be higher than those associated with accounting policy changes necessary to avoid GAAP violation related MAOs; or that companies might be on average more willing to avoid MAOs for GAAP violations because they cast more doubts on their financial statements and increase their public visibility. Further research is needed to disentangle the role in our results of the cost-benefit relation of MAOs.

Finally, regarding the uncertainty related MAOs, we find that subsidiaries owned by foreign groups are as likely to receive MAOs for GCUs as those owned by local groups, although the results of the differences-in-differences analysis show a lower incidence of GCUs in foreign group subsidiaries. This result is not surprising, since GCUs are associated with a higher probability of bankruptcy and the first paper of this thesis

indicates that, in terms of performance, foreign group subsidiaries have a sales advantage with respect to their local group counterparts which has been associated with company survivorship (Parker, Peters, & Turetsky, 2002). In contrast, the uncertainty related MAOs other than GCUs are more frequent in foreign-owned companies. Most uncertainties in this category are due to tax inspections and litigations, and the higher frequency of this type of MAOs in foreign-owned subsidiaries might be reflecting the unfamiliarity of foreign investors with the local regulations.

Overall, the results of the three papers suggest a negative effect of FDI on the performance and financial reporting quality of the host-companies. In particular, we find that foreign ownership is associated with a sales advantage, but the higher personnel costs make foreign group subsidiaries less profitable than their locally-owned counterparts. As far as accounting quality is concerned, foreign-owned companies are also inferior to those owned by local groups. More precisely, we find a higher prevalence of earnings management and a higher likelihood of receiving modified audit reports for lack of transparency in companies owned by foreign groups. In sum, foreign control does not enhance firm profitability nor financial reporting quality, but fosters firm opacity.

References

- Akerlof, G. (1970). The market for lemons: Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488-500.
- Akguc, S., Choi, J. J., Kim, S.-J., & McKenzie, M. (2014). Do private firms perform better than public firms? *Working Paper*, available at: http://sydney.edu.au/business/__data/assets/pdf_file/0017/202571/Akguc_Choi_Kim_McKenzie.pdf.
- Alfaro, L., Chanda, A., Kalemli-Ozcan, S., & Sayek, S. (2004). FDI and economic growth: The role of local financial markets. *Journal of International Economics*, 64(1), 113-134.
- Allee, K. D., Badertscher, B. A., & Yohn, T. L. (2015). Private versus public corporate ownership: Implications for future profitability. *Kelley School of Business Research Paper No. 2014-16*, available at SSRN: <https://ssrn.com/abstract=2375916> or <http://dx.doi.org/10.2139/ssrn.2375916>.
- An, Y. (2015). Does foreign ownership increase financial reporting quality? *Asian Academy of Management Journal*, 20(2), 81-101.
- Arnedo, L., Lizarraga, F., & Sánchez-Alegría, S. (2007). Does public/private status affect the level of earnings management in code-law contexts outside the United States? A study based on the Spanish case. *The International Journal of Accounting*, 42(3), 305-328.
- Arnold, J. M., & Javorcik, B. S. (2009). Gifted kids or pushy parents? Foreign direct investment and plant productivity in Indonesia. *Journal of International Economics*, 79(1), 42-53.
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83-128.
- Barbosa, N., & Louri, H. (2005). Corporate performance: Does ownership matter? A comparison of foreign- and domestic-owned firms in Greece and Portugal. *Review of Industrial Organization*, 27(1), 73-102.
- Ben-Nasr, H., Boubakri, N., & Cosset, J. C. (2015). Earnings quality in privatized firms: The role of state and foreign owners. *Journal of Accounting and Public Policy*, 34(4), 392-416.
- Berzins, J., Bøhren, Ø., & Rydland, P. (2008). Corporate finance and governance in firms with limited liability: Basic characteristics. *Research Report No.1*, Centre for Corporate Governance Research, Norwegian Business School.
- Beuselinck, C., Blanco, B., & García-Lara, J. M. (2017). The role of foreign shareholders in disciplining financial reporting. *Journal of Business Finance & Accounting*, 44(5-6), 558-592.
- Beuselinck, C., Cascino, S., Deloof, M., & Vanstraelen, A. (2017). Earnings management within multinational corporations. *Working Paper*, available at SSRN: <http://ssrn.com/abstract=1599678>.
- Bradshaw, M., Bushee, B., & Miller, G. (2004). Accounting choice, home bias, and US investment in non-US firms. *Journal of Accounting Research*, 42(5), 795-841.
- Bradshaw, M., Richardson, S., & Sloan, R. (2001). Do analysts and auditors use information in accruals? *Journal of Accounting Research*, 39(1), 45-74.
- Buckley, P. J., & Carter, M. J. (2002). Process and structure in knowledge management practices of British and US multinational enterprises. *Journal of International Management*, 8(1), 29-48.

- Buckley, P. J., & Casson, M. C. (1998). Analyzing foreign market entry strategies: Extending the internalization approach. *Journal of International Business Studies*, 29(3), 539-561.
- Burgstahler, D., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review*, 81(5), 983-1016.
- Butler, M., Leone, A. J., & Willenborg, M. (2004). An empirical analysis of auditor reporting and its association with abnormal accruals. *Journal of Accounting and Economics*, 37(2), 139-165.
- Central Intelligence Agency (CIA). (2016). *Spain*. In *The World Factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/sp.html>.
- Chen, K. Y., Elder, R. J., & Hung, S. (2010). The investment opportunity set and earnings management: Evidence from the role of controlling shareholders. *Corporate Governance: An International Review*, 18(3), 193-211.
- Chen, P. F., He, S., Ma, Z., & Stice, D. (2016). The information role of audit opinions in debt contracting. *Journal of Accounting and Economics*, 61(1), 121-144.
- Chislett, W. (2015). The international position of Spanish companies: On the rise. *Revista Elcano*, 9, 32-37.
- Choi, S. K., & Jeter, D. C. (1992). The effect of modified audit opinion on earnings response coefficients. *Journal of Accounting and Economics*, 14(2-3), 229-247.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386-405.
- Conyon, M. J., Girma, S., Thompson, S., & Wright, P. (2002). The productivity and wage effects of foreign acquisition in the United Kingdom. *Journal of Industrial Economics*, 50(1), 85-102.
- Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(Suppl.), 35-59.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2-3), 344-401.
- Dechow, P., Sloan, R., & Sweeney, A. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
- DeFond, M. L., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3), 275-326.
- Dichev, I., & Tang, V. W. (2009). Earnings volatility and earnings predictability. *Journal of Accounting and Economics*, 47(1), 160-181.
- Dopuch, N., Holthausen, R. W., & Leftwich, R. W. (1986). Abnormal stock returns associated with media disclosures of 'Subject to' qualified audit opinions. *Journal of Accounting and Economics*, 8(2), 93-117.
- Durán-Herrera, J. J., del Hoyo-Bernat, J., Cendejas-Bueno, J. L., Llorente-Álvarez, J. G., Monjas-Barroso, M., & Úbeda-Mellina, F. (2007). Inversión directa en el exterior, crecimiento económico y exportaciones de la economía española [Foreign direct investment, economic growth and exports of the Spanish economy]. *Información Comercial Española, ICE: Revista de economía*, 839, 35-54.
- European Central Bank (ECB). (2013). Valuation of foreign direct investment positions - Final report. *Statistics Paper Series*, 4.
- European Confederation of Directors' Associations (EcoDA). (2010). *Corporate governance guidance and principles for unlisted companies in Europe*. Brussels: EcoDA.
- Ferreira, M., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88(3), 499-533.

- Forte, R., & Moura, R. (2013). The effects of foreign direct investment on the host country's economic growth: Theory and empirical evidence. *The Singapore Economic Review*, 58(3), 1-28.
- Francis, J., Olsson, P., & Schipper, K. (2008). Earnings Quality. *Foundations and Trends in Accounting*, 1(4), 259-340.
- Gatignon, H., & Anderson, E. (1988). The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. *Journal of Law, Economics and Organization*, 4(2), 305-336.
- Guadalupe, M., Kuzmina, O., & Thomas, C. (2012). Innovation and foreign ownership. *American Economic Review*, 102(7), 3594-3627.
- Gugler, K. (2001). *Corporate governance and economic performance*. Oxford: University Press.
- Harzing, A. W. (2001). Who's in charge? An empirical study of executive staffing practices in foreign subsidiaries. *Human Resource Management*, 40(2), 139-158.
- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1-3), 85-107.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365-383.
- Herbohn, K., & Ragunathan, V. (2008). Auditor reporting and earnings management: Some additional evidence. *Accounting and Finance*, 48(4), 575-601.
- Holthausen, R. W., Larker, D., & Sloan, R. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics*, 19(1), 29-74.
- Hope, O. K., & Vyas, D. (2017). Private company finance and financial reporting. *Accounting and Business Research*, forthcoming, available at SSRN: <https://ssrn.com/abstract=2928730>.
- Jones, J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.
- Karjalainen, J. (2011). Audit quality and cost of debt capital for private firms: Evidence from Finland. *International Journal of Auditing*, 15(1), 88-108.
- Khanna, T., & Palepu, K. G. (2000). Emerging market business groups, foreign investors, and corporate governance. In R. Morck (Ed.). *Concentrated corporate ownership* (pp. 265-294). Chicago: University of Chicago Press.
- Kim, W. S., & Lyn, E. O. (1990). FDI theories and the performance of foreign multinationals operating in the US. *Journal of International Business Studies*, 21(1), 41-54.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505-527.
- Myro, R. (2015). Foreign direct investment in Spain. *SEFO-Spanish Economic and Financial Outlook*, 4(1), 37-45.
- Nguyen, Q. (2013). Can British multinational enterprises finance economic development in South East Asia? *Multinational Business Review*, 21(2), 122-147.
- Nguyen, Q., & Rugman, A. (2015). Internal equity financing and the performance of multinational subsidiaries in emerging economies. *Journal of International Business Studies*, 46(4), 468-490.
- Parker, S., Peters, G. F., & Turetsky, H. F. (2002). Corporate governance and corporate failure: A survival analysis. *Corporate Governance*, 2(2), 4-12.
- Piscitello, L., & Rabbiosi, L. (2005). The impact of inward FDI on local companies' labour productivity: Evidence from the Italian case. *International Journal of the Economics of Business*, 12(1), 35-51.

- Schipper, K., & Vincent, L. (2003) Earnings quality. *Accounting Horizons*, 17(Suppl.), 97-110.
- Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earnings management and the long-run market performance of initial public offerings. *Journal of Finance*, 53(6), 1935-1975.
- Tomassen, S., & Benito, G. R. (2009). The costs of governance in international companies. *International Business Review*, 18(3), 292-304.
- Tsipouridou, G., & Spathis, C. (2014). Audit opinion and earnings management: Evidence from Greece. *Accounting Forum*, 38(1), 38-54.
- Tucker, J., & Zarowin, P. (2006). Does income smoothing improve earnings informativeness? *The Accounting Review*, 81(1), 251-270.
- Tung, R. L. (1982). Selection and training procedures of US, European, and Japanese multinationals. *California Management Review*, 25(1), 57-71.
- Tung, R. L. (1987). Expatriate assignments: Enhancing success and minimizing failure. *Academy of Management Executive*, 1(2), 117-125.
- United Nations Conference on Trade and Development (UNCTAD). (2011). *World Investment Report*.
- Wang, J., & Wang, X. (2015). Benefits of foreign ownership: Evidence from foreign direct investment in China. *Journal of International Economics*, 97(2), 325-338.
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Englewood Cliffs, New Jersey: Prentice Hall.
- Wei, Z., Xie, F., & Zhang, S. (2005). Ownership structure and firm value in China's privatized firms: 1991-2001. *Journal of Financial and Quantitative Analysis*, 40(1), 87-108.
- Xu, B. (2000). Multinational enterprises, technology diffusion, and host country productivity growth. *Journal of Development Economics*, 62(2), 477-493.

***Paper 1. Foreign ownership and
financial performance:
Evidence from private subsidiaries***

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1. Introduction

Globalization expanded tremendously in the last decades, and foreign direct investment (FDI) has quickly become its most important component, alongside international trade. Thus, it is not surprising that the effects of FDI, both at the macro- and microeconomic level, have received much attention. Despite the fact that policy makers generally view FDI as beneficial for the host-country because multinational corporations (MNCs) are supposed to bring superior technology and organizational practices, it remains unclear whether or not, and under which circumstances, those expected benefits are actually produced (Lipsey & Sjöholm, 2005). In this paper we study how foreign ownership relates to the company's financial performance.

We examine privately held subsidiaries located in Spain. Unlike other studies that compare the performance of foreign-owned firms with that of domestic companies (i.e., subsidiaries and/or stand-alone firms), we focus on a large sample of subsidiaries, meaning companies that are majority-owned by a foreign or a local group. This way, we make sure that our findings are not capturing the effect of controlling shareholding, since control is related to both firm performance (Gugler, 2001) and foreign investment (Gatignon & Anderson, 1988), and the results on these associations are mixed. In addition, we focus on private firms, which constitute the most important FDI receivers worldwide, and especially in Europe (ECB, 2013: 66). Finally, our research setting permits leaving constant the country-specific institutional characteristics that could also affect the relation of interest. Spain is one of the main FDI receivers in the world (see CIA, 2016; OECD, 2014), and *foreign companies in Spain account for more than 49 percent of the total industrial turnover yearly and 33 percent of the industrial employment* (ICEX, 2017: 10).

The assumption that FDI fosters performance gains is based on the internalization theory on MNCs, according to which their foreign subsidiaries benefit from the transfer of proprietary intangible assets and are likely to enjoy higher productivity and profitability levels with respect to their locally-owned counterparts (Blomström, Kokko, & Zejan, 2000; Caves, 1996; Dunning, 1993). A number of studies document a superior performance of foreign subsidiaries, which has become a “stylized fact” (Conyon, Girma, Thompson, & Wright, 2002). However, there is a strand of literature that casts doubt on this finding (Barbosa & Louri, 2005; Greenaway, Guariglia, & Yu, 2014), arguing that foreign group subsidiaries have an informational disadvantage with regard to subsidiaries of local groups, which could difficult their governance, and ultimately result into lower profitability.

In our empirical tests, we focus on financial performance and use a battery of accounting-based performance measures. In particular, we consider the ratios of sales, operating income, income before taxes, net income, and cash flows from operations (CFOs), respectively, to total assets. We find that, although foreign group subsidiaries report higher sales turnover than subsidiaries of local groups, they obtain lower profits and similar CFOs per euro invested. Additionally, we observe that foreign-owned firms lose their sales advantage at the operating income level. This result prompts us to investigate whether the cause for this loss has to do with the higher wages that foreign group subsidiaries allegedly pay to their employees (Lipsey, 2004). Results are consistent with this explanation. When we exclude the wages expense from the profit-related measures (i.e., operating income, income before taxes, and net income) and CFOs, we see that firms under foreign control would have higher financial performance than those controlled by local groups.

In an additional analysis we test whether the productivity level in the parent company's home country compared to that in Spain has an effect on the relation investigated. We observe that when the FDI comes from a country with higher productivity levels than Spain the negative association between foreign shareholding and firm performance is mitigated. In addition, when eliminating the wages expense effect, the results reveal that subsidiaries controlled by groups from countries with relatively higher productivity would generate higher profits and CFOs than local group subsidiaries.

Overall, our results support the argument that foreign controlling shareholders transfer valuable intangible assets to their subsidiaries giving them an advantage over their local competitors and resulting in higher sales turnover ratios. However, our results also support the allegedly higher governance problems of foreign-owned subsidiaries, which lose their sales advantage at the operating profit and CFO level, mainly due to the higher wages expense incurred.

This paper contributes to the literature that explores the effects of ownership structure on firm performance (e.g.: Hu & Izumida, 2008b), and specifically that investigating the effects of foreign shareholding on host-firms (Lipsey & Sjöholm, 2005). Our results support the thesis that foreign group subsidiaries receive intangible assets from their parent companies which gives them an advantage over their locally-owned counterparts, resulting in higher levels of sales turnover. The second strand of literature related to our study deals with the implications of foreign ownership for wages (Aitken, Harrison, & Lipsey, 1996; Lipsey & Sjöholm, 2004 & 2006). Our results indicate that, despite the sales advantage of foreign group subsidiaries, these companies obtain lower profits and CFOs per unit invested because of the higher wages expense incurred. Finally, this paper makes a contribution to the prior research documenting that the nationality of

the foreign owners matters for firm performance (e.g.: Conyon et al., 2002; Girma, Greenaway, & Wakelin, 2001).

2. Related literature and hypothesis

Ownership structure and firm performance

Our research adds to the literature that has related several features of the company's ownership structure with its performance, like ownership concentration, and the presence of different types of shareholders, foreigners among others.

Ownership concentration

The literature related to the association between ownership concentration and firm performance goes back to the Berle and Means (1932) thesis that suggests an inverse relation between the diffuseness of shareholding and firm performance. The findings of early empirical studies are consistent with Berle and Means' claim, since they show a positive association between ownership concentration and profitability (e.g.: Cubbin & Leech, 1983; Short, 1994). The Berle and Means' view was challenged by Demsetz (1983), who argues that ownership structure is an endogenous outcome of the shareholders' decisions which are influenced by their profit-maximizing interests. In other words, there should be no relation between ownership structure and firm performance because the *ownership structures, whether diffuse or concentrated, that maximize shareholder expected returns are those that emerge from the interplay of market forces* (Demsetz & Villalonga, 2001: 212). Several studies provide empirical support for this argument, as they do not find a significant relation between ownership concentration and firm performance after controlling for endogeneity and for several firm-characteristics that are likely to influence both ownership structure and performance (e.g.: Demsetz & Villalonga, 2001; Himmelberg, Hubbard, & Palia, 1999). However, a

group of recent studies take into account the potential endogeneity problem and still document that ownership concentration is related to profitability, either positively (e.g.: Kapopoulos & Lazaretou, 2007; Kaserer & Moldenhauer, 2008), or non-linearly (e.g.: Cho & Kim, 2007; Hu & Izumida, 2008a; Thomsen & Pedersen, 2000).

Overall the results of this research stream are non-conclusive. In our study, we focus on controlled firms (i.e., subsidiaries), and we therefore avoid capturing the confounding effect of ownership concentration in our empirical analyses.

Shareholder types

As per the different types of shareholders whose presence has been related to performance, there is research concerned with managerial, institutional, State, or foreign shareholding. We are especially interested in the latter.

Managers

Regarding managerial ownership, a number of studies provide evidence supporting the convergence of interests hypothesis, whereby the interests of managers and shareholders align as managerial ownership increases (Jensen & Meckling, 1976), since they observe a positive association between insider ownership and performance (e.g.: Chung & Pruitt, 1996; Kapopoulos & Lazaretou, 2007; Kaserer & Moldenhauer, 2008; Palia & Lichtenberg, 1999). However, the managerial entrenchment hypothesis (Shleifer & Vishny, 1989) leads to predict the opposite. According to this hypothesis, insiders may deploy corporate actions to obtain personal gains, such as shirking and perquisite consumption, which would endanger firm performance; and these opportunistic actions are easier to put into practice as they increase their ownership share. There are also studies that do not find a relation between managerial ownership and firm performance (e.g.: Cho, 1998; Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001; Himmelberg et al.,

1999; Sheu & Yang, 2005; Welch, 2003). Most probably, as indicated in the seminal work by Morck, Shleifer, and Vishny (1988), the relation between insider ownership and firm performance is non-linear. In particular, the theory predicts a U-shape, which is corroborated by the results of studies like McConnell and Servaes (1990), Short and Keasey (1999), and Holderness, Kroszner, and Sheehan (1999).

Government

Another type of shareholding that has been associated with firm performance is State ownership, which is generally regarded as inefficient because the State focuses on political goals (e.g.: maximizing employment, protecting domestic producers, providing cheap goods and services), rather than on the maximization of wealth as private shareholders do (Boubakri, Cosset, & Guedhami, 2008). In addition, government ownership is also associated with information asymmetry and agency problems (e.g.: Boubakri, Cosset, & Guedhami, 2005; Chaney, Faccio, & Parsley, 2011; Guedhami, Pittman, & Saffar, 2009), which might negatively affect firm performance. Evidence supporting these arguments includes Thomsen and Pedersen (2000) and Chen, Sun, Tang, and Wu (2011), who find that State ownership is negatively related to financial performance and investment efficiency, respectively. In the same vein, Megginson, Nash, and van Randenborgh (1994) and Sun and Tong (2003) argue and find that privatizations are associated with significant performance improvements, and that the effect is lower in firms where the government continues as the majority owner after privatization (Chen, El Ghoul, Guedhami, & Wang, 2017).

Institutional investors

Institutional investors are another type of shareholder whose presence is closely related to performance. They are dominant players in many financial markets and have become a key external corporate governance mechanism worldwide (Gillan & Starks, 2003). A

positive association between institutional ownership and firm performance is documented by McConnell and Servaes (1990), Han and Suk (1998), and Tsai and Gu (2007), who explain their findings on the basis of the effective monitoring role of institutional investors. However, the superior monitoring role of institutional investors has also been questioned (e.g.: Demsetz & Lehn, 1985; Duggal & Millar, 1999). There is a great deal of heterogeneity regarding the objectives and behavior of institutional investors. Therefore, as pointed out by Sahut and Gharbi (2010), the effect of institutional investors on firm performance most likely depends on their typology. Indeed, Sahut and Gharbi (2010) find evidence that only active institutional investors improve firm performance. Also consistent with this thesis, Chen, Harford, and Li (2007) observe that only long-term institutional investors are associated with better post-merger performance and are more likely to withdraw from bad bids. Similarly, Qiu (2008) shows that the presence of large public pension fund shareholders reduces *ex ante* bad acquisitions.

Foreign investors: Institutional versus industrial investors

We are interested in how the presence of foreign owners relates to firm performance. However, literature has frequently studied the role of foreign investors together with that of Institutional investors. Some authors claim that foreign institutions play a more important role than local ones in improving corporate governance around the world (e.g.: Aggarwal, Erel, Ferreira, & Matos, 2011; Gillan & Starks, 2003). Consistent evidence is provided by Ferreira and Matos (2008) who find that foreign institutional ownership has a positive impact on the valuation and performance of non-US firms. Also, Fogel, Lee, Lee, and Palmberg (2013) show that the presence of foreign investors (which are mainly institutional investors) enhances the financial performance of public Swedish firms when they have an active role in the management of the firm. Chen et al. (2017) observe that, as opposed to State ownership, foreign institutional ownership enhances investment

efficiency, and this relation is stronger when governments relinquish majority control and in countries with weak institutional quality.

However, apart from financial and institutional investors (i.e., private equity firms, banks, insurance companies, investment companies, mutual funds, hedge funds etc.), FDI comes from non-financial investors (i.e., manufacturing and service firms). Institutional investors typically hold smaller stakes in their invested firms, while industrial investors have a preference for majority ownership; and the objectives for FDI differ between these two types of foreign investors (Fons-Rosen, Kalemli-Ozcan, Sorensen, Villegas-Sanchez, & Volosovych, 2013). Therefore, the relation of these two types of foreign shareholding with firm performance might also be different. We focus on industrial investors, since we try to isolate the effect of institutional investment from that of foreign shareholding in our analyses.

Hypothesis: Non-institutional foreign control and firm performance

The thesis that foreign-owned companies outperform the locally-owned ones derives from the internalization theory (Coase, 1937), according to which FDI occurs when a company owns proprietary (i.e., firm-specific) intangible assets, like expertise in research, or technology patents, that cannot be easily copied and could be capitalized by internally transferring to foreign subsidiaries (Blomström et al., 2000; Dunning, 1993). This theory predicts that FDI is value increasing to the host-country firms, and foreign group subsidiaries would outperform their locally-owned counterparts. However, there is a competing hypothesis that leads to the opposite prediction, namely the liability of foreignness argument (Hymer, 1976; Zaheer, 1995). According to this argument, foreign groups are less familiar than their local counterparts with the local markets, culture, business practices, and they often lack information networks and political connections in the host-country. These circumstances might difficult the group's governance and result

in a worse performance of companies with foreign ownership than those with local owners. In line with this argument, there is evidence that significant costs related to corporate governance can be obstacles in the good functioning of foreign subsidiaries. Using a sample of foreign subsidiaries of Norwegian multinationals, Tomassen and Benito (2009) conclude that such costs are an important determinant of the performance of foreign subsidiaries, explaining almost 40 percent of its variance.

Extent research offers evidence in support of the two competing hypotheses mentioned above. A summary of the literature that has related foreign shareholding, other than institutional, with different measures of firm performance like profitability, productivity, or efficiency, is provided in Table 1. In Panel A we include the studies documenting a positive association, while Panels B and C compile those studies that find no relation and a negative association, respectively.

Research conducted in Brazil (Willmore, 1986), Italy (Piscitello & Rabbiosi, 2005), Mexico (Khawar, 2003), Turkey (Yasar & Morrison Paul, 2007), the UK (Conyon et al., 2002; Girma, Kneller, & Pisu, 2007; Harris & Robinson, 2003), as well as some international-based studies (e.g.: Djankov, 1999), documents a superior productivity of foreign-owned firms/plants compared to their locally-owned counterparts, which is generally attributed to the foreigners' greater expertise, experience, resources, reputation, and credibility (Caves, 1996; Huang & Shiu, 2009; Teece, 1977). There are also studies where foreign ownership is found to be associated with greater financial performance and/or firm value (Chang, Chung, & Moon, 2013; Wei, Xie, & Zhang, 2005).

Table 1: Literature on the relation between foreign ownership and performance.*Panel A: Studies documenting a positive effect of FDI on performance*

Study	Sample	Findings
<i>Greater productivity</i>		
Aitken and Harrison (1999)	43,010 plant-level observations. 1976-1989 (with the exception of 1980). Venezuela	Foreign ownership is positively associated with plant productivity only for small plants.
Arnold and Javorcik (2009)	392 acquisitions of manufacturing plants. 1983-2001. Indonesia	Foreign ownership (both foreign acquisitions and foreign privatizations) leads to significant productivity improvements which is a result of restructuring.
Blomström and Sjöholm (1999)	13,663 manufacturing plants. 1991. Indonesia	Foreign ownership is positively associated with labor productivity, but the degree of foreign ownership is not relevant.
Canyon, Girma, Thompson, and Wright (2002)	331 domestic and 129 foreign acquisitions of manufacturing firms. 1989-1994. UK	Labor productivity improves as a result of foreign acquisitions, and the greatest improvement is observed for US acquisitions.
Dimelis and Louri (2002)	4,056 manufacturing firms. 1997. Greece	Foreign ownership is associated with increased labor productivity only when foreigners hold the majority of shares.
Djankov (1999)	960 privatized manufacturing firms. 1995-1997. Six newly independent states	Foreign ownership is positively associated with labor productivity growth at high ownership levels (at least 30 percent).
Djankov and Hoekman (2000)	513 listed firms. Diverse industries. 1992-1996. Czech Republic	Foreign investment positively impacts the productivity growth of recipient firms.
Fons-Rosen, Kalemli-Ozcan, Sorensen, Villegas-Sanchez, and Volosovych (2013)	About 134,000 manufacturing firms. 1999-2008. 25 countries	Firms with foreign ownership are hardly more productive than domestic firms.
Girma, Kneller, and Pisu (2007)	3,476 manufacturing firms including 303 foreign acquired firms. 1988-1996. UK	Foreign acquisitions generally promote productivity gains. Greater improvements are observed for firms with higher pre-acquisition productivity and in the years immediately after the acquisition.

Guadalupe, Kuzmina, and Thomas (2012)	About 2,800 manufacturing firms. 1990-2006. Spain	Foreign companies buy the most productive firms within industries, and labor productivity and innovation activities increase after acquisition.
Harris and Robinson (2003)	Plants in 20 manufacturing industries. 1974-1995. UK	Foreign-owned plants are more productive than domestic plants, and this is especially the case of US-owned plants.
Khawar (2003)	2,362 manufacturing firms. 1990. Mexico	Firms with foreign ownership enjoy higher levels of productivity.
Piscitello and Rabbiosi (2005)	113 foreign acquisitions of manufacturing companies. 1994-1997. Italy	Foreign acquisitions are associated with an increase in the subsidiary's labor productivity in the medium term. This is especially the case of subsidiaries controlled by EU MNCs.
Takii (2004)	16,682 manufacturing plants. 1995. Indonesia	Foreign-owned plants are more productive than locally-owned plants and the productivity levels are related to the share of foreign ownership: plants wholly-owned by foreigners have higher productivity than other foreign-owned plants.
Willmore (1986)	282 pairs of foreign and private-owned manufacturing firms. 1978. Brazil	Firms with foreign ownership have higher labor productivity, higher wages and greater capital intensity than their locally-owned counterparts.
Yasar and Morrison Paul (2007)	1,556 manufacturing plants. 1990-1996. Turkey	Foreign ownership and exporting are positively associated with productivity, although the relation is stronger for foreign ownership than for exports.
<i>Greater financial performance</i>		
Chang, Chung, and Moon (2013)	2,195 pairs of local firms acquired by foreign MNCs and firms that remained local. Diverse industries. 1998-2007. China	Larger and more productive firms are more likely to be acquired by foreigners. After takeover, foreign-owned subsidiaries are more likely to have greater financial performance than firms that remained local.
Chhibber and Majumdar (1999)	Over 1,000 listed firms. Diverse industries. Before and after 1991. India	The degree of foreign ownership is relevant to firm performance: foreign shareholding is positively associated with profitability only when attaining majority control (which was allowed only after 1991).

Greenaway, Guariglia, and Yu (2014)	21,582 private firms. Diverse industries. 2000-2005. China	There is an inverted U-shaped relation between foreign ownership and performance: firm performance increases as foreign shareholding rises up to the range 47-61 percent, and afterwards it declines.
Wei , Xie, and Zhang (2005)	5,284 firm-year observations of partially privatized firms. 1991-2001. China	Foreign ownership in privatized firms is positively related to firm value.

Panel B: Studies documenting no effect of FDI on performance

Study	Sample	Findings
No effect on productivity		
Benfratello and Sembenelli (2006)	2,026 manufacturing firms. 1992-1999. Italy	Foreign shareholding has no effect on productivity, but the nationality of the foreign owner matters as firms with US ownership outperform locally-owned firms.
Criscuolo and Martin (2009)	About 19,000 manufacturing plants. 1996-2000. UK	Foreign-owned plants have similar productivity as plants owned by local MNCs, and both are more productive than plants with no international involvement. Additionally, plants owned by US MNCs are the most productive.
Globerman, Ries, and Vertinsky (1994)	6,161 manufacturing plants. 1986. Canada	Foreign-owned plants are not significantly more productive than locally-owned plants, and the nationality of the foreign owner does not matter for labor productivity.
Wang and Wang (2015)	Around 974,000 firm-year observations of manufacturing firms. 2000-2007. China	Foreign acquisitions do not improve productivity relative to domestic acquisitions, but they improve the target's financial conditions.
No effect on financial performance		
Barbosa and Louri (2005)	523 manufacturing firms from Portugal in 1992 and 2,651 manufacturing firms from Greece in 1997	Foreign ownership is not significantly associated with firm profitability, probably because foreign owners have to compensate for their liability of foreignness.

Panel C: Studies documenting a negative effect of FDI on performance

Study	Sample	Findings
<i>Lower productivity</i>		
Doms and Jensen (1998)	115,139 manufacturing plants. 1987. US	MNCs (whether foreign or local) have the most productive, most capital intensive, highest-paying plants. However, plants of local MNCs have better operating characteristics than those of foreign MNCs.
Harris and Robinson (2002)	Plant acquisitions between 1987-1992. UK	Plants acquired by foreigners were on average 41 percent more productive than those that remained local, but after acquisition there is some evidence that productivity declines.
<i>Lower financial performance</i>		
Kim and Lyn (1990)	54 pairs of foreign-owned firms and randomly selected locally-owned firms. 1980-1984. US	Foreign-owned firms earn lower profits than locally-owned firms.

Some studies argue, and find, that foreign ownership leads to significant productivity improvements, even considering that foreigners pick the most productive companies (i.e., positive selection exists). This is the case of Arnold and Javorcik (2009) in Indonesia, Djankov and Hoekman (2000) in the Czech Republic, and Guadalupe, Kuzmina, and Thomas (2012) in Spain. Evidence of positive selection is also reported by Fons-Rosen et al. (2013) in a large sample of companies from 25 countries. This study finds that foreign shareholding has a very small effect on the target firms' productivity. In contrast, there are studies documenting that, despite the positive selection, foreign ownership does not translate into an improved productivity: Benfratello and Sembenelli (2006) analyze a sample of Italian manufacturing firms and conclude that foreign ownership has no effect on productivity; and Harris and Robinson (2002) show that, after foreign acquisitions, productivity declines in a group of UK companies. Similarly, Wang and Wang (2015) compare the changes in performance of firms acquired by foreign and

domestic groups in China and find that foreign ownership does not bring about additional productivity gains with respect to domestic acquisitions. Using plant-level data from Canada, Globerman, Ries, and Vertinsky (1994) convey that foreign-owned plants do not perform differently than local plants. In terms of financial performance, Barbosa and Louri (2005) observe no significant effect of foreign ownership in Portugal and Greece, while Kim and Lyn (1990) conclude that foreign-owned firms are less profitable than randomly selected locally-owned firms in the US setting.

A number of studies examine the existence of a non-linear relation between the degree of foreign ownership and firm performance, although results are mixed. Blomström and Sjöholm (1999) show that, even though foreign ownership in Indonesia is related to higher labor productivity, there is no difference between firms that are majority- or minority-owned by foreign shareholders. This finding contradicts the evidence provided by Dimelis and Louri (2002) and Chhibber and Majumdar (1999), who document a positive association between foreign shareholding and firm performance in Greece and India respectively only when foreigners hold a majority stake. Takii (2004) reaches the same conclusion in Indonesia and additionally finds that plants wholly-owned by foreigners are the most productive. Conversely, Greenaway et al. (2014) study a sample of Chinese firms and obtain evidence of an inverted U-shaped relation between foreign ownership and performance, concluding that joint-ventures perform better than both companies wholly-owned by foreigners and purely domestic firms.

In addition, there is evidence that the effect of foreign ownership on firm performance depends on the characteristics of the invested company. Aitken and Harrison (1999) take into account the size of the plant. Their results, based on a sample of Venezuelan plants, show that foreign ownership improves productivity only in the case of small plants.

Finally, there is also research arguing that the status of the parent company (MNC versus non-MNC) is more important than foreignness itself, since the differences between foreign MNCs and local MNCs are less pronounced than the gap between MNCs and non-MNCs. Consistent evidence is obtained by Criscuolo and Martin (2009), who analyze plant-level data from the UK and conclude that plants of local MNCs have similar productivity to those owned by foreign MNCs, and both are more productive than plants with no international involvement. Doms and Jensen (1998) also consider the status of the parent company and show that, while foreign-owned plants are more productive than domestic plants of non-MNCs, their productivity is lower than that of plants owned by local MNCs.

Overall, the line of research that has examined the effects of foreign shareholding on the firm's performance is inconclusive and the results are often contradictory. Given this lack of consensus we do not make a prediction about how foreign shareholding affects the private subsidiary's performance, and state our hypothesis as follows:

H0: The foreign status of the parent company relates to the financial performance of private subsidiaries.

3. Research design

3.1. Sample

We test the hypothesis stated previously in a large sample of private Spanish subsidiaries. Our primary source of data is the SABI database from Bureau Van Dijk, which we used to select non-financial private subsidiaries that presented full financial statements in

2011.¹ We define subsidiary as a firm controlled by another company (i.e., parent company) which holds, directly or indirectly, at least 50.01 percent of the voting rights.

Since the database does not provide historical information on the companies' ownership structure, we manually gathered the information on each subsidiary's controlling shareholder/s during the period 1997-2013. Specifically, we analyzed the corporate websites of both the group and the subsidiary to obtain the date when each parent company gained control of the corresponding subsidiary. When corporate websites did not disclose this information, we used FACTIVE, an international news database from Dow Jones, to search for information on changes of the controlling shareholders. We assume that a subsidiary was part of a group during the period comprised between the date when its parent company became the controlling shareholder and that when a new group gained control of the firm or when the firm became a stand-alone company (i.e., firm that is not a subsidiary of another company). In cases where the controlling shareholder took over the subsidiary before 1997 and no control change was identified later on, we assume that it exerted such control during the entire sample period.

Subsequently, we identified the home country of all the parent companies in the sample as well as their listing status over the period analyzed. To better isolate our analyses from potentially confounding effects, we discarded the firm-year observations where the controlling shareholder is a financial or an institutional investor.

We obtain the financial data at the subsidiary level from the SABI database. We carry out each subsequent empirical test using the sample where the corresponding

¹ SABI gives only the most recent information available on the ownership structure of a firm and 2011 was the year for which the database offered this information at the time we began the data selection process. Only large Spanish companies are required to draw up full financial statements. In 2011, large companies are those that fulfill two out of the following requirements during two consecutive years: total assets more than 11,400 thousand Euros; net sales revenue higher than 22,800 thousand Euros; and average number of employees higher than 250. In addition, audit is compulsory for large companies.

required variables can be calculated, the sample size slightly varying depending on the analysis. The common sample where all the research variables are available consists of 22,176 firm-year observations. Results do not vary if all the subsequent tests are performed using this sample or a sample where foreign group subsidiaries are matched with local group subsidiaries by size, year, and industry with the coarsened exact matching (CEM) procedure developed by Blackwell, Iacus, King, and Porro (2009).²

Table 2 presents the distribution of the common sample by the home country of the parent company (Panel A) and industry (Panel B). About 53 percent of the observations in our sample pertain to subsidiaries of foreign groups, which are headquartered in twenty seven countries. The foreign countries with a higher frequency are: France, the US, Germany, the UK, Italy, Switzerland, the Netherlands, Japan, Sweden, and Belgium. The remaining countries are aggregated as *other*.³ As for the industry divisions in which the sample companies operate, manufacturing firms are the most frequent, in both the subsamples under foreign and local control. Nonetheless, the industry distribution is quite different in the two subsamples, which suggests that it is important to control for industry affiliation in our subsequent tests because structural characteristics of particular industries are a determinant of profitability (Scherer, 1980).

3.2. Firm performance measures

Corporate performance is a broad concept which reflects how well an organization is doing and is traditionally measured in terms of profitability, productivity, or growth. It

² Matching reduces model dependence and statistical bias (Ho, Imai, King, & Stuart, 2007). Although there are several matching methods, PSM is one of the most popular. However, King and Nielsen (2016) note that CEM overcomes some of PSM's weaknesses, and that *for data with continuous, discrete, and mixed variables (such as continuous variables with natural breakpoints), CEM is the most natural; it is also considerably faster than other methods and so also works well for much larger data sets* (King & Nielsen, 2016: 26).

³ The following countries individually account for less than one percent of the sample (ordered by frequency): Portugal, Luxembourg, Ireland, Denmark, Austria, Finland, South Korea, Norway, Canada, Israel, South Africa, Australia, Mexico, Turkey, Russia, New Zealand, and Lithuania.

Table 2: Sample composition.

This table presents the distribution of the common sample by the parent company's home country (Panel A) and by industry (Panel B).

Panel A: Sample composition by the country of origin of the parent company

Country of origin	Freq.	%
Spain	10,532	47.49
France	2,386	10.76
United States	2,379	10.73
Germany	1,836	8.28
United Kingdom	852	3.84
Italy	686	3.09
Switzerland	658	2.97
Netherlands	632	2.85
Japan	481	2.17
Sweden	328	1.48
Belgium	233	1.05
Other	1,173	5.29
Total	22,176	100.00

Panel B: Sample composition by industry

Industry	Local control		Foreign control	
	Freq.	%	Freq.	%
Agriculture, Forestry & Fishing	126	1.20	77	0.66
Mining & Construction	1,297	12.31	338	2.9
Manufacturing	3,460	32.85	4,826	41.45
Transportation & Public Utilities	1,435	13.63	736	6.32
Wholesale & Retail Trade	1,939	18.41	3,524	30.26
Services	2,275	21.60	2,143	18.41
Total	10,532	100.00	11,644	100.00

is the most important firm characteristic (Hayakawa, Machikita, & Kimura, 2012) given its relevance to stakeholders, such as investors, creditors, analysts, and managers (Matsumoto, Shivaswamy, & Hoban, 1995; Dechow, 1994).

Despite the wide array of performance measures, Harrison and Wicks (2013: 102) note that *financial returns are the most relevant measure of the value created by a firm*. Indeed, financial performance measures are commonly used for analyzing a firm's financial health, since the information needed to calculate them is found in the financial statements (Ross, Westerfield, & Jordan, 2003). Since we focus on the private setting,

where market-based measures, like market-to-book, are not available, we use a set of accounting-based performance measures that can be easily calculated from data disclosed in the financial statements. Specifically, we employ sales (*Sales*), operating income (*OI*), income before taxes (*IBT*), net income (*NI*), and operating cash flows (*CFO*), all of them scaled by total assets.

Hutchinson and Gul (2004) argue that accounting-based performance measures are a reflection of the managerial actions since they are easier to alter (Hunt, 1985; Verrecchia, 1986). Nonetheless, Carr (1997) posits that even though accounting-based measures might be affected by managerial discretion in the short run, accounting- and market-based measures should reflect the same economic factors in the long run. Indeed, we find that our results hold when we correct the performance measures for potential earnings management practices.⁴

3.3. Empirical model

To examine the relation between the presence of foreign controlling shareholders and firm performance we estimate model (1), where the subscripts *i* and *t* indicate firm and time respectively, and we omit coefficients for simplicity.

$$\begin{aligned} Performance_{i,t} = & Foreignown_{i,t} + Size_{i,t} + Lev_{i,t} + PPE_{i,t} + Age_{i,t} + ListedP_{i,t} \\ & + TenureP_{i,t} + Year\ Effects_{i,t} + Industry\ Effects_{i,t} \end{aligned} \quad (1)$$

The definitions of all the variables are in the Appendix. *Performance* refers to each of our five performance measures: *Sales*, *OI*, *IBT*, *NI*, and *CFO*, respectively. The main experimental variable is *Foreignown*, a dummy equaling 1 if the parent company is headquartered in a foreign country, 0 otherwise. The model includes a battery of control

⁴ In particular, we obtain similar results when we correct net income by adding the magnitude of the signed discretionary accruals estimated using the Dechow and Dichev (2002) model and the modified Jones model (Dechow, Sloan, & Sweeney, 1995).

variables for several firm characteristics that prior literature has linked to both firm performance and foreign ownership. We control for the firm's size (*Size*), defined as the logarithm of sales. Larger companies benefit from economies of scale and have better access to bank credits, which might enhance profitability (Chhibber & Majumdar, 1999). The firm's leverage (*Lev*), calculated as total debt over total assets, is expected to be negatively associated with performance because of the debt overhang problem (Myers, 1977).⁵ We also control for capital intensity with the ratio of fixed assets to total assets (*PPE*), and expect a negative relation with firm performance because a higher proportion of fixed assets indicates lower growth opportunities (Tian & Estrin, 2008). Firm age (*Age*), defined as the logarithm of the number of years since the firm was founded, captures firm maturity and is frequently controlled for when analysing the relation between firm performance and ownership structure (e.g.: Barbosa & Louri, 2005; Chang et al., 2013; Dimelis & Louri, 2002). An additional control variable in model (1) is *ListedP*, an indicator variable set to 1 if the parent company is listed, 0 otherwise. Financial performance is higher in privately held companies than in listed firms (Akguc, Choi, Kim, & McKenzie, 2014), and we expect the parent's listing status to be related to the subsidiary's performance because of the substantial influence of the parent on its subsidiary's decision making (e.g.: Hsu, 2000; Robinson & Stocken, 2013). We also include the number of years since the parent company became the controlling shareholder of the subsidiary (*TenureP*) because the parent's tenure determines its autonomy (Fenton-O'Creevy, Gooderham, & Nordhaug, 2008; Taggart & Hood, 1999), which in turn has been associated with subsidiary performance (Robinson & Stocken, 2013). Finally, we

⁵ The term *debt overhang* refers to a situation where a firm's debt is so large that it dissuades current investment because all earnings generated by new investment projects go to existing debt holders.

include year and industry effects, where the latter are built based on the SIC classification.⁶

We winsorize all the continuous variables at the 1 percent and 99 percent levels to reduce the impact of outliers. In our main tests, we use ordinary least squares (OLS) and cluster standard errors on both firm and year following Cameron, Gelbach, and Miller (2011).

4. Descriptive statistics, univariate tests and correlations

Table 3 presents the descriptive statistics for the common sample where all the research variables are available. We report the descriptive statistics by subsamples of subsidiaries under foreign and local control, together with the statistics of the tests whose null hypothesis is that the two subsamples have identical means, distributions, or proportions.

The results indicate that on average foreign and local group subsidiaries perform differently in terms of sales. Differences disappear at the operating income level, while the differences in income before taxes and net income are significant only when comparing medians. It seems that foreign-owned firms have a greater ability than their locally-owned counterparts to generate sales per each euro of assets invested (*Sales*). Nevertheless, despite their superiority in terms of sales revenues, foreign-controlled firms have similar performance levels to subsidiaries of local groups when considering the profits and *CFO* they obtain with a given level of assets.

We also see that the subsidiaries of local and foreign groups significantly differ in other characteristics. In particular, foreign-controlled firms are significantly larger (*Size*) and less indebted (*Lev*) than locally-owned ones. Subsidiaries of foreign groups are also

⁶ Results remain unchanged whether we extend model (1) with the following control variables, whose calculation reduces the sample size considerably: the ratio of intangible assets to total assets, liquidity ratio calculated as current assets over current liabilities, and a dummy variable equaling 1 if the company is an exporter, 0 otherwise.

older (*Age*), more likely to have listed parent companies (*ListedP*), and are part of the same group for longer periods (*TenureP*). To the extent that these characteristics are related to both firm performance and foreign ownership, controlling for the former is necessary to study the association between the latter.

Table 4 presents Pearson pair wise correlations between the research variables. Consistent with the univariate tests, foreign control is significantly and positively correlated with *Sales* but the correlations with the other performance measures are not statistically significant, suggesting that foreign group subsidiaries have higher sales but similar levels of profits and CFOs. However, we see that both *Foreignown* and the performance measures are significantly correlated to the other variables. To control for the potential confounding effect of the other firm characteristics on the relation of interest, we turn now to multivariate analysis.

5. Regression results

In Table 5 we report the results of the estimation of model (1) using the five alternative performance measures employed. The results of the analysis at the univariate level are confirmed, since the coefficient of *Foreignown* in the *Sales* regression is positive and significant, meaning that firms controlled by foreign groups obtain significantly higher sales per assets than subsidiaries of local groups. The relation between *Foreignown* and *Sales* is not only statistically significant but also economically important. The sales revenues per euro of total assets generated by foreign group subsidiaries are, on average, 17.4 percent higher than the sales of subsidiaries of local groups. In contrast, the coefficient of *Foreignown* is negative and significant when the dependent variable is *OI*, *IBT*, or *NI*, indicating that the profits generated by foreign group subsidiaries with a given level of assets are between 0.8 and 0.9 percent lower than those obtained by subsidiaries of local groups. Foreign group subsidiaries have a sales advantage over their locally-

Table 3: Descriptive statistics of research variables.

This table presents the descriptive statistics of the research variables by subsamples of firms under local and foreign control, and the tests for the differences between the two subsamples. Reported statistics correspond to the common sample (22,176 observations). Variable definitions are in the Appendix. The last three columns show respectively the *t*-statistics, χ^2 -statistics and *z*-statistics of the tests where the null hypothesis is that the two groups have identical means, distributions or proportions. Statistical significance is indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variable	Local control (N=10,532)			Foreign control (N=11,644)			Means diff.	Kruskal Wallis	Proportions diff.
	Mean	Median	Stddev	Mean	Median	Stddev			
<i>Sales</i>	1.397	1.088	1.206	1.733	1.488	1.226	-20.56***	763.89***	
<i>Sales revenues (million €)</i>	200.444	57.617	512.540	256.106	100.630	518.356	-8.03***	932.10***	
<i>OI</i>	0.053	0.045	0.109	0.054	0.048	0.125	-0.96	3.83*	
<i>IBT</i>	0.048	0.040	0.118	0.051	0.044	0.134	-1.34	6.64**	
<i>NI</i>	0.035	0.031	0.092	0.034	0.034	0.110	0.86	5.63**	
<i>CFO</i>	0.068	0.056	0.163	0.068	0.057	0.172	-0.09	0.73	
<i>Size</i>	11.057	10.962	1.430	11.552	11.519	1.327	-26.71***	932.10***	
<i>Lev</i>	0.651	0.673	0.242	0.645	0.662	0.264	1.89*	8.35***	
<i>PPE</i>	0.227	0.148	0.235	0.212	0.153	0.206	5.04***	0.22	
<i>Age (years)</i>	23.725	20.000	16.403	27.385	21.000	20.375	-14.64***	95.84***	
<i>Age</i>	2.922	2.996	0.738	3.025	3.045	0.794	-9.98***	95.84***	
<i>ListedP</i>	0.458	0.000	0.498	0.758	1.000	0.429			-45.84***
<i>TenureP</i>	8.912	8.000	5.840	12.804	9.000	13.247	-27.81***	284.32***	

Table 4: Correlations.

This table presents Pearson pair wise correlations of the research variables for the common sample (22,176 observations). Variable definitions are in the Appendix. Statistical significance is indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) <i>Sales</i>	1.00											
(2) <i>OI</i>	0.13***	1.00										
(3) <i>IBT</i>	0.11***	0.95***	1.00									
(4) <i>NI</i>	0.08***	0.91***	0.97***	1.00								
(5) <i>CFO</i>	0.02***	0.42***	0.45***	0.46***	1.00							
(6) <i>Foreignown</i>	0.14***	0.01	0.01	-0.01	0.001	1.00						
(7) <i>Size</i>	0.28***	0.10***	0.10***	0.10***	0.03***	0.18***	1.00					
(8) <i>Lev</i>	0.19***	-0.32***	-0.37***	-0.39***	-0.13***	-0.01*	0.02***	1.00				
(9) <i>PPE</i>	-0.21***	-0.02**	-0.06***	-0.06***	0.15***	-0.03***	0.02***	-0.10***	1.00			
(10) <i>Age</i>	-0.04***	0.04***	0.07***	0.07***	0.03***	0.07***	0.20***	-0.16***	-0.07***	1.00		
(11) <i>ListedP</i>	-0.05***	0.03***	0.04***	0.04***	0.03***	0.31***	0.13***	0.001	-0.03***	0.04***	1.00	
(12) <i>TenureP</i>	0.03***	0.03***	0.04***	0.04***	0.02***	0.18***	0.25***	-0.10***	-0.03***	0.43***	0.09***	1.00

owned counterparts which they lose at the profit level of the income statement. The coefficient of *Foreignown* is also negative when we consider *CFO* as the performance measure, although it is not statistically significantly. Overall, these findings are consistent with both theories on the effect of FDI for host-companies. On the one hand, the sales advantage of the foreign-owned subsidiaries is in line with the internalization theory according to which foreign group subsidiaries outperform their locally-owned counterparts because of the proprietary intangible assets transferred by their parent companies. On the other hand, the fact that foreign group subsidiaries generate lower profits in spite of their sales advantage indicates that they incur higher costs due to their informational disadvantage with respect to local investors.

Table 5: Foreign control and firm performance. Regression analysis.

This table presents the results of the estimation of model (1) where we employ five measures of financial performance. Variable definitions are in the Appendix. We report *t*-statistics adjusted for clustering on both firm and year. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	<i>Sales</i>	<i>OI</i>	<i>IBT</i>	<i>NI</i>	<i>CFO</i>
Constant	-2.066*** [-10.47]	-0.011 [-0.60]	0.027 [1.43]	0.043*** [3.15]	0.024 [1.28]
Foreignown	0.174*** [3.62]	-0.008** [-2.04]	-0.008** [-2.01]	-0.009*** [-3.00]	-0.005 [-1.46]
Size	0.243*** [13.07]	0.012*** [8.00]	0.012*** [7.31]	0.010*** [7.07]	0.004** [2.42]
Lev	0.675*** [9.86]	-0.158*** [-20.89]	-0.199*** [-24.24]	-0.165*** [-25.58]	-0.077*** [-8.72]
PPE	-1.125*** [-9.68]	-0.028*** [-3.85]	-0.056*** [-7.18]	-0.046*** [-8.25]	0.104*** [9.35]
Age	-0.090*** [-3.39]	0.001 [0.27]	0.003 [1.20]	0.002 [1.27]	0.006** [2.24]
ListedP	-0.259*** [-5.88]	0.004 [1.28]	0.007* [1.84]	0.005* [1.94]	0.009** [2.47]
TenureP	-0.001 [-0.54]	0.000 [0.18]	0.000 [0.13]	-0.000 [-0.13]	0.000 [1.29]
Year and industry effects	Yes	Yes	Yes	Yes	Yes
No. observations	23,497	23,455	23,426	23,400	22,198
R-squared	0.253	0.156	0.196	0.202	0.044
F-statistic	233.74***	99.86***	130.25***	113.14***	32.54***

Overall, the coefficients of the control variables are as expected, and consistent with prior research. Financial performance is positively and significantly associated with firm size (*Size*), while it significantly decreases with leverage (*Lev*) and capital intensity (*PPE*). Firm age (*Age*), the likelihood of having a listed parent company (*ListedP*), and the tenure of the parent company (*TenureP*) are not significantly related to performance in most estimations.

6. Why the lower profits of foreign group subsidiaries? The role of the personnel expenses

Given that the sales advantage associated with foreign shareholding is lost at the operating income level, the lower earnings of foreign group subsidiaries has to do with the operating expenses. In this section, we further investigate the role of one specific operating expense in our results, namely the wages expense, which literature documents to be higher for foreign-owned companies.

The literature provides extensive evidence that foreign-owned firms pay higher salaries than local firms. Aitken et al. (1996) investigate the impact of foreign ownership on wages in Mexico, Venezuela, and the US and find that the higher the levels of foreign investment, the higher the wages paid. A positive relation between foreign shareholding and wages has also been documented by Globerman et al. (1994) for Canada, Lipsey and Sjöholm (2004) for Indonesia, and Willmore (1986) for Brazil. Some studies analyze the effect of foreign acquisitions on wages and find wage improvements in foreign acquired targets. For example, Lipsey and Sjöholm (2006) use data on Indonesian plants and document a wage premium following foreign acquisitions. Similarly, Conyon et al. (2002) show that foreign acquisitions in the UK result in a premium paid to workers, whilst wages fall in companies acquired by locals. Also, Wang and Wang (2015) find that

foreign acquisitions are associated with a significant wage increase relative to local acquisitions.

In order to investigate the role of the wages expense on the observed lower profitability of firms under foreign control, we re-calculate our performance measures to eliminate the effect of this expense. In particular, we add the wages expense scaled by total assets (*Wages*) to *OI*, *IBT*, *NI* and *CFO* and re-estimate model (1) using the transformed performance measures (*OI_c*; *IBT_c*; *NI_c*; and *CFO_c*) as dependent variables.⁷ Results are reported in Table 6.

Table 6: Foreign control and financial performance. Performance measures corrected for the wage effect.

This table presents the results of the estimation of model (1) where the dependent variables are corrected for the wage effect. Variable definitions are in the Appendix. We report *t*-statistics adjusted for clustering on both firm and year. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	<i>OI_c</i>	<i>IBT_c</i>	<i>NI_c</i>	<i>CFO_c</i>
Constant	0.246*** [4.22]	0.266*** [4.97]	0.357*** [7.66]	0.327*** [6.61]
Foreignown	0.051*** [3.71]	0.052*** [3.74]	0.051*** [3.83]	0.056*** [4.03]
Size	-0.004 [-1.04]	-0.004 [-0.97]	-0.007 [-1.59]	-0.012*** [-2.80]
Lev	-0.132*** [-6.40]	-0.175*** [-8.36]	-0.140*** [-7.30]	-0.050*** [-2.60]
PPE	-0.127*** [-4.92]	-0.153*** [-5.87]	-0.141*** [-5.81]	0.006 [0.24]
Age	0.020*** [3.07]	0.024*** [3.51]	0.024*** [3.70]	0.025*** [3.40]
ListedP	-0.005 [-0.40]	-0.002 [-0.16]	-0.003 [-0.30]	0.001 [0.12]
TenureP	0.000 [0.25]	0.000 [0.19]	0.000 [0.06]	0.000 [0.77]
Year and industry effects	Yes	Yes	Yes	Yes
No. observations	23,455	23,426	23,400	22,198
R-squared	0.116	0.127	0.128	0.098
F-statistic	57.51***	68.46***	64.23***	48.78***

⁷ We assimilate wages expenses to payments since we do not have the information on payments.

When eliminating the effect of the wages from the performance measures, the coefficient of *Foreignown* is positive and significant independently of the measure considered. In particular, foreign group subsidiaries would generate, per each euro of total assets, about 5.1 percent more profits and 5.6 percent more CFOs than subsidiaries of local groups. Thus, it seems that the lower earnings and CFOs reported by foreign group subsidiaries are driven by the higher wages expense incurred.

7. The role of the parent company's country of origin

There is evidence that the effect of foreign ownership on wages is sensitive to the nationality of the parent company (e.g.: Criscuolo & Martin, 2009; Girma & Görg, 2007), where FDI coming from more productive countries is expected to be more productive than that coming from less productive countries. Thus, we next investigate whether this finding also translates into the firm performance differences found in our main tests.

Considering that the influence exerted by parent companies over their subsidiaries concerns all aspects of their operations (Hsu, 2000; Robinson & Stocken, 2013), it is likely that parent companies transfer proprietary intangible assets to their subsidiaries that have an effect on their productivity. Therefore, foreign ownership from the most productive countries is expected to foster productivity to a greater extent. Consistent evidence is provided by Girma et al. (2001), Conyon et al. (2002), Harris and Robinson (2003), and Criscuolo and Martin (2009) in the UK, Benfratello and Sembenelli (2006) in Italy, and Bertrand and Zitouna (2008) in France. On the other hand, productivity is closely linked to the wages expense, and there is also evidence that the salary level in subsidiaries is linked to the performance of the parent company (Budd, Konings, & Slaughter, 2005). Thus, we assume that the level of productivity in the parent company's home country is related to the subsidiaries' productivity, and consequently to the salaries paid. In particular, we expect that the productivity level in the parent company's country

of origin relates to the association between foreign ownership and wages, and ultimately affects the relation between foreign ownership and financial performance.

We obtain the GDP per hour worked in the country of origin of the parent companies in our sample from the Organization for Economic Cooperation and Development (OECD) website. This data is estimated on a yearly basis and measures labor productivity. Next, we define *Higher_Productivity* as a dummy equaling 1 if in a given year the GDP per hour worked in the home country of the foreign parent company is higher than that in Spain, 0 otherwise. We include this variable in model (1) as an additional regressor, where its coefficient indicates the incremental effect of foreign ownership on performance when the parent company is located in a country with a higher level of productivity than Spain. In turn, the sum of the coefficients of *Foreignown* and *Higher_Productivity* indicates the relation of foreign shareholding and firm performance when the parent company is from a more productive country than Spain. In line with the argument that FDI from the most productive economies brings about an increase in the performance of host-country firms, we expect a positive and significant coefficient for the variable *Higher_Productivity*.

Results of this analysis are reported in Table 7. In Panel A, we employ the original version of the performance measures related to profits and CFOs, while in Panel B we replicate the analysis using the measures corrected for the wages expense effect. In all the estimations, the coefficient of *Foreignown* is negative and significant, which indicates that, with or without the wage effect, subsidiaries with parent companies located in countries with lower levels of productivity than Spain generate lower profits and CFOs than subsidiaries of local groups. Most importantly, the coefficient of *Higher_Productivity* is positive and statistically significant at the 1 percent level, and it is larger when isolating the effect of the wages expense. This means that the negative

effect of foreign shareholding on firm performance is significantly lower when the parent company is domiciled in a country more productive than Spain. In other words, when FDI comes from countries with productivity levels higher than those in Spain the negative association between foreign shareholding and financial performance is significantly lower than when FDI comes from less productive countries.

In Panel A, the sum of the coefficients of *Foreignown* and *Higher_Productivity* is always negative and it is statistically significant only for the *NI* measure. This indicates that, although the higher productivity in the parent company's home country mitigates the negative relation between foreign ownership and financial performance, foreign ownership is still associated with lower net profits when the parent company is headquartered in a more productive country than Spain. However, when the performance measures are corrected for the wages effect (Panel B), we see that the sum of these two coefficients is always positive and statistically significant at the 1 percent level, which suggests that subsidiaries of foreign groups domiciled in more productive countries would generate higher profits and CFOs than their locally-owned counterparts if it weren't for the higher wages expense incurred.

8. Conclusions

We examine how foreign shareholding relates to the financial performance of private Spanish subsidiaries. We employ several accounting-based performance measures and find that, although foreign group subsidiaries have a superior ability to generate sales, they lose this advantage at the operating income level, which results into lower profits and similar CFOs reported by subsidiaries of foreign groups as compared to those of local groups. Our results are consistent with both theories on the FDI effect on host-firms. In particular, the sales advantage of firms under foreign control with regard to locally-owned firms is compatible with the internalization argument which posits that parent companies

transfer intangible assets to their foreign subsidiaries which should result in a performance premium. Also consistent with this argument, we find that when FDI comes from more productive countries than Spain the negative relation between foreign control and performance is mitigated. Moreover, we observe that the lower profits and similar CFOs of subsidiaries controlled by foreign groups are explained by their higher wages expense. These higher personnel expenses are compatible with the higher frequency of

Table 7: Does the nationality of the parent company matter?

This table presents the results of the estimation of model (1) where we add the variable *Higher_Productivity*, a dummy equaling 1 if in a given year the GDP per hour worked in the home country of the foreign parent company is higher than that in Spain, 0 otherwise. In Panel A, we use the original performance measures related to profits and CFOs while in Panel B we use the same performance measures corrected for the wage effect. Variable definitions are in the Appendix. We report *t*-statistics adjusted for clustering on both firm and year. We also report the *F*-statistics of the Wald tests whose null hypothesis is that the sum of the two coefficients is not significantly different from zero. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Panel A: Original performance measures

Variables	<i>OI</i>	<i>IBT</i>	<i>NI</i>	<i>CFO</i>
Constant	-0.012 [-0.61]	0.027 [1.44]	0.044*** [3.20]	0.025 [1.32]
(1) Foreignown	-0.029*** [-4.47]	-0.032*** [-4.44]	-0.027*** [-4.46]	-0.027*** [-3.44]
(2) Higher_Productivity	0.023*** [3.51]	0.026*** [3.59]	0.019*** [3.19]	0.024*** [3.13]
(1) + (2)	-0.006 [2.35]	-0.006 [2.17]	-0.008** [6.10]	-0.003 [0.79]
<i>F</i>-statistic test (1) + (2) = 0				
Size	0.012*** [8.08]	0.012*** [7.40]	0.010*** [7.14]	0.004** [2.51]
Lev	-0.158*** [-21.03]	-0.199*** [-24.42]	-0.165*** [-25.72]	-0.077*** [-8.68]
PPE	-0.029*** [-3.90]	-0.056*** [-7.26]	-0.046*** [-8.35]	0.104*** [9.37]
Age	0.000 [0.16]	0.003 [1.08]	0.002 [1.15]	0.006** [2.11]
ListedP	0.005 [1.43]	0.007** [2.00]	0.006** [2.09]	0.010*** [2.59]
TenureP	0.000 [0.07]	0.000 [0.01]	-0.000 [-0.24]	0.000 [1.18]
Year and industry effects	Yes	Yes	Yes	Yes
No. observations	23,455	23,426	23,400	22,198
R-squared	0.157	0.198	0.204	0.045
<i>F</i> -statistic	96.91***	126.38***	109.89***	31.92***

Panel B: Performance measures excluding wage expenses

Variables	<i>OI_c</i>	<i>IBT_c</i>	<i>NI_c</i>	<i>CFO_c</i>
<i>Constant</i>	0.244*** [4.20]	0.266*** [4.98]	0.359*** [7.71]	0.330*** [6.67]
<i>(1) Foreignown</i>	-0.039** [-2.08]	-0.041** [-2.18]	-0.035* [-1.91]	-0.036* [-1.76]
<i>(2) Higher_Productivity</i>	0.099*** [5.53]	0.101*** [5.67]	0.093*** [5.41]	0.100*** [5.05]
<i>(1) + (2)</i>	0.060*** [17.35]	0.060*** [17.66]	0.058*** [18.26]	0.064*** [19.97]
<i>F-statistic test (1) + (2) = 0</i>				
<i>Size</i>	-0.004 [-0.95]	-0.004 [-0.88]	-0.006 [-1.51]	-0.012*** [-2.72]
<i>Lev</i>	-0.133*** [-6.49]	-0.176*** [-8.48]	-0.140*** [-7.41]	-0.051*** [-2.65]
<i>PPE</i>	-0.128*** [-4.97]	-0.154*** [-5.92]	-0.143*** [-5.86]	0.005 [0.21]
<i>Age</i>	0.019*** [2.90]	0.023*** [3.34]	0.023*** [3.53]	0.024*** [3.22]
<i>ListedP</i>	-0.002 [-0.20]	0.000 [0.03]	-0.001 [-0.11]	0.004 [0.31]
<i>TenureP</i>	0.000 [0.06]	-0.000 [-0.002]	-0.000 [-0.12]	0.000 [0.59]
Year and industry effects	Yes	Yes	Yes	Yes
No. observations	23,455	23,426	23,400	22,198
R-squared	0.120	0.131	0.131	0.102
<i>F</i> -statistic	58.66***	69.39***	65.07***	49.48***

expatriate employees in foreign group subsidiaries. For instance, MNCs tend to appoint managers from the country of origin of the parent company to make sure that everything is done ‘in the group’s best interests’ (e.g.: Harzing, 2001; Tung, 1982 & 1987). This implies that foreign controlling shareholders suffer from an informational disadvantage with regard to their local counterparts which results into higher governance costs.

Although we find that profitability is lower in foreign group subsidiaries, MNCs might be operating in a foreign country for other reasons that have to do with economies of scale, which are expected to improve the productivity of the group as a whole, or with the extension of the group’s international distribution networks. Additionally, MNCs

might invest overseas to take advantage of the cheaper resources. Indeed, Spain offers educated workforce with relatively low salaries. For instance, a report by the Institute for Public Policy Research (IPPR, 2014: 87) indicates that Spain is the EU country with the highest proportion of workers that are over-qualified, while according to Eurostat the labor costs per hour in 2016 were among the lowest in the Western Europe.

References

- Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1), 154-181.
- Akguc, S., Choi, J. J., Kim, S.-J., & McKenzie, M. (2014). Do private firms perform better than public firms? *Working Paper*, available at: http://sydney.edu.au/business/___data/assets/pdf_file/0017/202571/Akguc_Choi_Kim_McKenzie.pdf.
- Aitken, B., & Harrison, A. (1999). Do domestic firms benefit from direct foreign investment? Evidence from Venezuela. *American Economic Review*, 89(3), 605-618.
- Aitken, B., Harrison, A., & Lipsey, R. E. (1996). Wages and foreign ownership: A comparative study of Mexico, Venezuela, and the United States. *Journal of International Economics*, 40(3-4), 345-371.
- Arnold, J. M., & Javorcik, B. S. (2009). Gifted kids or pushy parents? Foreign direct investment and plant productivity in Indonesia. *Journal of International Economics*, 79(1), 42-53.
- Barbosa, N., & Louri, H. (2005). Corporate performance: Does ownership matter? A comparison of foreign- and domestic-owned firms in Greece and Portugal. *Review of Industrial Organization*, 27(1), 73-102.
- Benfratello, L., & Sembenelli, A. (2006). Foreign ownership and productivity: Is the direction of causality so obvious? *International Journal of Industrial Organization*, 24(4), 733-751.
- Berle, A., & Means, G. (1932). *The Modern Corporation and private property*. New York: Macmillan.
- Bertrand, O., & Zitouna, H. (2008). Domestic versus cross-border acquisitions: Which impact on the target firms' performance. *Applied Economics*, 40(17), 2221-2238.
- Blackwell, M., Iacus, S., King, G., & Porro, G. (2009). CEM: Coarsened exact matching in Stata. *The Stata Journal*, 9(4), 524-546.
- Blomström, M., Kokko, A., & Zejan, M. (2000). *Foreign direct investment: Firm and host country strategies*. London: Macmillan Press.
- Blomström, M., & Sjöholm, F. (1999). Technology transfers and spillovers: Does local participation with multinationals matter? *European Economic Review*, 43(4-6), 915-923.
- Boubakri, N., Cosset, J.-C., & Guedhami, O. (2008). Privatization in developing countries: Performance and ownership effects. *Development Policy Review*, 26(3), 275-308.
- Boubakri, N., Cosset, J.-C., & Guedhami, O. (2005). Post privatization corporate governance: The role of ownership structure and investor protection. *Journal of Financial Economics*, 76(2), 369-399.
- Budd, J. W., Konings, J., & Slaughter, M. J. (2005). International profit sharing in multinational firms. *Review of Economics and Statistics*, 87(1), 73-84.
- Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2011). Robust inference with multiway clustering. *Journal of Business and Economic Statistics*, 29(2), 238-249.
- Carr, L. L. (1997). Strategic determinants of executive compensation in small publicly traded firms. *Journal of Small Business Management*, 35(3), 1-12.
- Caves, R. E. (1996). *Multinational enterprises and economic analysis*. Cambridge: Cambridge University Press.
- Central Intelligence Agency (CIA). (2016). *Spain*. In *The World Factbook*. Retrieved

- from <https://www.cia.gov/library/publications/the-world-factbook/geos/sp.html>.
- Chaney, P. K., Faccio, M., & Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of Accounting and Economics*, 51(1), 58-76.
- Chang, S. J., Chung, J., & Moon, J. J. (2013). When do foreign subsidiaries outperform local firms? *Journal of International Business Studies*, 44(8), 853-860.
- Chen, R., El Ghouli, S., Guedhami, O., & Wang, H. (2017). Do state and foreign ownership affect investment efficiency? Evidence from privatizations. *Journal of Corporate Finance*, 42(3), 408-421.
- Chen, X., Harford, J., & Li, K. (2007). Monitoring: Which institutions matter? *Journal of Financial Economics*, 86(2), 279-305.
- Chen, S., Sun, Z., Tang, S., & Wu, D. (2011). Government intervention and investment efficiency: Evidence from China. *Journal of Corporate Finance*, 17(2), 259-271.
- Chhibber, P. K., & Majumdar, S. K. (1999). Foreign ownership and profitability: Property rights, control, and the performance of firms in Indian industry. *Journal of Law and Economics*, 42(1), 209-238.
- Cho, M. (1998). Ownership structure, investment, and the corporate value: An empirical analysis. *Journal of Financial Economics*, 47(1), 103-121.
- Cho, D. S., & Kim, J. (2007). Outside directors, ownership structure and firm profitability in Korea. *Corporate Governance: An International Review*, 15(2), 239-250.
- Chung, K. H., & Pruitt, S. W. (1996). Executive ownership, corporate value, and executive compensation: A unifying framework. *Journal of Banking and Finance*, 20(7), 1135-1159.
- Coase, R. H. (1937). The nature of the firm. *Economica*, 4(16), 386-405.
- Canyon, M. J., Girma, S., Thompson, S., & Wright, P. (2002). The productivity and wage effects of foreign acquisition in the United Kingdom. *Journal of Industrial Economics*, 50(1), 85-102.
- Criscuolo, C., & Martin, R. (2009). Multinationals and US productivity leadership: Evidence from Great Britain. *The Review of Economics and Statistics*, 91(2), 263-281.
- Cubbin, J., & Leech, D. (1983). The effect of shareholding dispersion on the degree of control in British companies: Theory and measurement. *Economic Journal*, 93(370), 351-369.
- Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics*, 18(1), 3-42.
- Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(Suppl.), 35-59.
- Dechow, P., Sloan, R., & Sweeney, A. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *Journal of Law and Economics*, 26(2), 375-390.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155-1177.
- Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3), 209-233.
- Dimelis, S., & Louri, H. (2002). Foreign ownership and production efficiency: A quantile regression analysis. *Oxford Economic Papers*, 54(3), 449-469.
- Djankov, S. (1999). Ownership structure and enterprise restructuring in six newly independent states. *Comparative Economic Studies*, 41(1), 75-95.

- Djankov, S., & Hoekman, B. (2000). Foreign investment and productivity growth in Czech enterprises. *World Bank Economic Review*, 14(1), 49-64.
- Doms, M. E., & Jensen, J. B. (1998). Comparing wages, skills, and productivity between domestically and foreign-owned manufacturing establishments in the United States. In R. Baldwin, R. Lipsey, & J. D. Richardson (Eds.), *Geography and ownership as bases for economic accounting* (pp. 235-255). Chicago: Chicago University Press.
- Duggal, R., & Millar, J. A. (1999). Institutional ownership and firm performance: The case of bidder returns. *Journal of Corporate Finance*, 5(2), 103-117.
- Dunning, J. H. (1993). *Multinational enterprises and the global economy*. Wokingham: Addison-Wesley.
- European Central Bank (ECB). (2013). Valuation of foreign direct investment positions - Final report. *Statistics Paper Series*, 4.
- Fenton-O'Creevy, M., Gooderham, P., & Nordhaug, O. (2008). Human resource management in US subsidiaries in Europe and Australia: Centralization or autonomy? *Journal of International Business Studies*, 39(1), 151-166.
- Ferreira, M. A., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88(3), 499-533.
- Fogel, K. S., Lee, K. K., Lee, W. Y., & Palmberg, J. (2013). Foreign direct investors as change agents: The Swedish firm experience. *Corporate Governance: An International Review*, 21(6), 516-534.
- Fons-Rosen, C., Kalemli-Ozcan, S., Sorensen, B. E., Villegas-Sanchez, C., & Volosovych, V. (2013). Quantifying productivity gains from foreign investment. *NBER Working Paper 18920*, available at: <http://www.nber.org/papers/w18920>.
- Gatignon, H., & Anderson, E. (1988). The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. *Journal of Law, Economics and Organization*, 4(2), 305-336.
- Gillan, S., & Starks, L. (2003). Corporate governance, corporate ownership, and the role of institutional investors: A global perspective. *Journal of Applied Finance*, 13(2), 4-22.
- Girma, S., & Görg, H. (2007). Evaluating the foreign ownership wage premium using a difference-in-differences matching approach. *Journal of International Economics*, 72(1), 97-112.
- Girma, S., Greenaway, D., & Wakelin, K. (2001). Who benefits from foreign domestic investment in the UK? *Scottish Journal of Political Economy*, 48(2), 119-133.
- Girma, S., Kneller, R., & Pisu, M. (2007). Do exporters have anything to learn from foreign multinationals? *European Economic Review*, 51(4), 981-998.
- Globerman, S., Ries, J. C., & Vertinsky, I. (1994). The economic performance of foreign affiliates in Canada. *Canadian Journal of Economics*, 27(1), 143-156.
- Greenaway, D., Guariglia, A., & Yu, Z. (2014). The more the better? Foreign ownership and corporate performance in China. *European Journal of Finance*, 20(7-9), 681-702.
- Guadalupe, M., Kuzmina, O., & Thomas, C. (2012). Innovation and foreign ownership. *American Economic Review*, 102(7), 3594-3627.
- Guedhami, O., Pittman, J. A., & Saffar, W. (2009). Auditor choice in privatized firms: Empirical evidence on the role of state and foreign owners. *Journal of Accounting and Economics*, 48(2), 151-171.
- Gugler, K. (2001). *Corporate governance and economic performance*. Oxford: University Press.

- Han, K. C., & Suk, D. Y. (1998). The effect of ownership structure on firm performance: Additional evidence. *Review of Financial Economics*, 7(2), 143-155.
- Harris, R., & Robinson, C. (2002). The effect of foreign acquisitions on total factor productivity: Plant-level evidence from UK manufacturing, 1987-1992. *Review of Economics and Statistics*, 84(3), 562-568.
- Harris, R. & Robinson, C. (2003). Foreign ownership and productivity in the United Kingdom: Estimates for UK manufacturing using the ARD. *Review of Industrial Organization*, 22(3), 207-223.
- Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. *Business Ethics Quarterly*, 23(1), 97-124.
- Harzing, A. W. (2001). Who's in charge? An empirical study of executive staffing practices in foreign subsidiaries. *Human Resource Management*, 40(2), 139-158.
- Hayakawa, K., Machikita, T., & Kimura, F. (2012). Globalization and productivity: A survey of firm-level analysis. *Journal of Economic Surveys*, 26(2), 332-350.
- Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53(3), 353-384.
- Ho, D. E., Imai, K., King, G., & Stuart, E. A. (2007). Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference. *Political Analysis*, 15(3), 199-236.
- Holderness, C., Kroszner, R., & Sheehan, D. (1999). Were the good old days that good? Evolution of managerial stock ownership and corporate governance since the great depression. *Journal of Finance*, 54(2), 435-469.
- Hsu, C. H. (2000). Capital budgeting analysis in wholly-owned subsidiaries. *Journal of Financial and Strategic Decisions*, 13(1), 1-6.
- Hu, Y., & Izumida, S. (2008a). Ownership concentration and corporate performance: A causal analysis with Japanese panel data. *Corporate Governance: An International Review*, 16(4), 342-358.
- Hu, Y., & Izumida, S. (2008b). The relationship between ownership and performance: A review of theory and evidence. *International Business Research*, 1(4), 72-81.
- Huang, R. D., & Shiu, C. Y. (2009). Local effects of foreign ownership in an emerging financial market: Evidence from qualified foreign institutional investors in Taiwan. *Financial Management*, 38(3), 567-602.
- Hunt, H. G. (1985). Potential determinants of corporate inventory accounting decisions. *Journal of Accounting Research*, 23(2), 448-467.
- Hutchinson, M., & Gul, F. A. (2004). Investment opportunity set, corporate governance practices and firm performance. *Journal of Corporate Finance*, 10(4), 595-614.
- Hymer, S. H. (1976). *The international operations of national firms: A study of foreign direct investment*. Cambridge: MIT Press.
- Institute for Public Policy Research (IPPR). (2014). *European jobs and skills: A comprehensive review 2014*.
- Instituto Español de Comercio Exterior (ICEX). (2017). *Investment trends and records in Spain*.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Kapopoulos, P., & Lazaretou, S. (2007). Corporate ownership structure and firm performance: Evidence from Greek firms. *Corporate Governance: An International Review*, 15(2), 144-158.
- Kaserer, C., & Moldenhauer, B. (2008). Insider ownership and corporate performance:

- Evidence from Germany. *Review of Managerial Science*, 2(1), 1-35.
- Khawar, M. (2003). Productivity and foreign direct investment: Evidence from Mexico. *Journal of Economic Studies*, 30(1), 66-76.
- Kim, W. S., & Lyn, E. O. (1990). FDI theories and the performance of foreign multinationals operating in the US. *Journal of International Business Studies*, 21(1), 41-54.
- King, G., & Nielsen, R. (2016). Why propensity scores should not be used for matching. *Working Paper*, available at: <http://gking.harvard.edu/files/gking/files/psnot.pdf>.
- Lipsey, R. E. (2004). Home- and host-country effects of foreign direct investment. In R. E. Baldwin & L. A. Winters (Eds.), *Challenges to Globalization: Analyzing the Economics* (pp. 333-379). Chicago: University of Chicago Press.
- Lipsey, R. E., & Sjöholm, F. (2004). FDI and wage spillovers in Indonesian manufacturing. *Review of World Economics*, 140(2), 321-332.
- Lipsey, R. E., & Sjöholm, F. (2006). Foreign firms and Indonesian manufacturing wages: An analysis with panel data. *Economic Development and Cultural Change*, 55(1), 201-221.
- Lipsey, R. E., & Sjöholm, F. (2005). The impact of inward FDI on host countries: Why such different answers? In T. H. Moran, E. M. Graham, & M. Blömmstrom (Eds.). *Does foreign direct investment promote development?* (pp. 23-43). Washington DC: Institute for International Economics.
- Matsumoto, K., Shivaswamy, M., & Hoban, J. P. Jr. (1995). Security analysts' views of the financial ratios of manufacturers and retailers. *Financial Practice & Education*, 5(2), 44-55.
- McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2), 595-612.
- Meggison, W. L., Nash, R., & van Randenborgh, M. (1994). The financial and operating performance of newly privatized firms: An international empirical analysis. *Journal of Finance*, 49(2), 403-452.
- Morck, R., Shleifer, A., & Vishny, R. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics*, 20(1-2), 293-315.
- Myers, S. (1977). The determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Organization for European Cooperation and Development (OECD). (2014). *OECD Factbook 2014: Economic, environmental and social statistics*. Paris: OECD Publishing.
- Palia, D., & Lichtenberg, F. (1999). Managerial ownership and firm performance: A reexamination using productivity measurement. *Journal of Corporate Finance*, 5(4), 323-339.
- Piscitello, L., & Rabbiosi, L. (2005). The impact of inward FDI on local companies' labour productivity: Evidence from the Italian case. *International Journal of the Economics of Business*, 12(1), 35-51.
- Qiu, L. (2008). Selection or influence? Institutional investors and corporate acquisitions. *Working Paper*, available at SSRN: <https://ssrn.com/abstract=1126430>.
- Robinson, L. A., & Stocken, P. C. (2013). Location of decision rights within multinational firms. *Journal of Accounting Research*, 51(5), 1261-1297.
- Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2003). *Fundamentals of corporate finance*. New York: The McGraw-Hill Companies.
- Sahut, J. M., & Gharbi, H. O. (2010). Institutional investors' typology and firm performance: The case of French firms. *International Journal of Business*, 15(1),

- 33-50.
- Scherer, F. M. (1980). *Industrial market structure and economic performance*. Boston: Houghton-Mifflin.
- Sheu, H., & Yang, H. (2005). Insider ownership structure and firm performance: A productivity perspective study in Taiwan's electronics industry. *Corporate Governance: An International Review*, 13(2), 326-337.
- Shleifer, A., & Vishny, R. W. (1989). Management entrenchment: The case of manager-specific investments. *Journal of Financial Economics*, 25(1), 123-139.
- Short, H. (1994). Ownership, control, financial structure and the performance of firms. *Journal of Economic Surveys*, 8(3), 203-249.
- Short, H., & Keasey, K. (1999). Managerial ownership and the performance of firms: Evidence from the UK. *Journal of Corporate Finance*, 5(1), 79-101.
- Sun, Q., & Tong, W. H. S. (2003). China share issue privatization: The extent of its success. *Journal of Financial Economics*, 70(2), 183-222.
- Taggart, J., & Hood, N. (1999). Determinants of autonomy in multinational corporation subsidiaries. *European Management Journal*, 17(2), 226-236.
- Takii, S. (2004). Productivity differentials between local and foreign plants in Indonesian manufacturing, 1995. *World Development*, 32(11), 1957-1969.
- Teece, D. J. (1977). Technology transfer by multinational firms: The resource cost of transferring technological know-how. *Economic Journal*, 87(346), 242-261.
- Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, 21(6), 689-705.
- Tian, L., & Estrin, S. (2008). Retained state ownership in Chinese PLCs: Does government ownership always reduce corporate value? *Journal of Comparative Economics*, 36(1), 74-89.
- Tomassen, S., & Benito, G. R. (2009). The costs of governance in international companies. *International Business Review*, 18(3), 292-304.
- Tsai, H., & Gu, Z. (2007). Institutional ownership and firm performance: Empirical evidence from US-based publicly traded restaurant firms. *Journal of Hospitality & Tourism Research*, 31(1), 19-38.
- Tung, R. L. (1982). Selection and training procedures of US, European, and Japanese multinationals. *California Management Review*, 25(1), 57-71.
- Tung, R. L. (1987). Expatriate assignments: Enhancing success and minimizing failure. *Academy of Management Executive*, 1(2), 117-125.
- Verrecchia, R. E. (1986). Managerial discretion in the choice among financial reporting alternatives. *Journal of Accounting and Economics*, 8(3), 175-196.
- Wang, J., & Wang, X. (2015). Benefits of foreign ownership: Evidence from foreign direct investment in China. *Journal of International Economics*, 97(2), 325-338.
- Wei, Z., Xie, F., & Zhang, S. (2005). Ownership structure and firm value in China's privatized firms: 1991-2001. *Journal of Financial and Quantitative Analysis*, 40(1), 87-108.
- Welch, E. (2003). The relationship between ownership structure and performance in listed Australian companies. *Australian Journal of Management*, 28(3), 287-305.
- Willmore, L. (1986). The comparative performance of foreign and domestic firms in Brazil. *World Development*, 14(4), 489-502.
- Yasar, M., & Morrison Paul, C. J. (2007). International linkages and productivity at the plant level: Foreign direct investment, exports, imports and licensing. *Journal of International Economics*, 71(2), 373-388.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341-364.

Appendix: Variable definitions.

Variable	Description
<i>Accruals</i>	Total accruals, calculated as the annual change in non-cash current assets less the annual change in current liabilities, and less the annual depreciation expense, scaled by total assets.
<i>Age</i>	Natural logarithm of the number of years since the firm was founded.
<i>Foreignown</i>	Dummy variable that equals 1 if the parent company is foreign, 0 if it is local.
<i>CFO</i>	Cash flow from operations, calculated as earnings before taxes scaled by total assets less total accruals (<i>Accruals</i>).
<i>Higher_Productivity</i>	Dummy equaling 1 if in a given year the GDP per hour worked in the home country of the foreign parent company is higher than that in Spain, 0 otherwise.
<i>IBT</i>	Income before taxes scaled by total assets.
<i>Lev</i>	Ratio of total debt to total assets.
<i>ListedP</i>	Dummy variable that equals 1 whether the parent company is listed, 0 otherwise.
<i>NI</i>	Net income scaled by total assets.
<i>OI</i>	Operating income scaled by total assets.
<i>PPE</i>	Property, plant, and equipment divided by total assets.
<i>TenureP</i>	Number of years since the parent company became the firm's controlling shareholder.
<i>Sales</i>	Total sales scaled by total assets.
<i>Size</i>	Natural logarithm of the firm's sales.
<i>X_c</i>	Sum of the variable <i>X</i> and <i>Wages</i> .
<i>Wages</i>	Wages expense scaled by total assets.

***Paper 2. Foreign ownership and
financial reporting quality
in private subsidiaries:
The role of the institutional
environment***

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1. Introduction

Despite that the economic effects of foreign direct investment (FDI) have been widely studied, there are still questions concerning the conditions and the channels through which FDI affects the host-country economies (Lipsey & Sjöholm, 2005). A related research stream within the corporate finance and accounting areas studies the role of foreign investors in determining the quality of the invested firm's accounting information. Our work builds upon this research and focuses on the scarcely analyzed setting of privately held companies, which are the main FDI recipients (e.g.: ECB, 2013: 66) and the source of a large portion of economic growth (e.g.: EcoDA, 2010: 6).

In the setting of public companies some studies document an effective governing role of foreign shareholders in constraining earnings management (e.g.: Beuselinck, Blanco, & García-Lara, 2017). However, these results cannot be extrapolated to private firms because they are different from public firms along a number of important dimensions that determine financial reporting quality (Burgstahler, Hail, & Leuz, 2006).

We analyze a sample of subsidiaries since decision making at the subsidiary level is substantially influenced by the parent company (e.g.: Hsu, 2000; Robinson & Stocken, 2013), while that might not be the case at lower ownership rates. Moreover, this helps to isolate the effect of foreign shareholding from one important correlated factor, namely controlling shareholding. Assuming a significant influence of parent companies in their subsidiaries' decisions, financial reporting quality at the subsidiary level depends on the incentives and opportunities of the parent company (Beuselinck, Cascino, Deloof, & Vanstraelen, 2017). The incentives relate to both the benefits and costs of producing poor (or good) quality accounting information at the subsidiary level; and the opportunities mainly depend on the subsidiaries' institutional framework, including accounting standards and enforcement mechanisms.

In this study, the country-level characteristics that determine the subsidiaries' financial reporting quality are held constant. Spain is the Eurozone's fourth-largest economy and one of the main FDI receivers worldwide, ranking 14th in the top of countries by FDI inflows (CIA, 2016); and being the 8th most open country according to the OECD's FDI regulatory restrictiveness index (OECD, 2014: 91). Similar to other EU members, only 0.1 percent of the Spanish companies are publicly traded (Chislett, 2015: 36; EcoDA, 2010: 6), and the accounts of private companies are public by law. This provides us with a representative setting to study how foreign shareholding affects financial reporting quality in private firms. Additionally, despite being a developed country, Spain has relatively low quality institutions (e.g.: La Porta, López-de-Silanes, Shleifer, & Vishny, 2000); and earnings management practices are more prevalent than in other developed countries (e.g.: Leuz, Nanda, & Wysocki, 2003).

Ceteris paribus opportunities, our predictions are based on the differential incentives of foreign and local controlling shareholders to produce high quality financial statements at the subsidiary level in the private setting. Several international studies suggest that multinational corporations (MNCs) prefer to manipulate earnings abroad, in order to avoid the pressure from the parent companies' local enforcers (e.g.: Durnev, Li, & Magnan, 2017; Fan, 2012). These studies have implications for the research question addressed in this paper, that is, how foreign shareholding relates to financial reporting quality in private firms. If the incentives of foreign shareholders to manipulate earnings at the subsidiary level are on average stronger than those of their local counterparts, we should observe a negative association between foreign ownership and accounting quality.

We employ the magnitude of discretionary accruals as proxy for financial reporting quality and find that firms controlled by foreign groups report higher magnitudes of discretionary accruals. The association is not only statistically significant

at conventional levels, but it is also economically important: keeping all controls constant, the magnitude of discretionary accruals represents, on average, between 0.3 and 0.5 percent more of total assets in the foreign group subsidiaries than in their locally-owned counterparts. This result is robust to including a wide set of covariates, to the use of several discretionary accruals measures, and to alternative model estimation procedures. Additionally, although these tests are based on a small number of takeovers and should be taken with caution, we observe that in the companies that during the sample period changed from local to foreign control or vice-versa the magnitude of discretionary accruals is significantly higher in the years under foreign control.

Literature also documents that the preference to manage earnings abroad has to do with the international differences in institutional quality, since earnings management, both at the consolidated level and at the subsidiary level, is more pervasive when the investment flows from parent companies established in strong institutional environments to subsidiaries located in settings with less stringent regulations and enforcement mechanisms (e.g.: Beuselinck, Cascino, et al., 2017; Dyreng, Hanlon, & Maydew, 2012). We therefore investigate the sensitiveness of our result to the relative institutional quality of the countries where the parent companies of the foreign groups are headquartered. In particular, we make partitions of our sample of foreign-controlled subsidiaries considering several institutional quality indexes identified in prior research that proxy for the level of investor protection and legal enforcement in the parent firm's country of origin. We find that the negative association between foreign ownership and financial reporting quality is stronger when we consider the group of subsidiaries with parent companies located in countries that rank higher than Spain in several measures of institutional quality. These findings suggest that the observed lower financial reporting quality of companies controlled by foreign shareholders in Spain is a result of the

incentives of MNCs to allocate earnings management in subsidiaries domiciled in countries with relatively weaker institutional environments than that of the parent company's home country.

We explore an alternative explanation for our results. As suggested in prior research, foreign owners have a disadvantage with respect to local groups regarding their knowledge of local accounting standards and other related regulation (e.g.: Masulis, Wang, & Xie, 2012). Such informational disadvantage should be reduced as time passes. Thus, we argue that if the informational disadvantage faced by foreign owners underlies our results, financial reporting quality of foreign-controlled firms would improve with the controlling shareholder's tenure. However, the results reveal that when the parent company is foreign its tenure has a negative incremental effect on the subsidiary's financial reporting quality, which is inconsistent with the informational disadvantage explanation.

This paper contributes to the literature in a number of ways. We add to the research concerned with the association between the company's ownership structure and its financial reporting quality (e.g.: Man & Wong, 2013). Specifically, we provide evidence on the role of foreign ownership in determining accounting quality in private subsidiaries, whereas prior research has mainly analyzed samples of stand-alone listed companies (e.g.: Beuselinck, Blanco, & García-Lara, 2017). Our results suggest that in the setting of private Spanish subsidiaries foreign shareholders do not play the effective monitoring role documented in public firms. In this sense, our work also relates to the literature concerned with the determinants of accounting quality in the private setting. Our results add to prior research indicating that these are not necessarily the same as in public firms (e.g.: Ball & Shivakumar, 2005; Burgstahler et al., 2006; Coppens & Peek, 2005; Hope, Thomas, & Vyas, 2011 & 2013). We also contribute to the scant literature that focuses on financial

reporting quality within MNCs. In line with Beuselinck, Cascino, et al. (2017), our results complement the evidence of the studies that focus on the parent company's perspective (e.g.: Durnev et al., 2017; Dyreng et al., 2012) by looking at the subsidiaries' side. Our paper is closely related to Beuselinck, Cascino, et al. (2017), although it differs along two main aspects. First, we look at several dimensions of the institutional environment in the parent company's country of origin. Second, we hold constant the country-level characteristics of the host-country, so that we ensure that our findings are not driven by the differences in the quality of institutions or financial reporting practices across the different countries in which MNCs operate. Moreover, we contribute to a better understanding of the effects of FDI on the information quality of the host-country companies, and specifically in a relatively low institutional quality setting. Finally, this paper relates to the studies focused on the effects of the institutional environment on accounting outcomes (e.g.: Burgstahler et al., 2006; Leuz, et al., 2003). Our results suggest that, in the context of MNCs, strong institutions do not eliminate the incentives to carry out earnings management, but result in the transfer of the manipulation towards subsidiaries domiciled in countries with more lenient institutions.

2. Related literature and hypothesis development

The monitoring role of foreign investors and financial reporting quality

A number of studies suggest that foreign shareholders have higher incentives and a superior ability to monitor managerial actions. For instance, Dahlquist and Robertsson (2001) posit that the role of foreign shareholders resembles that of institutional investors, whose effectiveness in monitoring insiders is documented in the literature (e.g.: Koh, 2007). Aggarwal, Erel, Ferreira, and Matos (2011) find that foreign investors play a decisive role in improving the governance of non-US companies, while Ferreira and

Matos (2008) provide evidence that foreign institutional ownership has a positive impact on the valuation and performance of non-US firms.

One potential outcome of the effective role of foreign shareholders in disciplining insiders is an increase in accounting quality. The empirical results of some studies conducted in the setting of listed firms are consistent with this prediction. For example, Khanna and Palepu (2000) find that foreign investors reduce the opportunities for discretionary accounting choices in a sample of listed Indian firms; and An (2015) shows that foreign shareholding in Korea is positively related to conservatism, which in turn is associated with reduced managerial opportunism. Closer to the setting analyzed in our study, Beuselinck, Blanco, and García-Lara et al. (2017) examine a sample of listed firms from the four countries known under the derogatory acronym of PIGS (Portugal, Italy, Greece and Spain) and find a negative association between changes in foreign ownership from shareholders located in countries with strong institutional quality and changes in the magnitude of discretionary accruals.

Financial reporting quality in the private setting

Our study shares the geographical setting described by Beuselinck, Blanco, and García-Lara (2017). However, we focus on private companies, whose specificities make it difficult to extrapolate the arguments of the studies carried out in the public setting. Firstly, because the conflict between managers and shareholders is not a major problem in private firms, where ownership is more concentrated and, if any, the agency problems arise from the conflict between the majority and the minority owners (La Porta, López-de-Silanes, Shleifer, & Vishny, 1999). Moreover, public firms are usually stand-alone companies where the influence of the foreign investor on the accounting policy is limited. We focus on subsidiaries to ensure the existence of the controlling shareholders' influence on the firm's reporting activity (e.g.: Hedlund, 1981; Robinson & Stocken, 2013). Since

the consolidated financial statements are obtained from the individual annual reports of all the firms within the consolidation perimeter, a parent company might manipulate the group's consolidated earnings via its subsidiaries. Additionally, looking at subsidiaries avoids capturing the compound effect of foreign and controlling shareholding on the quality of the firm's financial reporting outcomes.¹ Both effects would be mixed in a non-restricted sample since investors tend to acquire majority stakes in their foreign invested firms (e.g.: Erramilli, 1996; Gatignon & Anderson, 1988); especially in settings where the legal framework does not provide sufficient protection, and foreign investors compensate this deficiency by taking large positions in their invested firms (La Porta et al., 2000).

Secondly, because of the documented differential response of private and public firms to some factors that determine financial reporting quality such as tax alignment, minority-shareholder rights or disclosure requirements (Burgstahler et al., 2006: 986). The lower demand and the weaker internal and external enforcement mechanisms make the cost-benefit relation of reporting good quality accounting information less positive in private than in public firms. Accordingly, several studies document lower reporting quality in the private setting: Ball and Shivakumar (2005) in the UK; Hope et al. (2013) in the US; Burgstahler et al. (2006) in a set of European countries; Goncharov and Zimmerman (2006) in Russia; or Arnedo, Lizarraga, and Sánchez-Alegría (2007) in Spain. There is also evidence that public companies use their private subsidiaries to manage the group's consolidated earnings in order to overcome the restrictions imposed by capital markets (Bonacchi, Cipollini, & Zarowin, 2017).

¹ Literature on ownership concentration and financial reporting quality is extensive, and offers conflicting results (Fan & Wong, 2002; Firth, Fung, & Rui, 2007; Francis, Schipper, & Vincent, 2005; Shleifer & Vishny, 1986 & 1997; Yeo, Tan, & Chen, 2002).

Despite the relative lower quality of accounting information with regard to the public setting, accounting quality plays a role also in private companies (e.g.: Chen, Hope, Li, & Wang, 2011). In the Spanish setting, for example Gill-de-Albornoz and Illueca (2007) observe that, when private firms are large enough, higher accruals quality is associated with lower cost of debt. Therefore, specifically studying the determinants of financial reporting in this setting deserves attention. We are interested in the role of foreign shareholding.

We keep constant the country-level factors that determine the opportunities of the parent company to influence in the quality of its subsidiaries' reporting policies, such as the accounting standards or the audit enforcement regulations. *Ceteris paribus* opportunities, our predictions are based on the incentives of the controlling shareholders.

The role of the international differences in institutional quality in shaping the incentives to manipulate earnings within MNCs

Prior research indicates a preference for earnings manipulation away from enforcers. For example, Kedia and Rajgopal (2011) argue and find that the firm's proximity to a SEC's office is negatively associated with the likelihood of misreporting; and Fan (2012) finds that US MNCs manipulate foreign earnings to avoid losses. Additionally, recent research suggests that the international differences in institutional quality underlie the incentives for earnings management within MNCs, which tend to manage earnings through subsidiaries located in countries with more lenient regulations. Durnev et al. (2017) conclude that financial reporting quality is lower when MNCs have subsidiaries in offshore financial centers; and Dyreng et al. (2012) document that US MNCs with subsidiaries located in weak rule of law countries manage their earnings more than those with subsidiaries from countries with strong institutions. In the same line, but from the subsidiaries' perspective, Beuselinck, Cascino, et al. (2017) provide evidence that MNCs

headquartered in countries with more restrictive regulations manage earnings through subsidiaries established in jurisdictions with weak institutions.

The informational disadvantage of foreign owners

The most common way employed by MNCs to effectively exert control over their foreign subsidiaries is by appointing managers from the parent company's country, who better serve the group's interests (e.g.: Edström & Galbraith, 1977; Harzing, 2001; Kopp, 1994; Tung, 1982 & 1987). Similar to foreign analysts (e.g.: Bae, Stulz, & Tan, 2008), foreign directors have a poorer knowledge of local accounting standards and practices, at least during the first years of appointment (Masulis et al., 2012) which translates into an informational disadvantage for the foreign owner.

Hypothesis

Both the incentives of MNCs to transfer earnings management away from local enforcers and the potential informational disadvantage faced by international owners with regard to local groups are plausible scenarios that lead to predict a negative association between foreign shareholding and financial reporting quality. Therefore, we state the following hypothesis:

H1: financial reporting quality of foreign group subsidiaries is poorer than that of companies controlled by local groups.

3. Research design

3.1. Sample

Our primary source of data is SABI, a database by Bureau van Dijk covering a large number of Spanish companies. We used SABI's ownership files to select non-financial private subsidiaries. We consider that a firm is a subsidiary if there is a parent company which holds, directly or indirectly, at least 50.01 percent of the voting rights. We

discarded companies where the controlling shareholder, either local or foreign, is a financial or an institutional investor (i.e., private equity firms, banks, insurance companies, investment companies, mutual funds, hedge funds etc.) because they do not consolidate their invested companies' accounts. We additionally require that sample firms presented full financial statements in 2011.² We identified 2,055 firms that comply with these requirements.

SABI does not provide historical ownership data. Therefore, we hand-collected the information on the controlling shareholder/s of each subsidiary for the period 1997-2013 using the FACTIVE database,³ and/or the corporate websites. In particular, we identified the country of origin of all the controlling shareholders in the sample, the date when each parent company gained control of the corresponding subsidiary, as well as the listing status of the parent firms during the sample period.

The sample period starts in 1997 because the availability of financial data necessary to calculate all the research variables significantly decreases before that year. Observations of year 2008 were dropped because some of the variables of the empirical analyses require comparable accounting information of two consecutive years, and the accounting standards applied by the sample firms were changed in 2007 to harmonize with IFRS.⁴ The new local standards have to be applied to prepare the financial statements since year 2008; and, despite the requirement to report the prior year information restated

² Spanish standards require companies to present full financial statements (i.e., detailed formats of both balance sheet and income statement, as well as cash flow and changes in equity statements) when they are large enough. In 2011, full financial statements were compulsory for all firms that had met two out of these criteria during two consecutive years: total assets more than 11,400 thousand Euros; net sales revenue higher than 22,800 thousand Euros; and average number of employees higher than 250. These companies must also have their annual accounts audited.

³ FACTIVE is a Dow Jones database which provides access to top national and international newspapers, newswires, business journals etc.

⁴ The companies analyzed have to prepare their financial statements under the standards established in the General Accounting Plan, which is part of the Spanish corporate law. The Spanish local GAAP were harmonized with the International Financial Reporting Standards (IFRS) by the Royal Decree 1514/2007.

for comparability purposes, for the vast majority of the companies SABI provides the information of year 2007 prepared only under the old standards.

The final sample consists of 20,959 firm-year observations. Table 1 presents the distribution of the sample by the home country of the parent company (Panel A), and by industry (Panel B). About 53 percent of the sample observations correspond to subsidiaries with foreign controlling shareholders, which are headquartered in thirty nine countries. Countries with a higher presence are: France (10.76 percent of the whole sample), the US (10.59 percent), Germany (8.26 percent), the UK (3.79 percent), Italy (3.22 percent), Switzerland (3.00 percent), the Netherlands (2.81 percent), Japan (2.22 percent), Sweden (1.49 percent), and Belgium (1.06 percent). The rest of the countries represent individually less than one percent of the whole sample.⁵ Subsidiaries included in our sample operate in six industry divisions based on the standard industrial classification of economic activities (SIC); the most represented industry in both subsamples is manufacturing, with 32.35 and 41.17 percent of the local and foreign group subsidiaries respectively. However, there are differences in the industry distribution between the two subsamples. Since financial reporting quality might also differ across industries, this indicates the need to control for industry affiliation in our subsequent tests.

3.2. Financial reporting quality measures

An empirical assessment of financial reporting quality is difficult because of its context-specificity (Dechow, Ge, & Schrand, 2010: 344). We follow prior studies and use the magnitude of the discretionary (or abnormal) component of accruals, which is frequently

⁵ The other home countries of foreign parent companies are (ordered by frequency): Portugal, Luxembourg, Ireland, Denmark, Finland, Austria, South Korea, United Arab Emirates, Bermuda, Norway, Canada, South Africa, Israel, Mexico, Australia, China, Kuwait, India, Brazil, Turkey, Hong Kong, Taiwan, Kazakhstan, Russia, New Zealand, Lithuania, Saudi Arabia, Algeria, and Colombia.

Table 1: Sample composition.*Panel A: Sample composition by the country of origin of the parent company*

Country of origin	Freq.	%
Spain	9,756	46.55
France	2,256	10.76
United States	2,219	10.59
Germany	1,731	8.26
United Kingdom	794	3.79
Italy	674	3.22
Switzerland	628	3.00
Netherlands	588	2.81
Japan	466	2.22
Sweden	312	1.49
Belgium	222	1.06
Other	1,313	6.25
Total	20,959	100.00

Panel B: Sample composition by industry

Industry	Local control		Foreign control	
	Freq.	%	Freq.	%
Agriculture, Forestry & Fishing	118	1.21	76	0.68
Mining & Construction	1,219	12.49	330	2.95
Manufacturing	3,156	32.35	4,612	41.17
Transportation & Public Utilities	1,334	13.67	714	6.37
Wholesale & Retail Trade	1,817	18.62	3,436	30.67
Services	2,112	21.65	2,035	18.16
Total	9,756	100.00	11,203	100.00

used to proxy for the firm's earnings management behavior (García-Osma, Gill-de-Albornoz, & Gisbert, 2005).

Earnings are the sum of cash flows and accruals. Accrual accounting requires a great deal of professional judgment, allowing management to make discretionary choices. There is plenty of evidence suggesting that managers use such discretion to alter accounting numbers and give an interest-based image of the company (for a review see Dechow et al., 2010). Given that not all the observed accruals are opportunistic, the literature frequently uses an expectations model to split them into a non-discretionary (or normal) and a discretionary (or abnormal) component. In particular, we use two models:

(1) the modified version of the Jones model proposed by Dechow, Sloan, and Sweeney (1995), which we estimate both in its total accruals and working capital accruals versions; and (2) the Dechow and Dichev (2002) model.

To calculate discretionary accruals with the modified Jones model (*DAC*) we first estimate the model proposed by Jones (1991), as presented in expression (1a), where for firm *i* in year *t*: *Accruals* are total accruals, calculated as the annual change in non-cash current assets less the annual change in current liabilities, less the annual depreciation expense; $\Delta Sales$ is the annual change in sales revenue, and *PPE* is the level of property, plant and equipment; and then use the estimated coefficients to calculate *DAC* as indicated in expression (1b), where ΔRec is the annual change in accounts receivable.

$$Accruals_{i,t} = \alpha + \beta_1 \Delta Sales_{i,t} + \beta_2 PPE_{i,t} + \varepsilon_{i,t} \quad (1a)$$

$$DAC_{i,t} = Accruals_{i,t} - [\hat{\alpha} + \hat{\beta}_1 (\Delta Sales_{i,t} - \Delta Rec_{i,t}) + \hat{\beta}_2 PPE_{i,t}] \quad (1b)$$

The discretionary accruals from the working capital accruals version of the modified Jones model (*WCDAC*) are calculated similarly but using working capital accruals (*WCAccruals*) instead of *Accruals*⁶ as the dependent variable and excluding *PPE* from the right hand side of the model.

Additionally, we use an accruals quality measure derived from the model proposed by Dechow and Dichev (2002) (*DD*). This model assesses the degree to which working capital accruals (*WCAccruals*) map into the past, current, and future cash flows from operations (*CFO*). In particular, we use the residuals of the estimation of model (2) to proxy for discretionary accruals.

⁶ Working capital accruals are calculated as the annual change in non-cash current assets less the annual change in current liabilities.

$$WCAccruals_{i,t} = \alpha + \beta_1 CFO_{i,t-1} + \beta_2 CFO_{i,t} + \beta_3 CFO_{i,t+1} + \varepsilon_{i,t} \quad (2)$$

All the variables in models (1a), (1b) and (2) are scaled by lagged total assets. The models (1a) and (2) are estimated using the pool of observations that meet the size criteria required for our sample of subsidiaries, where we include industry and year controls.⁷ Our proxies of the firm's financial reporting quality are the absolute value of the discretionary accruals measures estimated (i.e., $|DAC|$, $|WCDAC|$, and $|DD|$).

3.3. Empirical model

We explore the relation between foreign shareholding and accruals quality by estimating model (3), where we omit coefficients for simplicity, and subscripts i and t represent firm and year respectively.

$$\begin{aligned} FRQ_{i,t} = & Foreignown_{i,t} + Size_{i,t} + Lev_{i,t} + |Roa|_{i,t} + |CFO|_{i,t} + Loss_{i,t} \\ & + Salesgrowth_{i,t} + Big_{i,t} + NBanksA_{i,t} + ListedP_{i,t} \\ & + Year\ Effects_{i,t} + Industry\ Effects_{i,t} \end{aligned} \quad (3)$$

The definitions of all the variables are in Table 2. FRQ is financial reporting quality and stands for $|DAC|$, $|WCDAC|$ or $|DD|$. The main experimental variable is *Foreignown*, a dummy that equals 1 if the parent company is foreign, and 0 if it is local. The model includes a set of control variables, since we are interested in the effect of foreign shareholding on financial reporting quality above and beyond the effect of other factors. We include several firm characteristics in which subsidiaries of local and foreign groups potentially differ and that prior studies relate to discretionary accruals. We control for firm size using the logarithm of total sales (*Size*). Foreign group subsidiaries are

⁷ Results are qualitatively the same when estimating the models in each year and 2-digit SIC combination requiring a minimum of 10 observations per regression as in DeFond and Jambalvo (1994), although the sample size is considerably reduced.

Table 2: Variable definitions.

Variable	Description
<i>Accruals</i>	Total accruals, calculated as the annual change in non-cash current assets less the annual change in current liabilities, and less the annual depreciation expense.
<i>Big</i>	Dummy variable that equals 1 if the firm is audited by a multinational audit firm, 0 otherwise.
<i>CFO</i>	Cash flow from operations, calculated as earnings before taxes less total accruals (<i>Accruals</i>).
<i>DAC</i>	Discretionary accruals obtained from the total accruals version of the modified Jones model (Dechow et al., 1995).
<i>DD</i>	Discretionary accruals calculated as de residuals of the Dechow and Dichev (2002) model.
<i>Foreignjyr</i> ($j = 2$ or 3)	Dummy variables that equal 1 in the j years after (before) the takeover by a foreign (local) shareholder, and 0 in the j years before (after) the takeover by a foreign (local) shareholder.
<i>Foreignown</i>	Dummy variable that equals 1 if the parent company is foreign, 0 if it is local.
<i>IQ</i>	Aggregate measure of institutional quality calculated as the mean rank by country based on six institutional quality indexes.
<i>Lev</i>	Ratio of total debt to total assets.
<i>ListedP</i>	Dummy variable that equals 1 whether the parent company is listed, 0 otherwise.
<i>Loss</i>	Dummy variable that equals 1 if net income is negative, 0 otherwise.
<i>NBanks</i>	Number of banks the company works with.
<i>NBanksA</i>	<i>NBanks</i> over total assets. This variable is multiplied by 1,000 for expositional convenience.
<i>PPE</i>	Property, plant and equipment.
<i>Rec</i>	Accounts receivable.
<i>Roa</i>	Ratio of net income over total assets.
<i>Sales</i>	Total sales.
<i>Salesgrowth</i>	Annual growth rate in sales.
<i>Size</i>	Natural logarithm of <i>Sales</i> .
<i>TenureP</i>	Number of years since the parent company became the firm's controlling shareholder.
<i>Treat</i>	Dummy variable that equals 1 for observations of firms that change from local to foreign control during the sample period, and 0 for observations of firms that are under local control during the entire sample period.
<i>WCAccruals</i>	Working capital accruals, calculated as the annual change in non-cash current assets less the annual change in current liabilities.
<i>WCDAC</i>	Discretionary accruals obtained from the working capital accruals version of the modified Jones model proposed by Dechow et al. (1995).
$ X $	Absolute value of the variable X .
ΔX	Annual change of the variable X .

potentially larger than those of local groups, while the previously documented relation of firm size with our proxies of accounting quality is unclear.

Larger firms have higher political costs and better internal control procedures over financial reporting, and therefore exhibit lower levels of discretionary accruals (e.g.: Ball & Foster, 1982; Hribar & Nichols, 2007); although larger firms have also greater incentives to incur in income smoothing practices (e.g.: Craig & Walsh, 1989; Michelson, Jordan-Wagner, & Wootton, 1995 & 2000; Moses, 1987). The company's leverage, calculated as total debt over total assets (*Lev*), proxies for the firm's financial constraints and is expected to be positively associated with the prevalence of earnings manipulation since higher bankruptcy risk is related to higher discretionary accruals (e.g.: DeAngelo, DeAngelo, & Skinner, 1994; DeFond & Jiambalvo, 1994). Firm performance is another determinant of reporting quality that in turn has been related to foreign ownership. There is evidence that firms with extreme performance and loss-making firms have higher discretionary accruals (e.g.: Dechow & Dichev, 2002; Dechow et al., 1995), so that we control for performance with the absolute value of the return on assets ratio ($|RoA|$), the absolute value of the cash flow from operations ($|CFO|$), and a dummy variable equaling 1 if the firm reports losses, and 0 otherwise (*Loss*).⁸ The model also includes the annual rate of sales growth (*Salesgrowth*), since previous studies show that growing firms tend to report higher levels of discretionary accruals (e.g.: Menon & Williams, 2004).

A potentially important confounding factor affecting both financial reporting quality and foreign ownership is the auditor's size, which we proxy with a dummy variable equaling 1 if the firm is audited by a multinational audit firm, and 0 otherwise (*Big*). Foreign investors are more likely to choose one of the internationally renowned

⁸ We use the absolute values of ROA and CFO because the discretionary accruals variables are also unsigned. Results are similar whether we use signed ROA and CFO instead.

audit firms, and auditor size is in turn a determinant of financial reporting quality. US-based research finds that companies audited by big auditors have lower discretionary accruals (Becker, DeFond, Jiambalvo, & Subramanyam, 1998; Francis & Krishnan, 1999). However, there is also evidence that large auditors are less conservative and have lower incentives to constrain earnings management in settings with less restrictive regulation and lenient audit environment (e.g.: Francis & Wang, 2008; Maijoor & Vanstraelen, 2006; Van Tendeloo & Vanstraelen, 2008). Additionally, the role of auditor reputation as determinant of financial reporting quality in the private setting, where the risk of reputation loss is lower than in public firms, has been scarcely explored (Hope & Langli, 2010).

We control for the firm's dependence on bank financing with the variable *NBanksA*, calculated as the number of banks the company works with over total assets. Banks are the most important users of financial statements in the private setting, and financial reporting quality is related to loan terms (Armstrong, Guay, & Weber, 2010; Chen, He, Ma, & Stice, 2016; Karjalainen, 2011). The higher the dependence on bank financing the more important the incentives of debt contracting for financial reporting quality. Thus, given that subsidiaries of foreign groups are documented to be more financially dependent on the parent company than subsidiaries of local groups (e.g.: Chowdhry & Coval, 1998; Huizinga, Laeven, & Nicodeme, 2008),⁹ the observed relation between foreign shareholding and financial reporting quality could be due to different debt contracting incentives.

Similarly, we control for the listing status of the parent company (*ListedP*), since the capital markets' pressure generates incentives for parent companies to manipulate

⁹ MNCs' subsidiaries are frequently funded with the parent company's loans since *MNCs can exploit the tax advantage of debt more aggressively than national companies* (e.g.: Møen, Schindler, Schjelderup, & Tropina, 2011).

their subsidiaries' accounts (Bonacchi et al., 2017), and in our sample the rate of listed parent companies is substantially higher among foreign investors, which is as expected because the rate of public companies in Spain is much lower than in many of the countries where the FDI comes from.

Finally, model (3) includes year and industry effects, where the latter are built based on the SIC classification. We winsorize all the continuous variables at the 1 percent and 99 percent levels to minimize the effect of outliers,¹⁰ and use ordinary least squares (OLS) to estimate the model, where we correct standard errors by clustering on both firm and year following Cameron, Gelbach, and Miller (2011).

4. Descriptive statistics, univariate tests and correlations

Table 3 reports the descriptive statistics of the research variables by type of parent company, local (N = 9,756, except for variables *DAC* and *DD* where the sample is reduced) and foreign (N = 11,203, except for variables *DAC* and *DD*), as well as the statistics for the corresponding tests to compare means, distributions, or proportions between the two groups. Table 4 presents Pearson pair wise correlations.

Both the descriptive statistics and the correlations are consistent with our main prediction, that is, financial reporting of foreign-controlled firms is of lower quality than that of firms under local control. Subsidiaries of foreign groups report significantly higher levels of discretionary accruals (mean $|DAC|$ of 0.109 vs. 0.103; mean $|WCDAC|$ of 0.107 vs. 0.101; mean $|DD|$ of 0.066 vs. 0.058). However, the two groups of subsidiaries also exhibit significant differences in other variables that in turn are related to financial reporting quality. On average, firms with foreign controlling shareholders are larger (*Sales*) and less leveraged (*Lev*), have higher return on sales ($|RoA|$) and cash flows from

¹⁰ Our conclusions remain unchanged whether we truncate the sample below percentile 1 and above percentile 99 of the variables $|DAC|$, $|WCDAC|$, $|DD|$, *Size*, *Lev*, $|RoA|$, $|CFO|$, *Salesgrowth*, and *NBanksA*.

operations ($|CFO|$), are more likely to incur in losses (*Loss*), and have lower sales growth rates (*Salesgrowth*) than companies under local control.¹¹ Additionally, as expected, the proportion of international auditors (*Big*) and listed parent companies (*ListedP*) is significantly higher in the subsidiaries of foreign groups, and the dependence on bank financing (*NBanksA*) is significantly higher in subsidiaries of local groups. Also as expected, all these variables are significantly correlated to our financial reporting quality measures. Therefore, the observed positive association at the univariate level between foreign shareholding and our discretionary accruals measures could be just reflecting some confounding effect/s. This calls for carrying out multivariate analysis in order to get any meaningful insights on the relation between foreign shareholding and our financial reporting quality proxies.

5. Regression results

Table 5 presents the results of the estimation of model (3). The coefficient of *Foreignown* is positive and statistically significant at conventional levels regardless of the accruals quality measure employed. Thus, above and beyond the effect of the rest of the explanatory variables included in our model, the magnitude of the discretionary accruals is significantly higher for the firms controlled by foreign groups. This result is consistent with the evidence obtained at the univariate level and supports our hypothesis: financial reporting of foreign group subsidiaries is of lower quality than that of local group subsidiaries. The results are not only statistically significant but also economically important: the coefficient of *Foreignown* ranges between 0.003 and 0.005, meaning that,

¹¹ For the sake of comparability, we provide some references of our sample characteristics with regard to other studies using Spanish data. As expected, our sample firms are smaller and less leveraged than listed Spanish firms included in the sample of Beuselinck, Blanco, and García-Lara (2017). As compared to the private firms with audited financial statements used in Cano-Rodríguez and Sánchez-Alegría (2012), our sample firms are larger, and have higher growth rates, while they are similar in terms of leverage and profitability. Finally, compared to SMEs with audited accounts studied in Huguet and Gandía (2016), the firms included in our sample are larger, more leveraged and profitable, and have higher growth rates.

Table 3: Descriptive statistics of research variables.

This table presents the descriptive statistics of the variables included in our baseline model for the two subsamples of subsidiaries (with local or foreign control), as well as the tests that compare the characteristics of the two subsamples. Variable definitions are in Table 2. The last three columns show respectively the *t*-statistics, χ^2 -statistics and *z*-statistics of the tests where the null hypothesis is that the two groups have identical means, distributions or proportions. Statistical significance is indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variable	Local control				Foreign control				Means		Kruskal		Proportions	
	N	Mean	Median	Stddev	N	Mean	Median	Stddev	diff.		Wallis		diff.	
<i> DAC </i>	9,733	0.103	0.059	0.134	11,174	0.109	0.063	0.139	-2.81***		8.37***			
<i> WCDAC </i>	9,756	0.101	0.058	0.129	11,203	0.107	0.062	0.134	-3.30***		16.75***			
<i> DD </i>	8,337	0.058	0.038	0.072	9,516	0.066	0.043	0.079	-6.98***		60.58***			
<i>Sales</i> (million €)	9,756	209.755	59.960	526.213	11,203	265.639	104.839	531.716	-7.63***		895.61***			
<i>Lev</i>	9,756	0.653	0.674	0.239	11,203	0.646	0.663	0.263	1.87*		8.06***			
<i> Roal </i>	9,756	0.066	0.044	0.072	11,203	0.079	0.053	0.083	-11.79***		142.55***			
<i> CFO </i>	9,756	0.119	0.081	0.125	11,203	0.127	0.084	0.133	-4.37***		8.08***			
<i>Loss</i>	9,756	0.206	0.000	0.404	11,203	0.253	0.000	0.434					-8.04***	
<i>Salesgrowth</i>	9,756	0.216	0.063	0.944	11,203	0.182	0.054	0.810	2.82***		2.98*			
<i>Big</i>	9,756	0.791	1.000	0.407	11,203	0.907	1.000	0.291					-23.60***	
<i>NBanksA</i>	9,756	0.091	0.044	0.188	11,203	0.055	0.027	0.107	17.02***		531.32***			
<i>ListedP</i>	9,756	0.465	0.000	0.499	11,203	0.755	1.000	0.430					-43.15***	

Table 4: Correlations.

This table presents Pearson pair wise correlations of the research variables. Variable definitions are in Table 2. Statistical significance is indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) <i>DAC</i>	1.00											
(2) <i>WCDAC</i>	0.96***	1.00										
(3) <i>DD</i>	0.57***	1.00										
(4) <i>Foreignown</i>	0.02***	0.05***	1.00									
(5) <i>Size</i>	-0.12***	-0.11***	0.18***	1.00								
(6) <i>Lev</i>	0.11***	0.10***	-0.01*	0.03***	1.00							
(7) <i>Roa</i>	0.19***	0.20***	0.08***	-0.06***	-0.04***	1.00						
(8) <i>CFO</i>	0.59***	0.58***	0.30***	0.03***	0.03***	0.42***	1.00					
(9) <i>Loss</i>	0.11***	0.10***	0.06***	-0.08***	0.27***	0.07***	0.02***	1.00				
(10) <i>Salesgrowth</i>	0.26***	0.25***	-0.02***	-0.03***	0.08***	-0.01	0.04***	-0.001	1.00			
(11) <i>Big</i>	0.03***	0.03***	0.16***	0.14***	-0.004	0.05***	0.05***	0.03***	0.01*	1.00		
(12) <i>NBanksA</i>	0.04***	0.05***	-0.12***	-0.40***	0.06***	0.06***	0.03***	0.01	0.01**	-0.13***	1.00	
(13) <i>ListedP</i>	0.03***	0.04***	0.30***	0.13***	-0.004	0.06***	0.04***	0.002	0.01	0.27***	-0.10***	1.00

Table 5: Foreign control and financial reporting quality. Regression analysis.

This table presents the results of the estimation of model (3). Variable definitions are in Table 2. We report *t*-statistics adjusted for clustering on both firm and year. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	 DAC 	 WCDAC 	 DD
<i>Constant</i>	0.121*** [10.21]	0.090*** [8.53]	0.061*** [7.44]
<i>Foreignown</i>	0.005*** [2.63]	0.005** [2.55]	0.003** [2.15]
<i>Size</i>	-0.008*** [-8.81]	-0.008*** [-8.52]	-0.005*** [-6.61]
<i>Lev</i>	0.024*** [5.28]	0.021*** [4.44]	0.012*** [3.34]
<i> Roa </i>	-0.114*** [-3.57]	-0.091*** [-3.24]	0.390*** [24.41]
<i> CFO </i>	0.634*** [45.24]	0.595*** [38.62]	0.074*** [8.18]
<i>Loss</i>	0.029*** [11.54]	0.024*** [10.37]	0.027*** [7.72]
<i>Salesgrowth</i>	0.036*** [15.43]	0.033*** [15.51]	0.022*** [13.50]
<i>Big</i>	0.002 [0.91]	0.002 [0.77]	0.001 [0.61]
<i>NBanksA</i>	-0.008 [-1.34]	-0.008 [-1.32]	-0.010* [-1.69]
<i>ListedP</i>	0.003 [1.44]	0.003 [1.46]	0.002 [1.26]
Year and industry effects	Yes	Yes	Yes
No. observations	20,907	20,959	17,853
R-squared	0.426	0.404	0.314
<i>F</i> -statistic	144.30***	143.67***	70.08***

keeping the rest of controls constant at their mean values, the magnitude of discretionary accruals in the subsidiaries of foreign groups represents on average between 0.3 and 0.5 percent more of total assets than in the subsidiaries of local groups.

Regarding the coefficients of the control variables, although the sign of the coefficient of *|Roa|* differs depending on the discretionary accruals measure considered, both *|CFO|* and *Loss* are positively and significantly associated with the magnitude of discretionary accruals, which is consistent with prior research indicating that extreme

performance firms have higher discretionary accruals. Additionally, the magnitude of discretionary accruals significantly increases with leverage (*Lev*) and sales growth (*Salesgrowth*), and decreases with firm size (*Size*). The variable measuring bank financing dependence (*NBanksA*) is negative and marginally significant, which suggests that debt contracting incentives increase the need for companies to have better accruals quality. Finally, the coefficients of *Big* (auditor size) and *ListedP* (the listing status of the parent company) are positive although not statistically significant.

6. Competing explanations for the negative association between foreign control and accounting quality

Literature suggests at least two potential explanations for the result obtained in the prior section. Firstly, some studies indicate that the earnings management constraints faced in the home country of the parent company lead MNCs headquartered in high institutional quality countries to allocate earnings manipulation in their subsidiaries domiciled in low institutional quality settings. Given that Spain is a country with relatively weak institutions, it is likely that the average institutional quality in the FDI providers' home countries is higher than that of Spain, and this might underlie the documented negative association between foreign shareholding and financial reporting quality. If this is the case, the result should be driven by the group of subsidiaries where the parent company is located in a country with higher institutional quality than Spain. In other words, we would not expect that foreign-owned subsidiaries manipulate more than local group subsidiaries if their parents' headquarters are located in a country with lower institutional quality than Spain.

Secondly, we explore whether the potential informational disadvantage of foreign owners with regard to their local counterparts underlies our result. To do so, we examine the relation between the tenure of the controlling shareholder and the subsidiaries'

financial reporting quality, conditioned on whether the parent company is local or foreign. Given that the informational disadvantage is likely more important in the first years after takeover and it reduces as time passes, if the informational disadvantage of foreign investors explains our result, we would expect an improvement in the subsidiaries' accounting quality as the tenure of the foreign owner increases; and such improvement would be higher than that observed when the subsidiary's owners are local.

6.1. The role of the institutional quality of the parent company's home country

In order to provide evidence on the role of the institutional quality of the parent companies' home countries in our main finding, we partition our sample considering several country-level institutional quality measures suggested in the literature.

Institutional quality is a broad concept and prior research in international accounting documents multiple characteristics of a country's institutional environment that explain the differences in financial reporting quality around the world. However, as noted by Leuz and Wysocki (2016), it is difficult to isolate the impact of an individual institutional attribute on reporting outcomes. Accordingly, we use six measures that proxy for the quality of institutions in the parent company's home country and construct an aggregate measure of institutional quality (*IQ*). In particular, we consider the following measures of institutional quality: (1) the anti-self-dealing index of Djankov, La Porta, López-de-Silanes, and Shleifer (2008), which focuses on private enforcement mechanisms; (2) the index of shareholder protection through securities laws of La Porta, López-de-Silanes, and Shleifer (2006); (3) the anti-director index of La Porta, López-de-Silanes, Shleifer, and Vishny (1998); (4) the aggregate earnings management score of Leuz et al. (2003); (5) the mean premium paid for the controlling block of Dyck and Zingales (2004), which proxies for private control benefits; and (6) the index for public enforcement of La Porta et al. (2006). Except for the earnings management score and the

block premium, which are inverse measures, the rest are all direct measures of institutional quality. These metrics have been frequently used as proxies for two fundamental dimensions of a country's institutional environment, namely the level of legal protection of minority shareholders and the quality of the enforcement mechanisms. Investor protection relates to the insiders' ability to consume private control benefits, strong outsider rights acting as a deterrent to earnings management (Leuz et al., 2003). On the other hand, legal enforcement plays a major role for the quality of reporting regulation given that the accounting standards may remain ineffective in the absence of strong enforcement mechanisms (e.g.: Burgstahler et al., 2006; Byard, Li, & Yu, 2011; Daske, Hail, Leuz, & Verdi, 2008; Holthausen, 2009; La Porta et al., 1998; Landsman, Maydew, & Thornock, 2011; Leuz, 2010).

To calculate our aggregate measure of institutional quality (*IQ*) we consider only the countries for which all the individual institutional quality measures are available. This leaves us with twenty one countries out of the forty included in our sample.¹² Given that all the individual measures are static (i.e., they are obtained at a certain moment in time), each country has the same *IQ* during the entire sample period. Firstly, we rank the parent companies' home countries (Spain included) based on each individual measure of institutional quality, and then we calculate *IQ* as the mean rank by country. We observe that the US ranks first in institutional quality which means that, of all the MNCs in our sample, US MNCs are subject to the highest institutional pressure in their country of origin. This is consistent with prior literature documenting the US superiority in terms of institutional quality (e.g.: Clarkson & Simunic, 1994; Jackson, 2006 & 2007; Leuz, 2010; Hope, 2003). Other countries with strong institutions are Australia, Canada, Hong Kong,

¹² Although the number of countries is considerably reduced, the number of observations is not. We lose 835 firm-year observations in this analysis, that is, less than 5 percent of the initial sample.

Table 6: Foreign control and financial reporting quality: The role of the institutional quality in the parent company's home country.

This table presents the results of the estimation of model (3) in the subsamples where the observations of the foreign-controlled firms are partitioned according to the level of institutional quality in the parent company's home country with respect to that in Spain. Variable definitions are in Table 2. We report *t*-statistics adjusted for clustering on both firm and year. We also report the χ^2 for the difference in the coefficient of *Foreignown* of the two estimations. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	DAC		WCDAC		DD	
	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
Constant	0.090*** [6.93]	0.125*** [8.78]	0.118*** [7.91]	0.092*** [7.23]	0.052*** [10.82]	0.047*** [5.18]
Foreignown	0.009*** [4.45]	0.003 [1.12]	0.009*** [4.50]	0.003 [1.20]	0.004** [2.48]	0.001 [0.54]
Size	-0.009*** [-9.48]	-0.008*** [-7.47]	-0.008*** [-7.93]	-0.008*** [-6.85]	-0.005*** [-6.20]	-0.004*** [-5.80]
Lev	0.021*** [3.89]	0.028*** [4.89]	0.020*** [3.44]	0.024*** [3.94]	0.009** [2.22]	0.016*** [3.35]
 Roa 	-0.116*** [-3.00]	-0.133*** [-3.45]	-0.092*** [-2.66]	-0.114*** [-3.41]	0.373*** [19.12]	0.386*** [17.54]
 CFO 	0.645*** [41.05]	0.624*** [34.35]	0.607*** [35.96]	0.589*** [30.94]	0.083*** [9.19]	0.069*** [4.97]
Loss	0.028*** [11.20]	0.027*** [9.13]	0.023*** [9.93]	0.022*** [8.05]	0.027*** [7.61]	0.027*** [6.32]
Salesgrowth	0.036*** [12.29]	0.035*** [14.08]	0.032*** [12.82]	0.032*** [15.06]	0.024*** [11.30]	0.022*** [13.22]
Big	0.004 [1.59]	0.000 [0.22]	0.003 [1.46]	-0.000 [-0.08]	-0.000 [-0.01]	0.001 [0.59]
NBanksA	-0.009 [-1.62]	-0.008 [-1.28]	-0.008 [-1.20]	-0.009 [-1.28]	-0.010** [-2.05]	-0.009 [-1.61]
ListedP	0.002 [0.78]	0.000 [0.14]	0.001 [0.46]	-0.000 [-0.01]	0.004** [2.10]	0.000 [0.30]

Test for the difference in Foreignown (χ^2 HigherIQ vs LowerIQ):

	7.57***		8.04***		5.41**	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No. observations	15,213	14,595	15,252	14,628	13,012	12,495
R-squared	0.434	0.420	0.412	0.399	0.305	0.315
F-statistic	109.12***	95.16***	108.74***	94.78***	47.01***	44.42***

and the UK, whereas South Korea, Switzerland, Italy, Germany, and Austria have the lowest institutional quality in our sample. Spain ranks eleventh out of the twenty one countries included in this analysis (see Appendix 1 for the complete ranking of the countries). Subsequently, we partition the sample of foreign-owned subsidiaries in two subsamples taking as a reference the level of institutional quality in Spain, and we estimate model (3) in the subsamples where the parent company is located in a country that ranks higher or lower than Spain according to *IQ*. Results are reported in Table 6. The coefficient of *Foreignown* is positive and statistically significant only in the subsample of subsidiaries with parent companies located in relatively high institutional quality countries.¹³ This finding is consistent with the parent company's incentives explanation, and relates to the evidence that MNCs from strong institutional settings allocate earnings management away from the scrutiny of local enforcers, and especially in subsidiaries located in weak institutional quality jurisdictions (Beuselinck, Cascino, et al., 2017).

6.2. The informational disadvantage of foreign investors

To explore the foreign investors' informational disadvantage explanation, we estimate model (3) extended with two additional regressors, as indicated in expression (4), where: *TenureP* is the number of years since the parent company became the controlling shareholder; and *TenureP_Foreignown*, is the interaction of *TenureP* with *Foreignown*. The coefficient of *TenureP* indicates how the controlling shareholder's tenure relates to the reporting quality of firms under local control, while the coefficient of the interaction term *TenureP_Foreignown* captures the incremental effect of foreign shareholding on the relation between the controlling shareholder's tenure and the magnitude of discretionary

¹³ In the Appendix 2 we show the results obtained when the sample is partitioned using each individual measure of institutional quality. Results (untabulated) are qualitatively the same when the sample partition is based on the two underlying factors obtained from applying a factor analysis procedure.

accruals. Finally, the sum of the coefficients of *TenureP* and *TenureP_Foreignown* indicates how the controlling shareholder's tenure relates to financial reporting quality in the sample of foreign-controlled firms.

$$FRQ_{i,t} = Foreignown_{i,t} + TenureP_{i,t} + TenureP_Foreignown_{i,t} + Control\ Variables_{i,t} \quad (4)$$

Table 7 provides the results. The coefficient of *TenureP* is negative and significant at the 1 percent level, suggesting that accruals quality improves with the tenure of the parent company when subsidiaries are owned by local groups. Most important, the coefficient of the interaction term (*TenureP_Foreignown*) is positive and significant, indicating that when the parent company is foreign the controlling shareholder's tenure has a negative incremental effect on the subsidiary's reporting quality. Finally, the sum of the coefficients of *TenureP* and *TenureP_Foreignown* is not significantly different from zero, which means that accruals quality does not significantly change as the parent company's tenure increases in the case of foreign group subsidiaries.

In sum, the subsidiaries' reporting quality does not improve as the foreign parent company's tenure increases. On the contrary, the effect of the parent company's tenure on the subsidiaries' financial reporting quality is significantly negative when the parent company is foreign. These results are not compatible with the explanation of an informational disadvantage of foreign investors for our main finding, but supports the thesis that the lower quality of the accounting numbers reported by firms under foreign control is driven by the parent company's incentives.

7. Control changes and financial reporting quality

Inferring causality in the reported relation between foreign shareholding and financial reporting quality is challenging. We intend to further address this issue by exploring the sample of subsidiaries where we observe changes of control (i.e., firms that during the sample period changed from a foreign to a local parent company and vice versa). Specifically, we identify 160 takeovers where the subsidiary changes from a local to a foreign controlling shareholder and 42 takeovers where the subsidiary changes from a foreign to a local controlling shareholder.

In a first set of tests, we restrict the sample to the firm-years around these 202 takeovers, and compare the accruals quality of years under foreign and local control. In particular, we estimate the model specified in expression (5), where the coefficients and control variables are omitted for simplicity; and $Foreignjyr_{i,t}$ is a dummy variable that equals 1 in the j years after (before) the takeover by a foreign (local) shareholder, and 0 in the j years before (after) the takeover by a foreign (local) shareholder, with j equaling 2 or 3. The rest of the control variables are as defined in model (3).

$$FRQ_{i,t} = Foreignjyr_{i,t} + Control\ Variables_{i,t} \quad (5)$$

Results of this additional analysis are reported in Panel A of Table 8. The coefficients of $Foreign2yr$ and $Foreign3yr$ are all positive and statistically significant at conventional levels in five out of the six estimations carried out. This indicates that the magnitude of discretionary accruals is higher in the years when the owner of the company is a foreign group, suggesting that the deterioration (improvement) of accruals quality is a consequence of changing from local (foreign) to foreign (local) control.

In a second set of tests, we use a differences-in-differences design where companies that are controlled by a local group during the entire sample period are used

Table 7: Parent company's tenure and financial reporting quality.

This table presents the results of the estimation of model (4). Variable definitions are in Table 2. We report *t*-statistics adjusted for clustering on both firm and year. We also report the *F*-statistic of the Wald test whose null hypothesis is that the sum of the two coefficients is not significantly different from zero. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	DAC	WCDAC	DD
<i>Constant</i>	0.124*** [10.39]	0.095*** [8.73]	0.062*** [7.43]
<i>(1) Foreignown</i>	-0.001 [-0.37]	-0.000 [-0.08]	-0.000 [-0.02]
<i>(2) TenureP</i>	-0.0006*** [-2.84]	-0.0006*** [-3.02]	-0.0003*** [-2.71]
<i>(3) TenureP_Foreignown</i>	0.0006*** [2.91]	0.0006*** [2.74]	0.0003** [2.44]
<i>(2) + (3)</i>	0.0000 [0.01]	0.0000 [0.31]	0.0000 [0.27]
<i>F-statistic test (2) + (3) = 0</i>			
<i>Size</i>	-0.008*** [-8.70]	-0.008*** [-8.46]	-0.005*** [-6.44]
<i>Lev</i>	0.024*** [5.21]	0.020*** [4.32]	0.011*** [3.32]
<i> Roa </i>	-0.113*** [-3.54]	-0.090*** [-3.22]	0.390*** [24.49]
<i> CFO </i>	0.633*** [45.32]	0.595*** [38.71]	0.074*** [8.15]
<i>Loss</i>	0.029*** [11.57]	0.023*** [10.33]	0.027*** [7.72]
<i>Salesgrowth</i>	0.036*** [15.39]	0.033*** [15.41]	0.022*** [13.39]
<i>Big</i>	0.002 [0.88]	0.002 [0.73]	0.001 [0.57]
<i>NBanksA</i>	-0.008 [-1.37]	-0.008 [-1.35]	-0.010* [-1.71]
<i>ListedP</i>	0.004* [1.65]	0.004* [1.68]	0.002 [1.46]
Year and industry effects	Yes	Yes	Yes
No. observations	20,907	20,959	17,853
R-squared	0.426	0.404	0.314
<i>F</i> -statistic	136.02***	135.64***	66.02***

Table 8: Control changes and financial reporting quality.

Panel A presents the results of the estimation of model (5) while Panel B presents the results of the estimation of model (6). We report *t*-statistics adjusted for clustering on both firm and year. Variable definitions are in Table 2. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

<i>Panel A: Comparing years around takeovers under local and foreign control</i>						
	<i>Two years around takeovers</i>			<i>Three years around takeovers</i>		
Variables	 DAC 	 WCDAC 	 DD 	 DAC 	 WCDAC 	 DD
Constant	0.162*	0.014	0.155***	0.067	0.067	0.052
	[1.70]	[0.31]	[3.47]	[1.47]	[1.58]	[0.62]
Foreign2yr	0.031**	0.031**	0.011			
	[2.08]	[2.10]	[1.48]			
Foreign3yr				0.026**	0.025**	0.015**
				[2.30]	[2.30]	[2.39]
Size	-0.004	-0.005	-0.001	-0.004	-0.005	-0.001
	[-1.03]	[-1.11]	[-0.29]	[-1.27]	[-1.33]	[-0.31]
Lev	0.036	0.036	0.034*	0.046	0.043	0.037**
	[0.94]	[1.10]	[1.96]	[1.42]	[1.51]	[2.47]
 Roa 	0.192	0.137	0.690***	0.181	0.149	0.585***
	[1.22]	[0.82]	[12.07]	[1.39]	[1.09]	[10.16]
 CFO 	0.462***	0.456***	-0.056	0.417***	0.416***	-0.049
	[4.85]	[4.94]	[-0.88]	[5.61]	[6.34]	[-1.63]
Loss	0.023*	0.024*	0.027***	0.003	0.004	0.016**
	[1.80]	[1.91]	[4.79]	[0.54]	[0.70]	[2.45]
Salesgrowth	0.009	0.009	0.014**	0.021**	0.020**	0.020***
	[1.31]	[1.25]	[2.18]	[2.19]	[2.11]	[2.77]
Big	0.017	0.018	0.003	-0.000	0.002	-0.004
	[1.37]	[1.47]	[0.42]	[-0.02]	[0.21]	[-0.52]
NBanksA	0.037	0.029	0.048	-0.014***	-0.008**	0.031*
	[0.78]	[0.54]	[1.53]	[-5.61]	[-2.06]	[1.72]
ListedP	0.003	0.006	0.007	-0.001	0.001	0.002
	[0.22]	[0.54]	[1.39]	[-0.13]	[0.10]	[0.51]
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No. observations	421	427	370	554	562	482
R-squared	0.410	0.384	0.518	0.360	0.352	0.468
F-statistic	4.13***	3.41***	4.22***	4.65***	4.11***	4.39***

Panel B: Differences-in-differences design

Variables	All years			Three years around takeover		
	 DAC 	 WCDAC 	/DD/	 DAC 	 WCDAC 	/DD/
Constant	0.102*** [5.48]	0.098*** [3.26]	0.054*** [4.12]	0.110*** [5.58]	0.107*** [5.53]	0.054*** [4.14]
Treat	-0.002 [-0.28]	-0.005 [-0.72]	-0.002 [-0.61]	-0.013 [-1.62]	-0.010 [-1.21]	-0.009** [-2.56]
Foreignown	0.013** [2.19]	0.016** [2.42]	0.010** [2.13]	0.028*** [3.39]	0.025*** [2.69]	0.022*** [3.23]
Size	-0.008*** [-5.73]	-0.007*** [-4.91]	-0.004*** [-3.30]	-0.009*** [-5.65]	-0.008*** [-4.95]	-0.004*** [-3.72]
Lev	0.028*** [3.80]	0.028*** [3.68]	0.012** [2.44]	0.026*** [3.19]	0.027*** [3.11]	0.010* [1.91]
/Roa 	-0.157*** [-3.26]	-0.136*** [-2.91]	0.345*** [13.55]	-0.184*** [-3.81]	-0.166*** [-3.47]	0.334*** [12.39]
 CFO 	0.649*** [27.12]	0.615*** [24.73]	0.086*** [4.45]	0.647*** [24.83]	0.618*** [23.75]	0.081*** [4.04]
Loss	0.027*** [8.98]	0.023*** [7.10]	0.026*** [5.74]	0.025*** [8.12]	0.022*** [6.94]	0.026*** [5.59]
Salesgrowth	0.036*** [11.54]	0.033*** [11.19]	0.025*** [14.01]	0.033*** [9.34]	0.030*** [10.15]	0.024*** [9.32]
Big	0.002 [0.77]	0.001 [0.46]	-0.001 [-0.29]	0.003 [0.99]	0.002 [0.64]	-0.001 [-0.29]
NBanksA	0.003 [0.36]	0.005 [0.45]	0.000 [0.01]	0.000 [0.03]	0.002 [0.14]	-0.002 [-0.30]
ListedP	0.000 [0.07]	-0.002 [-0.72]	0.004* [1.85]	-0.001 [-0.39]	-0.003 [-1.16]	0.003 [1.51]
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No. observations	8,847	8,870	7,538	7,927	7,949	6,754
R-squared	0.439	0.422	0.305	0.436	0.421	0.296
F-statistic	58.18***	57.95***	22.22***	53.06***	53.19***	19.23***

as the control sample; and the treatment sample is composed of firms that during the sample period change from local to foreign control. We define a dummy variable, *Treat*, that equals 1 for observations belonging to the treatment sample, and 0 for the control sample; and estimate the model specified in equation (6), where the coefficients and control variables are omitted for simplicity. The coefficient of *Treat* captures the differences in financial reporting quality between the control and the treatment samples

other than those related to foreign shareholding while *Foreignown* captures the effect of foreign shareholding on financial reporting quality.

$$FRQ_{i,t} = Treat_{i,t} + Foreignown_{i,t} + Control\ Variables_{i,t} \quad (6)$$

We report the results of this analysis in Panel B of Table 8. The first three columns show the results of the estimation of model (6) in the entire control and treatment samples, while in the last three columns we report the results of the estimation where we restrict the treatment sample to the three years around the takeover. Irrespective of the accruals quality measure and treatment sample employed, the coefficients of *Foreignown* are positive and statistically significant at conventional levels, indicating that foreign shareholding reduces reporting quality.

Nevertheless, the majority of the firms included in our sample are under local or foreign control during the entire sample period, so that these tests are based on a limited number of takeovers.

8. Robustness tests

In this section, we summarize the results of several robustness tests carried out to enhance our main findings. The results reported in Table 5 are robust in a firm-fixed effects estimation, which controls for unobserved firm heterogeneity (see Appendix 3). We also implement the coarsened exact matching (CEM) procedure (Blackwell, Iacus, King, & Porro, 2009) to match subsidiaries controlled by foreign MNCs with locally-owned subsidiaries by size, year and industry, and obtain results consistent with those in Table 5 (see Appendix 4).

We confirm the results using several additional discretionary accruals measures. The association between foreign shareholding and the magnitude of discretionary accruals is also positive: when adjusting the modified Jones model for performance as

suggested in Kothari, Leone, and Wasley (2005), and for timely loss and gain recognition as suggested in Ball and Shivakumar (2006); and when using the discretionary accruals model proposed by Francis and Wang (2008) (see Appendix 5).

The results are also robust when we estimate model (3) in the subsample with big audit firms, and after excluding the observations of subsidiaries whose parent companies come from countries with less than 10 observations.

Finally, the negative relation between foreign ownership and financial reporting quality is also observed when extending the baseline model with several control variables, whose calculation reduces the sample size considerably, such as: the rolling 5-year standard deviation of cash flow from operations from year t to $t - 4$, the rolling 5-year standard deviation of sales going from t to $t - 4$, and lagged discretionary accruals (see Appendix 6).

9. Conclusions

We provide evidence on the relation between foreign shareholding and financial reporting quality in a sample of large private Spanish subsidiaries. We find that firms controlled by foreign shareholders have poorer accruals quality than locally-controlled firms. Furthermore, the negative relation between foreign shareholding and accounting quality is driven by the subsidiaries of groups where the parent company comes from countries with higher institutional quality than Spain, and our evidence is inconsistent with the alternative explanation of a potential informational disadvantage of foreign owners.

Our results suggest that (1) the incentives of the foreign parent companies to report poor accounting quality at the subsidiary level are significantly stronger than those of their local counterparts; and (2) foreign shareholding from high institutional quality countries not only does not result into positive spill-overs for the financial reporting

quality outcome, but it has a negative incremental effect on the accounting quality of subsidiaries located in countries with weaker institutional quality.

Our research has implications for policy makers, who should be aware of the potential negative effects that institutional differences between countries have for financial reporting quality. Our results support the view that reducing the international differences in institutional quality may help to improve the quality of financial reporting worldwide.

Our research also has limitations, since the causality issue is always challenging and our data constraints do not allow us to rule out some omitted variables problems; for instance, we are unable to control for some characteristics of the parent companies.

References

- Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, 100(1), 154-181.
- An, Y. (2015). Does foreign ownership increase financial reporting quality? *Asian Academy of Management Journal*, 20(2), 81-101.
- Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics*, 50(2), 179-234.
- Arnedo, L., Lizarraga, F., & Sánchez-Alegría, S. (2007). Does public/private status affect the level of earnings management in code-law contexts outside the United States? A study based on the Spanish case. *The International Journal of Accounting*, 42(3), 305-328.
- Bae, K. H., Stulz, R. M., & Tan, H. (2008). Do local analysts know more? A cross-country study of the performance of local analysts and foreign analysts. *Journal of Financial Economics*, 88(3), 581-606.
- Ball, R., & Foster, G. (1982). Corporate financial reporting: A methodological review of empirical research. *Journal of Accounting Research*, 20(Suppl.), 161-234.
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83-128.
- Ball, R., & Shivakumar, L. (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research*, 44(2), 207-242.
- Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary Accounting Research*, 15(1), 1-24.
- Beuselinck, C., Blanco, B., & García-Lara, J. M. (2017). The role of foreign shareholders in disciplining financial reporting. *Journal of Business Finance & Accounting*, 44(5-6), 558-592.
- Beuselinck, C., Cascino, S., Deloof, M., & Vanstraelen, A. (2017). Earnings management within multinational corporations. *Working Paper*, available at SSRN: <http://ssrn.com/abstract=1599678>.
- Blackwell, M., Iacus, S., King, G., & Porro, G. (2009). CEM: Coarsened exact matching in Stata. *The Stata Journal*, 9(4), 524-546.
- Bonacchi, M., Cipollini, F., & Zarowin, P. (2017). Parents' use of subsidiaries to 'push down' earnings management: Evidence from Italy. *Working Paper*, available at SSRN: <http://ssrn.com/abstract=2262042>.
- Burgstahler, D., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review*, 81(5), 983-1016.
- Byard, D., Li, Y., & Yu, Y. (2011). The effect of mandatory IFRS adoption on financial analysts' information environment. *Journal of Accounting Research*, 49(1), 69-96.
- Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2011). Robust inference with multiway clustering. *Journal of Business and Economic Statistics*, 29(2), 238-249.
- Cano-Rodríguez, M., & Sánchez-Alegría, S. (2012). The value of audit quality in public and private companies: Evidence from Spain. *Journal of Management and Governance*, 16(4), 683-706.
- Central Intelligence Agency (CIA). (2016). *Spain*. In *The World Factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/sp.html>.

- Chen, P. F., He, S., Ma, Z., & Stice, D. (2016). The information role of audit opinions in debt contracting. *Journal of Accounting and Economics*, 61(1), 121-144.
- Chen, F., Hope, O. K., Li, Q., & Wang, X. (2011). Financial reporting quality and investment efficiency of private firms in emerging markets. *The Accounting Review*, 86(4), 1255-1288.
- Chislett, W. (2015). The international position of Spanish companies: On the rise. *Revista Elcano*, 9, 32-37.
- Chowdhry, B., & Coval, J. D. (1998). Internal financing of multinational subsidiaries: Debt vs. equity. *Journal of Corporate Finance*, 4(1), 87-106.
- Clarkson, P., & Simunic, D. (1994). The association between audit quality, retained ownership, and firm-specific risk in the US vs. Canadian IPO markets. *Journal of Accounting and Economics*, 17(1), 207-228.
- Coppens, L., & Peek, E. (2005). An analysis of earnings management by European private firms. *Journal of International Accounting, Auditing and Taxation*, 14(1), 1-17.
- Craig, R., & Walsh, P. (1989). Adjustments for 'extraordinary items' in smoothing reported profits of listed Australian companies: Some empirical evidence. *Journal of Business Finance and Accounting*, 16(2), 229-245.
- Dahlquist, M., & Robertsson, G. (2001). Direct foreign ownership, institutional investors and firm characteristics. *Journal of Financial Economics*, 59(3), 413-440.
- Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008). Mandatory IFRS reporting around the world: Early evidence on the economic consequences. *Journal of Accounting Research*, 46(5), 1085-1142.
- DeAngelo, H., DeAngelo, L. E., & Skinner, D. (1994). Accounting choice in troubled companies. *Journal of Accounting and Economics*, 17(1-2), 113-143.
- Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(Suppl.), 35-59.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2-3), 344-401.
- Dechow, P., Sloan, R., & Sweeney, A. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
- DeFond, M. L., & Jambalvo, J. (1994). Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics*, 17(1-2), 145-176.
- Djankov, S., La Porta, R., López-de-Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics*, 88(3), 430-465.
- Durnev, A., Li, T., & Magnan, M. (2017). Beyond tax avoidance: Offshore firms' institutional environment and financial reporting quality. *Journal of Business Finance and Accounting*, 44(5-6), 646-696.
- Dyck, A., & Zingales, L. (2004). Private benefits of control: An international comparison. *Journal of Finance*, 59(2), 537-600.
- Dyreng, S., Hanlon, M., & Maydew, E. (2012). Where do firms manage earnings? *Review of Accounting Studies*, 17(3), 649-687.
- Edström, A., & Galbraith, J. R. (1977). Transfer of managers as a coordination and control strategy in multinational organizations. *Administrative Science Quarterly*, 22(2), 248-263.
- Erramilli, M. K. (1996). Nationality and subsidiary ownership patterns in multinational corporations. *Journal of International Business Studies*, 27(2), 225-248.
- European Central Bank (ECB). (2013). *Valuation of foreign direct investment positions - Final report* (Statistics Paper Series, 4). Retrieved from: <https://www.ecb.europa.eu/pub/pdf/scpsps/ecbsp4.en.pdf>.

- European Confederation of Directors' Associations (EcoDA). (2010). *Corporate governance guidance and principles for unlisted companies in Europe*. Brussels: EcoDA.
- Fan, N. (2012). A study of foreign earnings management using an empirical distribution approach. *International Research Journal of Applied Finance*, 3(12), 1704-1730.
- Fan, J., & Wong, J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3), 401-425.
- Ferreira, M., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88(3), 499-533.
- Firth, M., Fung, P., & Rui, O. (2007). Ownership, two-tier board structure, and the informativeness of earnings: Evidence from China. *Journal of Accounting and Public Policy*, 26(4), 463-496.
- Francis, J., & Krishnan, J. (1999). Accounting accruals and auditor reporting conservatism. *Contemporary Accounting Research*, 16(1), 135-165.
- Francis, J., Schipper, K., & Vincent, L. (2005). Earnings and dividend informativeness when cash flow rights are separated from voting rights. *Journal of Accounting and Economics*, 39(2), 329-360.
- Francis, J., & Wang, D. (2008). The joint effect of investor protection and Big 4 audits on earnings quality around the world. *Contemporary Accounting Research*, 25(1), 157-191.
- García-Osma, B., Gill-de-Albornoz, B., & Gisbert, A. (2005). La investigación sobre *earnings management* [Research on earnings management]. *Revista Española de Financiación y Contabilidad*, XXXIV(127), 1001-1033.
- Gatignon, H., & Anderson, E. (1988). The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. *Journal of Law, Economics and Organization*, 4(2), 305-336.
- Gill-de-Albornoz, B., & Illueca, M. (2007). La calidad de los ajustes por devengo no afecta al coste de la deuda de las PYMES españolas [Accruals quality does not influence the cost of debt of Spanish SMEs]. *Investigaciones Económicas*, 31(1), 79-117.
- Goncharov, I., & Zimmermann, J. (2006). Earnings management when incentives compete: The role of tax accounting in Russia. *Journal of International Accounting Research*, 5(1), 41-65.
- Harzing, A. W. (2001). Who's in charge? An empirical study of executive staffing practices in foreign subsidiaries. *Human Resource Management*, 40(2), 139-158.
- Hedlund, G. (1981). Autonomy of subsidiaries and formalization of headquarters-subsidiary relationships in Swedish MNC's. In L. Otterbeck (Ed.), *The management of headquarters-subsidiary relations in multinational corporations* (pp. 27-76). Hampshire: Gower Publishing.
- Holthausen, R. W. (2009). Accounting standards, financial reporting outcomes, and enforcement. *Journal of Accounting Research*, 47(2), 447-458.
- Hope, O. K. (2003). Disclosure practices, enforcement of accounting standards, and analysts' forecast accuracy: An international study. *Journal of Accounting Research*, 41(2), 235-272.
- Hope, O. K., & Langli, J. C. (2010). Auditor independence in a private firm and low litigation risk setting. *The Accounting Review*, 85(2), 573-605.
- Hope, O. K., Thomas, W. B., & Vyas, D. (2011). Financial credibility, ownership, and financing constraints in private firms. *Journal of International Business Studies*, 42(7), 935-957.

- Hope, O. K., Thomas, W. B., & Vyas, D. (2013). Financial reporting quality of US private and public firms. *The Accounting Review*, 88(5), 1715-1742.
- Hribar, P., & Nichols, D. C. (2007). The use of unsigned earnings quality measures in tests of earnings management. *Journal of Accounting Research*, 45(5), 1017-1053.
- Hsu, C. H. (2000). Capital budgeting analysis in wholly owned subsidiaries. *Journal of Financial and Strategic Decisions*, 13(1), 1-6.
- Huguet, D., & Gandía, J. L. (2016). Audit and earnings management in Spanish SMEs. *Business Research Quarterly*, 19(3), 171-187.
- Huizinga, H., Laeven, L., & Nicodeme, G. (2008). Capital structure and internal debt shifting. *Journal of Financial Economics*, 88(1), 80-118.
- Jackson, H. (2006). An American perspective on the UK Financial Services Authority: politics, goals & regulatory intensity. In L. Cho & J. Kim (Eds.), *Regulatory reforms in the age of financial consolidation: The emerging market economy and advanced countries* (pp. 39-71). Seoul, Korea: KDI.
- Jackson, H. (2007). Variation in the intensity of financial regulation: Preliminary evidence and potential implications. *Yale Journal of Regulation*, 24(2), 253-291.
- Jones, J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.
- Karjalainen, J. (2011). Audit quality and cost of debt capital for private firms: Evidence from Finland. *International Journal of Auditing*, 15(1), 88-108.
- Kedia, S., & Rajgopal, S. (2011). Do SEC's enforcement preferences affect corporate misconduct? *Journal of Accounting and Economics*, 51(3), 259-278.
- Khanna, T., & Palepu, K. G. (2000). Emerging market business groups, foreign investors, and corporate governance. In R. Morck (Ed.), *Concentrated corporate ownership* (pp. 265-294). Chicago: University of Chicago Press.
- Koh, P. S. (2007). Institutional investor type, earnings management and benchmark beaters. *Journal of Accounting and Public Policy*, 26(3), 267-299.
- Kopp, R. (1994). International human resource policies and practices in Japanese, European and United States multinationals. *Human Resource Management*, 33(4), 581-599.
- Kothari, S. P., Leone, A., & Wasley, C. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163-197.
- La Porta, R., López-de-Silanes, F., & Shleifer, A. (2006). What works in securities laws? *Journal of Finance*, 61(1), 1-33.
- La Porta, R., López-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155.
- La Porta, R., López-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1999). Corporate ownership around the world. *Journal of Finance*, 54(2), 471-517.
- La Porta, R., López-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1-2), 3-27.
- Landsman, W., Maydew, E., & Thornock, E. (2011). The information content of annual earnings announcements and mandatory adoption of IFRS. *Journal of Accounting and Economics*, 53(1-2), 34-54.
- Leuz, C. (2010). Different approaches to corporate reporting regulation: How jurisdictions differ and why. *Accounting and Business Research*, 40(3), 229-256.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505-528.
- Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting

- regulation: Evidence and suggestions for future research. *Journal of Accounting Research*, 54(2), 525-622.
- Lipsey, R. E. & Sjöholm, F. (2005). The impact of inward FDI on host countries: Why such different answers? In T. H. Moran, E. M. Graham, & M. Blömsstrom (Eds.), *Does foreign direct investment promote development?* (pp. 23-43). Washington DC: Institute for International Economics.
- Maijoor, S. J., & Vanstraelen, A. (2006). Earnings management within Europe: The effects of member state audit environment, audit firm quality and international capital markets. *Accounting and Business Research*, 36(1), 33-52.
- Man, C. K., & Wong, B. (2013). Corporate governance and earnings management: A survey of literature. *Journal of Applied Business Research*, 29(2), 1-29.
- Masulis, R., Wang, C., & Xie, F. (2012). Globalizing the boardroom - The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics*, 53(3), 527-554.
- Menon, K., & Williams, D. D. (2004). Former audit partners and abnormal accruals. *The Accounting Review*, 79(4), 1095-1118.
- Michelson, S. E., Jordan-Wagner, J., & Wootton, C. W. (1995). A market based analysis of income smoothing. *Journal of Business Finance and Accounting*, 22(8), 1179-1193.
- Michelson, S. E., Jordan-Wagner, J., & Wootton, C. W. (2000). The relationship between the smoothing of reported income and risk-adjusted returns. *Journal of Economics and Finance*, 24(2), 141-159.
- Møen, J., Schindler, D., Schjelderup, G., & Tropina, J. (2011). International debt shifting: Do multinationals shift internal or external debt? *CESifo Working Paper Series No. 3519*, available at SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1891843.
- Moses, O. D. (1987). Income smoothing and incentives: Empirical tests using accounting changes. *The Accounting Review*, 62(2), 358-377.
- Organization for European Cooperation and Development (OECD). (2014). *OECD Factbook 2014: Economic, environmental and social statistics*. Paris: OECD Publishing.
- Robinson, L. A., & Stocken, P. C. (2013). Location of decision rights within multinational firms. *Journal of Accounting Research*, 51(5), 1261-1297.
- Royal Decree 1514/2007, of 16 November, approving the Spanish National Chart of Accounts.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3), 461-488.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737-783.
- Tung, R. L. (1982). Selection and training procedures of US, European, and Japanese multinationals. *California Management Review*, 25(1), 57-71.
- Tung, R. L. (1987). Expatriate assignments: Enhancing success and minimizing failure. *Academy of Management Executive*, 1(2), 117-125.
- Van Tendeloo, B., & Vanstraelen, A. (2008). Earnings management and audit quality in Europe: Evidence from the private client segment market. *European Accounting Review*, 17(3), 447-469.
- Yeo, G., Tan, P., & Chen, S. (2002). Corporate ownership structure and the informativeness of earnings. *Journal of Business Finance and Accounting*, 29(7), 1023-1046.

Appendix 1: Institutional quality in the home country of the parent company.

This table presents the individual indexes and the aggregate measure of institutional quality (*IQ*) by home country of the parent companies. We also report the ranking of the countries based on *IQ*.

Country	Individual institutional quality measures						<i>IQ</i>	Rank
	<i>Anti-self-dealing</i>	<i>Investor protection</i>	<i>Anti-director</i>	<i>Earnings manag.</i>	<i>Block premium</i>	<i>Public enf.</i>		
United States	0.65	1.00	5	2.00	0.01	0.90	2.00	1
Australia	0.76	0.78	4	4.80	0.02	0.90	2.83	2
Canada	0.64	0.96	5	5.30	0.01	0.80	3.00	3
Hong Kong	0.96	0.85	5	19.50	0.00	0.87	3.67	4
United Kingdom	0.95	0.78	5	7.00	0.01	0.68	3.83	5
South Africa	0.81	0.60	5	5.60	0.02	0.25	5.33	6
Taiwan	0.56	0.55	3	22.50	0.00	0.52	7.50	7
France	0.38	0.47	3	13.50	0.02	0.77	7.50	8
Norway	0.42	0.44	4	5.80	0.01	0.32	8.17	9
Finland	0.46	0.47	3	12.00	0.02	0.32	8.50	10
Spain	0.37	0.55	4	18.60	0.04	0.33	9.00	11
Sweden	0.33	0.39	3	6.80	0.07	0.50	9.17	12
Japan	0.50	0.42	4	20.50	-0.04	0.00	9.33	13
Portugal	0.44	0.57	3	25.10	0.20	0.58	9.67	14
Denmark	0.46	0.36	2	16.00	0.08	0.37	9.83	15
Netherlands	0.20	0.54	2	16.50	0.02	0.47	9.83	15
South Korea	0.47	0.36	2	26.80	0.16	0.25	12.33	17
Switzerland	0.27	0.30	2	22.00	0.06	0.33	12.33	17
Italy	0.42	0.20	1	24.80	0.37	0.48	12.67	19
Germany	0.28	0.00	1	21.50	0.10	0.22	13.67	20
Austria	0.21	0.10	2	28.30	0.38	0.17	15.50	21

Appendix 2: The role of the institutional environment in the parent company's home country. Individual institutional quality measures.

This table presents the results of the estimation of model (3) in the subsamples where the observations of the foreign-controlled firms are partitioned according to the institutional quality in the parent company's home country, and taking as a reference the level of institutional quality in Spain. The sample partitions are based on each individual measure of institutional quality. Variable definitions are in Table 2. We report *t*-statistics adjusted for clustering on both firm and year. We also report the χ^2 for the difference in the coefficient of *Foreignown* of the two estimations. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Panel A: Anti-self-dealing index (Djankov et al., 2008)

Variables	DAC		WCDAC		DD	
	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
<i>Constant</i>	0.096*** [7.50]	0.099*** [3.36]	0.105*** [8.02]	0.089*** [7.38]	0.050*** [8.64]	0.051*** [6.17]
<i>Foreignown</i>	0.008*** [4.23]	0.002 [0.50]	0.008*** [4.25]	0.002 [0.64]	0.004** [2.56]	0.001 [0.60]
<i>Size</i>	-0.009*** [-9.27]	-0.008*** [-7.48]	-0.008*** [-8.39]	-0.007*** [-6.42]	-0.005*** [-6.89]	-0.004*** [-5.40]
<i>Lev</i>	0.026*** [5.74]	0.023*** [3.43]	0.024*** [5.18]	0.019*** [2.63]	0.011*** [3.16]	0.012*** [2.58]
<i> RoA </i>	-0.107*** [-3.27]	-0.155*** [-3.38]	-0.084*** [-2.82]	-0.136*** [-3.38]	0.382*** [22.31]	0.375*** [15.96]
<i> CFO </i>	0.645*** [41.87]	0.632*** [35.03]	0.607*** [37.95]	0.598*** [29.60]	0.081*** [8.90]	0.073*** [5.22]
<i>Loss</i>	0.027*** [10.90]	0.029*** [10.02]	0.022*** [10.12]	0.023*** [8.27]	0.026*** [7.22]	0.027*** [6.72]
<i>Salesgrowth</i>	0.035*** [12.09]	0.036*** [15.58]	0.031*** [12.76]	0.034*** [15.22]	0.023*** [11.23]	0.023*** [14.08]
<i>Big</i>	0.003 [1.36]	0.000 [0.09]	0.003 [1.18]	-0.001 [-0.22]	0.001 [0.37]	0.000 [0.12]
<i>NBanksA</i>	-0.010* [-1.94]	-0.005 [-0.70]	-0.010 [-1.62]	-0.005 [-0.74]	-0.011** [-2.25]	-0.007 [-1.17]
<i>ListedP</i>	0.002 [0.87]	0.001 [0.48]	0.001 [0.59]	0.001 [0.34]	0.003 [1.61]	0.001 [1.01]

Test for the difference in *Foreignown* (χ^2 HigherIQ vs LowerIQ):

	7.99***		7.59***		3.43*	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No.						
observations	17,241	13,278	17,285	13,307	14,749	11,347
R-squared	0.432	0.427	0.411	0.407	0.306	0.315
F-statistic	120.83***	90.82***	121.17***	89.96***	54.33***	41.13***

Appendix 2: The role of the institutional environment in the parent company's home country. Individual institutional quality measures (Cont'd).

Panel B: Investor protection index (La Porta et al., 2006)

Variables	DAC		WCDAC		DD	
	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
Constant	0.121*** [9.41]	0.093*** [7.07]	0.123*** [9.68]	0.090*** [7.03]	0.056*** [6.71]	0.065*** [7.74]
Foreignown	0.015*** [5.90]	0.002 [0.84]	0.016*** [6.18]	0.002 [0.85]	0.007*** [3.63]	0.001 [0.80]
Size	-0.008*** [-8.80]	-0.008*** [-8.22]	-0.008*** [-7.26]	-0.008*** [-7.62]	-0.004*** [-5.99]	-0.005*** [-6.55]
Lev	0.024*** [3.78]	0.025*** [5.25]	0.022*** [3.25]	0.022*** [4.39]	0.009** [2.36]	0.014*** [3.40]
 Roa 	-0.123*** [-2.78]	-0.134*** [-3.89]	-0.096** [-2.39]	-0.117*** [-3.99]	0.373*** [16.25]	0.382*** [21.56]
 CFO 	0.651*** [35.87]	0.626*** [40.12]	0.613*** [31.39]	0.591*** [35.74]	0.083*** [7.36]	0.072*** [5.96]
Loss	0.026*** [10.56]	0.029*** [9.37]	0.021*** [8.76]	0.024*** [8.30]	0.026*** [7.46]	0.027*** [6.71]
Salesgrowth	0.035*** [12.11]	0.036*** [13.71]	0.032*** [13.21]	0.033*** [13.48]	0.023*** [10.24]	0.023*** [14.80]
Big	0.001 [0.55]	0.001 [0.62]	0.001 [0.23]	0.001 [0.43]	-0.001 [-0.43]	0.001 [0.54]
NBanksA	-0.010* [-1.89]	-0.007 [-0.97]	-0.010 [-1.55]	-0.006 [-0.83]	-0.009* [-1.81]	-0.010* [-1.75]
ListedP	0.002 [0.80]	0.000 [0.20]	0.001 [0.28]	0.000 [0.20]	0.004** [2.46]	0.000 [0.07]

Test for the difference in Foreignown (χ^2 HigherIQ vs LowerIQ):

	31.11***		37.45***		13.74***	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No.						
observations	13,090	17,213	13,117	17,259	11,209	14,706
R-squared	0.436	0.424	0.417	0.402	0.304	0.316
F-statistic	96.34***	112.36***	96.48***	112.14***	39.45***	55.54***

Appendix 2: The role of the institutional environment in the parent company's home country. Individual institutional quality measures (Cont'd).

Panel C: Anti-director index (La Porta et al., 1998)

	DAC		WCDAC		DD	
Variables	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
Constant	0.131*** [10.61]	0.114*** [8.20]	0.096*** [7.30]	0.101*** [8.21]	0.053*** [5.79]	0.051*** [5.64]
Foreignown	0.016*** [5.77]	0.002 [1.04]	0.017*** [6.04]	0.002 [1.05]	0.007*** [3.45]	0.001 [1.00]
Size	-0.008*** [-9.00]	-0.008*** [-7.98]	-0.008*** [-7.25]	-0.008*** [-7.51]	-0.004*** [-6.06]	-0.005*** [-6.40]
Lev	0.022*** [3.45]	0.027*** [5.73]	0.020*** [2.98]	0.024*** [4.74]	0.008** [2.16]	0.015*** [3.53]
 Roa 	-0.122*** [-2.74]	-0.134*** [-4.04]	-0.094** [-2.32]	-0.118*** [-4.17]	0.370*** [16.30]	0.384*** [21.01]
 CFO 	0.649*** [36.06]	0.629*** [39.70]	0.610*** [31.02]	0.594*** [35.96]	0.081*** [7.34]	0.074*** [6.23]
Loss	0.026*** [10.70]	0.029*** [9.53]	0.021*** [9.17]	0.024*** [8.36]	0.027*** [7.72]	0.027*** [6.60]
Salesgrowth	0.035*** [12.06]	0.036*** [13.99]	0.032*** [13.04]	0.033*** [13.91]	0.023*** [10.64]	0.023*** [14.32]
Big	0.001 [0.55]	0.001 [0.64]	0.001 [0.22]	0.001 [0.44]	-0.001 [-0.47]	0.001 [0.58]
NBanksA	-0.008 [-1.37]	-0.008 [-1.28]	-0.007 [-1.09]	-0.008 [-1.21]	-0.008* [-1.74]	-0.010* [-1.79]
ListedP	0.002 [0.78]	0.000 [0.22]	0.001 [0.30]	0.000 [0.18]	0.004** [2.55]	0.000 [0.09]

Test for the difference in Foreignown (χ^2 HigherIQ vs LowerIQ):

	28.94***		34.50***		11.84***	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No.						
observations	12,842	17,461	12,869	17,507	11,005	14,910
R-squared	0.436	0.424	0.416	0.403	0.302	0.317
F-statistic	93.55***	115.30***	93.54***	115.15***	38.21***	56.74***

Appendix 2: The role of the institutional environment in the parent company's home country. Individual institutional quality measures (Cont'd).

Panel D: Earnings management score (Leuz et al., 2003)

	DAC		WCDAC		DD	
Variables	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
Constant	0.099*** [7.72]	0.100*** [5.13]	0.097*** [4.62]	0.106*** [6.54]	0.053*** [5.44]	0.060*** [6.54]
Foreignown	0.007*** [3.73]	0.003 [1.08]	0.008*** [4.17]	0.003 [0.90]	0.004*** [2.91]	-0.000 [-0.03]
Size	-0.009*** [-9.72]	-0.008*** [-7.04]	-0.008*** [-8.39]	-0.008*** [-6.30]	-0.005*** [-6.57]	-0.004*** [-5.39]
Lev	0.020*** [3.67]	0.031*** [5.48]	0.018*** [3.21]	0.027*** [4.42]	0.009** [2.43]	0.015*** [3.13]
 RoA 	-0.117*** [-2.98]	-0.138*** [-3.78]	-0.094*** [-2.71]	-0.120*** [-3.71]	0.379*** [19.83]	0.378*** [17.58]
 CFO 	0.642*** [42.53]	0.629*** [35.03]	0.606*** [37.44]	0.593*** [30.70]	0.080*** [8.69]	0.071*** [5.25]
Loss	0.029*** [11.45]	0.027*** [8.88]	0.024*** [10.26]	0.022*** [7.87]	0.027*** [7.87]	0.026*** [6.15]
Salesgrowth	0.036*** [13.58]	0.036*** [12.04]	0.032*** [13.12]	0.032*** [13.61]	0.023*** [12.48]	0.022*** [10.51]
Big	0.004 [1.42]	0.000 [0.19]	0.003 [1.33]	-0.000 [-0.14]	0.000 [0.21]	0.001 [0.45]
NBanksA	-0.007 [-1.34]	-0.009 [-1.41]	-0.007 [-1.01]	-0.009 [-1.35]	-0.010* [-1.92]	-0.009 [-1.62]
ListedP	0.003 [1.38]	-0.001 [-0.62]	0.002 [0.98]	-0.001 [-0.72]	0.003* [1.89]	0.000 [0.24]

Test for the difference in Foreignown (χ^2 HigherIQ vs LowerIQ):

	3.32*		6.39**		8.60***	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No.						
observations	16,414	13,807	16,453	13,841	14,038	11,826
R-squared	0.434	0.422	0.413	0.401	0.305	0.314
F-statistic	118.47***	89.76***	118.69***	89.19***	50.68***	42.26***

Appendix 2: The role of the institutional environment in the parent company's home country. Individual institutional quality measures (Cont'd).

Panel E: Block premium (Dyck & Zingales, 2004)

Variables	DAC		WCDAC		DD	
	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
Constant	0.091*** [6.82]	0.103*** [8.02]	0.089*** [7.02]	0.108*** [8.46]	0.052*** [5.23]	0.048*** [5.66]
Foreignown	0.008*** [4.12]	0.002 [0.66]	0.009*** [4.45]	0.002 [0.60]	0.004** [2.55]	0.001 [0.32]
Size	-0.009*** [-9.70]	-0.008*** [-7.15]	-0.008*** [-8.41]	-0.008*** [-6.37]	-0.005*** [-6.68]	-0.004*** [-5.46]
Lev	0.022*** [4.32]	0.028*** [4.36]	0.020*** [3.82]	0.024*** [3.56]	0.009** [2.45]	0.015*** [3.11]
 Roa 	-0.105*** [-2.68]	-0.150*** [-3.80]	-0.083** [-2.39]	-0.130*** [-3.74]	0.384*** [19.36]	0.374*** [18.21]
 CFO 	0.643*** [41.54]	0.628*** [34.03]	0.606*** [37.22]	0.592*** [29.83]	0.081*** [9.00]	0.072*** [5.33]
Loss	0.028*** [11.23]	0.026*** [8.84]	0.023*** [10.31]	0.022*** [7.58]	0.027*** [7.86]	0.027*** [6.02]
Salesgrowth	0.035*** [13.32]	0.037*** [12.99]	0.031*** [13.51]	0.034*** [13.82]	0.023*** [12.44]	0.023*** [11.34]
Big	0.004 [1.46]	0.001 [0.27]	0.003 [1.38]	-0.000 [-0.09]	0.000 [0.19]	0.000 [0.31]
NBanksA	-0.007 [-1.43]	-0.009 [-1.46]	-0.007 [-1.05]	-0.010 [-1.46]	-0.010* [-1.95]	-0.010* [-1.74]
ListedP	0.003 [1.42]	-0.001 [-0.57]	0.002 [0.97]	-0.001 [-0.69]	0.003** [1.97]	0.001 [0.36]

Test for the difference in Foreignown (χ^2 HigherIQ vs LowerIQ):

	7.87***		10.32***		5.31**	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No.						
observations	16,272	13,618	16,311	13,651	13,924	11,634
R-squared	0.431	0.424	0.411	0.402	0.308	0.314
F-statistic	114.95***	90.11***	115.17***	89.29***	50.42***	42.19***

Appendix 2: The role of the institutional environment in the parent company's home country. Individual institutional quality measures (Cont'd).

Panel F: Public enforcement index (La Porta et al., 2006)

Variables	DAC		WCDAC		DD	
	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local	HigherIQ vs Local	LowerIQ vs Local
Constant	0.091*** [6.95]	0.089*** [6.93]	0.106*** [7.98]	0.115*** [8.41]	0.061*** [6.55]	0.061*** [7.26]
Foreignown	0.007*** [4.03]	0.001 [0.25]	0.008*** [4.20]	0.000 [0.16]	0.004*** [2.92]	-0.000 [-0.26]
Size	-0.009*** [-9.60]	-0.008*** [-7.29]	-0.008*** [-8.70]	-0.007*** [-6.26]	-0.005*** [-7.03]	-0.004*** [-5.31]
Lev	0.023*** [4.55]	0.027*** [4.76]	0.021*** [3.97]	0.023*** [3.67]	0.011*** [2.97]	0.013*** [2.88]
 Roa 	-0.114*** [-3.02]	-0.150*** [-3.74]	-0.091*** [-2.70]	-0.132*** [-3.74]	0.379*** [20.89]	0.376*** [17.12]
 CFO 	0.641*** [41.35]	0.634*** [34.51]	0.604*** [37.51]	0.597*** [29.37]	0.079*** [8.44]	0.074*** [5.42]
Loss	0.028*** [10.74]	0.026*** [9.34]	0.023*** [9.86]	0.022*** [7.93]	0.027*** [7.43]	0.027*** [6.49]
Salesgrowth	0.036*** [13.68]	0.035*** [12.17]	0.033*** [13.58]	0.032*** [13.23]	0.023*** [12.43]	0.022*** [10.93]
Big	0.003 [1.42]	0.000 [0.06]	0.003 [1.26]	-0.000 [-0.21]	0.001 [0.34]	0.000 [0.16]
NBanksA	-0.009* [-1.77]	-0.007 [-1.00]	-0.009 [-1.49]	-0.006 [-0.86]	-0.011** [-2.08]	-0.008 [-1.47]
ListedP	0.003 [1.35]	-0.001 [-0.38]	0.002 [1.03]	-0.001 [-0.51]	0.003* [1.71]	0.001 [0.72]

Test for the difference in Foreignown (χ^2 HigherIQ vs LowerIQ):

	8.40***		11.42***		8.95***	
Year and industry effects	Yes	Yes	Yes	Yes	Yes	Yes
No. observations	17,260	13,043	17,304	13,072	14,754	11,161
R-squared	0.431	0.425	0.412	0.403	0.307	0.312
F-statistic	123.29***	85.88***	124.08***	84.68***	54.78***	39.14***

Appendix 3: Robustness tests. Firm-fixed effects estimation.

This table presents the results of the estimation of model (3) including firm-fixed effects. Variable definitions are in Table 2. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	 DAC 	 WCDAC 	 DD
Constant	0.298*** [16.82]	0.300*** [17.55]	0.210*** [15.61]
Foreignown	0.012** [2.07]	0.012** [2.03]	0.012*** [2.86]
Size	-0.025*** [-16.39]	-0.024*** [-16.52]	-0.017*** [-15.63]
Lev	0.018*** [3.53]	0.009* [1.75]	-0.008** [-2.16]
 Roa 	-0.077*** [-6.28]	-0.053*** [-4.49]	0.428*** [51.09]
 CFO 	0.618*** [94.10]	0.582*** [91.17]	0.060*** [13.56]
Loss	0.015*** [7.10]	0.011*** [5.19]	0.019*** [13.31]
Salesgrowth	0.035*** [40.60]	0.032*** [37.77]	0.021*** [34.22]
Big	-0.002 [-0.64]	-0.002 [-0.64]	-0.002 [-0.59]
NBanksA	-0.048*** [-7.16]	-0.047*** [-7.23]	-0.035*** [-6.08]
ListedP	-0.006 [-1.53]	-0.007* [-1.77]	0.000 [0.13]
Year effects	Yes	Yes	Yes
Firm fixed-effects	Yes	Yes	Yes
No. observations	20,907	20,959	17,853
R-squared	0.392	0.375	0.254
F-statistic	466.48***	434.89***	215.05***
Number of groups	2,053	2,055	2,006

Appendix 4: Robustness tests. Coarsened Exact Matching.

This table presents the results of the estimation of model (3) in the sample where foreign group subsidiaries are matched by size, industry and year with local group subsidiaries. Variable definitions are in Table 2. We report *t*-statistics adjusted for clustering on both firm and year. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	DAC	WCDAC	DD
Constant	0.081*** [6.15]	0.094*** [8.17]	0.058*** [5.42]
Foreignown	0.005*** [2.86]	0.006*** [3.16]	0.003** [2.32]
Size	-0.008*** [-7.90]	-0.007*** [-7.82]	-0.005*** [-5.37]
Lev	0.025*** [4.93]	0.022*** [4.20]	0.013*** [3.97]
 RoA 	-0.106*** [-3.35]	-0.084*** [-2.99]	0.398*** [26.74]
 CFO 	0.628*** [41.31]	0.590*** [36.32]	0.070*** [8.21]
Loss	0.029*** [11.53]	0.024*** [10.46]	0.027*** [8.17]
Salesgrowth	0.037*** [13.13]	0.033*** [13.28]	0.023*** [11.14]
Big	0.003 [1.21]	0.002 [0.83]	0.000 [0.30]
NBanksA	-0.012 [-1.14]	-0.010 [-0.98]	-0.018** [-2.04]
ListedP	0.002 [1.10]	0.002 [0.85]	0.001 [0.53]
Year and industry effects	Yes	Yes	Yes
No. observations	19,443	19,489	16,639
R-squared	0.426	0.403	0.317
F-statistic	133.09***	131.79***	69.13***

Appendix 5: Robustness tests. Alternative discretionary accruals measures.

This table presents the results of the estimation of model (3) with alternative discretionary accruals measures. $|DACk|$ and $|WCDACK|$ are $|DAC|$ and $|WCDAC|$ respectively adjusted for performance (Kothari et al. 2005); $|DACbs|$ and $|WCDACbs|$ are $|DAC|$ and $|WCDAC|$ respectively adjusted for timely loss and gain recognition (Ball & Shivakumar, 2006); and $|DACfw|$ is discretionary accruals based on Francis and Wang (2008). The other variable definitions are in Table 2. We report t -statistics adjusted for clustering on both firm and year. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	$ DACk $	$ WCDACK $	$ DACbs $	$ WCDACbs $	$ DACfw $
Constant	0.067*** [7.25]	0.087*** [8.73]	0.098*** [8.57]	0.089*** [8.64]	0.142*** [6.49]
Foreignown	0.006*** [4.02]	0.004** [2.24]	0.004** [2.23]	0.004** [2.04]	0.011*** [4.87]
Size	-0.007*** [-7.47]	-0.007*** [-8.31]	-0.007*** [-8.13]	-0.008*** [-8.35]	-0.011*** [-5.82]
Lev	0.032*** [6.91]	0.021*** [4.94]	0.019*** [5.44]	0.021*** [5.31]	0.048*** [7.54]
Roa	-0.180*** [-7.29]	-0.118*** [-4.76]	-0.182*** [-7.43]	-0.173*** [-7.39]	0.052** [2.29]
CFO	0.679*** [43.28]	0.617*** [40.56]	0.647*** [45.48]	0.672*** [42.73]	0.208*** [10.07]
Loss	0.034*** [15.51]	0.024*** [10.80]	0.024*** [12.49]	0.025*** [11.29]	0.030*** [6.98]
Salesgrowth	0.030*** [15.24]	0.032*** [14.77]	0.025*** [13.66]	0.035*** [15.61]	0.118*** [32.89]
Big	0.003 [1.53]	0.002 [1.02]	0.003 [1.46]	0.001 [0.66]	0.011*** [2.94]
NBanksA	-0.013** [-2.34]	-0.009 [-1.46]	-0.004 [-0.73]	-0.008 [-1.21]	-0.020* [-1.68]
ListedP	0.002 [0.95]	0.004** [1.97]	0.003 [1.54]	0.004** [2.00]	0.003 [0.93]
Year and industry effects	Yes	Yes	Yes	Yes	Yes
No. observations	20,936	20,936	20,907	20,959	19,613
R-squared	0.481	0.427	0.474	0.463	0.305
F-statistic	215.10***	162.84***	209.93***	169.29***	52.95***

Appendix 6: Robustness tests. Extended baseline model.

This table presents the results of the estimation of model (3) extended with three additional controls: *DevCFO5yr*, defined as the rolling 5-year standard deviation of cash flow from operations from year t to $t - 4$; *DevSales5yr*, which is the rolling 5-year standard deviation of sales going from t to $t - 4$; and the corresponding discretionary accruals measure in $t - 1$ (*Lag_*/*DAC*/, *Lag_*/*WCDAC*/, or *Lag_*/*DD*/). The other variable definitions are in Table 2. We report t -statistics adjusted for clustering on both firm and year. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	<i>DAC</i>	<i>WCDAC</i>	<i>DD</i>
Constant	0.065*** [4.25]	0.048*** [3.65]	0.029*** [2.71]
Foreignown	0.004** [2.00]	0.005** [2.00]	0.003*** [3.58]
Lag_ / <i>DAC</i> /	0.083*** [6.23]		
Lag_ / <i>WCDAC</i> /		0.096*** [7.40]	
Lag_ / <i>DD</i> /			0.166*** [7.78]
Size	-0.005*** [-5.74]	-0.005*** [-5.86]	-0.003*** [-3.89]
Lev	0.012** [2.43]	0.008* [1.68]	0.007*** [2.68]
 Roa 	-0.153*** [-4.34]	-0.133*** [-4.15]	0.353*** [17.14]
 CFO 	0.564*** [29.38]	0.519*** [26.06]	0.048*** [4.13]
Loss	0.023*** [7.04]	0.017*** [6.48]	0.022*** [5.85]
Salesgrowth	0.037*** [10.24]	0.034*** [11.17]	0.021*** [8.50]
DevCFO5yr	0.116*** [6.82]	0.126*** [7.22]	0.035*** [4.54]
DevSales5yr	-0.000 [-0.02]	0.002 [0.84]	-0.000 [-0.17]
Big	0.001 [0.27]	-0.000 [-0.15]	-0.001 [-1.16]
NBanksA	-0.005 [-0.32]	-0.006 [-0.40]	-0.014* [-1.81]
ListedP	0.001 [0.27]	0.000 [0.02]	-0.000 [-0.27]
Year and industry effects	Yes	Yes	Yes
No. observations	13,767	13,801	12,110
R-squared	0.433	0.413	0.339
F-statistic	97.80***	93.82***	47.89***

***Paper 3. Foreign ownership and the
auditor's opinion: An analysis in
private subsidiaries***

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1. Introduction

Extant evidence on the relation of foreign shareholding with the financial reporting quality of private companies is limited. In the second paper of this thesis we find that earnings management, as measured by discretionary accruals (DAC), is more prevalent in private Spanish subsidiaries when the parent company is foreign. This result is consistent with the only other study analysing the earnings management practices at the subsidiary level (Beuselinck, Cascino, Deloof, & Vanstraelen, 2017).

In this paper, we analyze financial reporting quality of private subsidiaries from the auditor's perspective. In particular, we address the research question of whether the type of controlling shareholder, local or foreign, relates to the probability of receiving a modified audit opinion (MAO), which is a direct proxy of the company's financial reporting quality, the output of the audit process.

Two main arguments derived from prior research lead to predict a higher incidence of MAOs in foreign group subsidiaries than in locally-owned ones. On the one hand, MAOs are associated with poor financial reporting quality (Chen, He, Ma, & Stice, 2016; Karjalainen, 2011). Some studies claim that, because DAC indicate earnings manipulation, higher DAC should be associated with the probability of receiving MAOs (e.g.: Bartov, Gul, & Tsui, 2001). If this is the case, given the results of the second paper in this thesis, foreign shareholding would be expected to be positive to the probability of receiving an MAO. On the other hand, the debt contracting related incentives to avoid the documented negative consequences of MAOs (e.g.: Karjalainen, 2011) are likely lower for subsidiaries of foreign groups because of their lower dependence on external financing in the host-country, since they are often financed through loans from the parent company or other subsidiaries (Nguyen, 2013; Nguyen & Rugman, 2015).

Nevertheless, we argue that the two arguments mentioned above could be refined if we look at the underlying reasons giving rise to MAOs. Firstly, because, if any, not all MAOs indicate earnings management practices. For example, uncertainty related MAOs do not imply *per se* poor financial reporting quality; or, although an MAO issued because the company fails to disclose any required information in the notes is indicative of poor reporting quality, this dimension of financial reporting quality could be orthogonal to that of earnings management done through accruals manipulation. And secondly, because the cost-benefit relation of avoiding an MAO likely differs by types of reasons for MAOs. Thus, it is possible that the expected differences in the incentives to avoid MAOs between foreign and local group subsidiaries in turn depend on the type of underlying reason for MAOs.

Therefore, we investigate our relation of interest considering different types of reasons for issuing MAOs. Depending on their underlying reasons, we classify MAOs into three main categories: (1) related to infringements of recognition and measurement standards (thereafter, GAAP violations); (2) related to lack of transparency (thereafter, opacity); and (3) related to uncertainties, including going concern uncertainties (GCU) among others. Only MAOs for reasons (1) and (2) could be considered the result of the auditor's assessment of the company's reporting quality, and in turn from different perspectives. Nevertheless, for the sake of completeness, we also explore whether foreign shareholding relates to the likelihood of receiving MAOs for uncertainty reasons.

We investigate the relations of interest in a unique sample of 2,081 private Spanish subsidiaries over the period 1997-2013. Therefore, the regulatory environment and the accounting and auditing standards are held constant at the subsidiary level. Private companies are the main FDI recipients in Spain, like in other European countries (ECB, 2013: 66). In addition, Spain is one of the main FDI receivers worldwide, with important

annual growth rates of FDI inflows since its adhesion to the European Economic Community (EEC) in the 80s; in 2016, it is the 14th country in the world and the 7th in the European Union (EU) as per FDI inflows, and surpasses countries like Italy, Austria or Sweden in the magnitude of the FDI stock (see CIA, 2016).

Our results indicate that foreign controlling shareholders are associated with a higher likelihood of receiving MAOs in general. Moreover, as expected, we find that the relation between foreign shareholding and the frequency of MAOs differs depending on the underlying reasons for receiving a modified report. Specifically, the probability of having a GAAP violation related MAO is similar in foreign and local group subsidiaries, despite that earnings management, as measured by discretionary accruals, is more prevalent in foreign group subsidiaries. Jointly with the results of the second paper of this thesis, this result suggests that GAAP violations and discretionary accruals capture different dimensions of financial reporting quality, which is consistent with prior literature documenting that discretionary accruals detect within GAAP earnings manipulation (DeFond & Zhang, 2014; Healy, 1985), which auditors are not required to report.

We also find that the opacity related MAOs (i.e., for omitted information and/or scope limitations) are significantly more likely in subsidiaries of foreign groups than in subsidiaries of local groups. In order to explain why the higher incidence of opacity related MAOs in foreign group subsidiaries, while the frequency of GAAP violation related MAOs is similar in the two groups, the potential costs and benefits associated to avoiding each type of MAO should be considered. It could be the case: (1) that avoiding opacity related MAOs is costlier than avoiding GAAP violation related MAOs. For example, preparing the additional information to be disclosed in the notes might be costlier than changing the accounting policies; and/or (2) that avoiding opacity related

MAOs is less beneficial than avoiding GAAP violation related MAOs. For example, GAAP violations related MAOs could increase the visibility (and political costs) of the company or raise more doubts about the usefulness of financial statements for decision-making, so that foreign-owned companies might choose to avoid MAOs for GAAP violations over opacity related MAOs.

Finally, as regards the MAOs for uncertainties, it should be noticed that these are not related to the auditor's assessment of the company's financial reporting quality. Moreover, assuming auditor's independence, it is unlikely that the client could avoid an MAO for uncertainties. The incidence of these MAOs basically depends on whether the circumstances that underlie them occur. Our results reveal that there is no significant difference in the frequency of GCUs between subsidiaries of foreign and local groups, although the results of the differences-in-differences analysis show a lower incidence of GCUs in foreign group subsidiaries. This is not surprising because GCUs just reflect the auditor's doubts about the company being able to continue its operations, and the results of the first paper in this thesis suggest that foreign group subsidiaries have an advantage in terms of sales turnover with regard to locally-owned companies which has been associated with company survivorship (Parker, Peters, & Turetsky, 2002). In addition, foreign group subsidiaries rely more on intra-group loans than locally-owned companies (Nguyen, 2013; Nguyen & Rugman, 2015; Wang & Wang, 2015) and the dependence on group financing has been associated with a lower bankruptcy probability (Gopalan, Nanda, & Seru, 2007). The results are different when we look at the uncertainties other than GCUs (non-GCUs), which are significantly more likely to be mentioned in reports issued to foreign-owned companies. Most uncertainties in this category relate to tax inspections and litigations, and their higher incidence in foreign-owned companies might be just reflecting the unfamiliarity of foreign investors with the local regulations.

This research makes several contributions to the existing literature. First, it relates to the literature concerned with the determinants of reporting quality in the still scarcely explored setting of private companies (Ball & Shivakumar, 2005; Burgstahler, Hail, & Leuz, 2006; Hope, Thomas, & Vyas, 2011 & 2013). Second, by looking at the specific reasons giving rise to MAOs, we contribute to a better understanding of the auditor's assessment of the company's financial reporting quality, and therefore to the literature that relates MAOs with other proxies of financial reporting quality (e.g.: Bartov et al., 2001; Francis & Krishnan, 1999). To our knowledge, no prior study has investigated the circumstances leading to a modification to the auditor's opinion down to the last detail. Third, we complement the research concerned with financial reporting in multinational groups (Beuselinck et al., 2017; Durnev, Li, & Magnan, 2017; Dyreng, Hanlon, & Maydew, 2012). Our measures of financial reporting quality are based on the auditor's opinion, whereas prior studies have primarily focused on accrual-based earnings management. This in turn allows adding to the research concerned with corporate transparency (Bhattacharya, Daouk, & Welker, 2003; Bushman, Piotroski, & Smith, 2004), since we document that the higher incidence of modified reports in companies owned by foreign groups is particularly related to their lower transparency. Therefore, in privately held companies foreign investors are not associated with increased corporate transparency as documented in public companies (e.g.: Jiang & Kim, 2004; Kang & Stulz, 1997). Overall, this study contributes to a better understanding of the effects of FDI in the host-country at the company level. As far as accounting quality is concerned, foreign control does not have a positive effect in the context of private companies, but fosters firm opacity.

2. Institutional background: Audit regulation in Spain

2.1. Historical review

Since the adhesion of Spain to the EU in 1986, its audit regulation runs parallel to that of the EU. Figure 1 shows a chronology of the milestones in the evolution of the audit regulation in the EU and Spain.

The first milestone is represented by the Eighth Directive (EC, 1984) which addressed the qualification requirements (i.e., education and experience) for the professionals undertaking audit services. Although the main objective of the Eighth Directive was the creation of a single market for audit services, it failed to reduce the differences in national legislations and auditing practices due to its lack of precision (Dewing & Russell, 2004; Soltani, 2007).¹

Spain implemented the Eighth Directive two years after joining the EU by promulgating the Law 19/1988. This law marked the beginning of the audit regulation in Spain and made audits compulsory for medium and large companies. Prior to 1988, audit was mandatory only for a few companies, such as those owned by the State or operating in regulated industries.

The financial scandals that occurred in the late 1990s and early 2000s, like Enron and WorldCom in the US or Parmalat and Ahold in Europe,² raised concerns about auditor independence and audit quality, and prompted regulatory authorities to introduce

¹ In particular, the Eighth Directive covered auditor independence to a very limited extent (Evans & Nobes, 1998), made no specific reference to the auditors' responsibilities, nor did it establish the circumstances under which auditors could be held liable for audit failures. All these issues were left to be determined by each member state. Another issue not properly addressed in the Eighth Directive was the auditors' oversight (Nobes & Parker, 2008).

² Spain also experienced a number of major financial scandals, one of the most notorious being the case of Banco Español de Crédito – Banesto, which led regulators to impose fines on the big international audit firms. For instance, PriceWaterhouse was fined Pta127 million (approximately 765,000 Euros, which represented 3 percent of its annual audit fee) for the inadequate audit of Banesto's 1992 financial statements (García-Benau, Ruiz-Barbadillo, Humphrey, & Al Husaini, 1999).

substantial changes in the audit regulation. In the US, the Sarbanes-Oxley Act (SOX) was enacted in 2002, while the European Commission (EC) issued several recommendations concerning statutory audits, which Spain incorporated in the Law 44/2002.³ A few years later, the EU amended the Eighth Directive with the enactment of the Directive 2006/43/EC (EC, 2006). The 2006 Directive required the establishment of oversight bodies in each member state and the applicability of international auditing standards endorsed by the EC. It introduced a new concept of public interest entities (PIEs) to identify companies that have a higher visibility and are economically more important, and established stricter requirements for their statutory audits.⁴

Although the member states had to adapt their local audit legislations to the Directive 2006/43/EC by June 2008, Spain reformed its audit law in July 2010 (Law 12/2010), amending the Law 19/1988. The main changes introduced by the Law 12/2010 were related to the auditor's report (see section 2.2. for further details) and the limitations to provide non-audit services to audit clients.

In the aftermath of the financial crisis, the EU started a new reform of its audit market with the release of the Green Paper entitled *Audit policy: Lessons from the crisis* (EC, 2010). Following the consultation period, which received almost 700 responses, in November 2011 the EC issued a set of legislative proposals and subjected them to debate. The outcome of this debate, which took nearly three years, was the Directive 2014/56/EU (EC, 2014a), which amended the 2006 Directive, and the Regulation 537/2014 (EC, 2014b). The new Directive establishes the framework for all statutory audits, strengthens

³ In particular, the Law 44/2002 incorporated the Commission Recommendations 2001/256/EC (EC, 2001) and 2002/590/EC (EC, 2002).

⁴ According to the Directive 2006/43/EC, public interest entities (PIEs) are: (1) entities governed by the law of a member state and listed on a regulated market in the EU; (2) credit institutions in the EU (irrespective of whether they are listed or not); (3) insurance undertakings in the EU (regardless of whether they are listed or not and regardless of whether they are life, non-life, insurance or reinsurance undertakings); (4) entities designated by member states as PIEs (for instance, entities of significant public relevance due to the nature of their business, size, or number of employees).

public oversight of the audit profession, and promotes cooperation between competent authorities in the EU,⁵ while the Regulation 537 specifies additional requirements that relate to the statutory audits of PIEs. Similar to the 2006 Directive, these rules aim to reinforce the auditor's independence, which would restore the investors' trust in the financial information and foster cross-border investment and economic growth in the EU.

The last amendment of the Spanish audit regulation is the Law 22/2015 incorporating the provisions of Directive 2014/56/EU and Regulation 537/2014. In particular, this law introduces more restrictive requirements with regard to the auditor's incompatibilities and the limitation to audit a company's accounts when the auditor is financially dependent on the entity. This last reform of the audit regulation, however, does not affect our results, since our sample period ends in 2013.

In Spain, audit has been mandatory for medium and large companies ever since 1988. However, the size requirements that make audit compulsory varied in time. Currently, companies are exempt from mandatory audit when they meet the EU criteria referring to small companies (EC, 2013). In particular, small companies are those that fulfill two out of the following requirements during two consecutive years: total assets less than 4,000 thousand Euros; net sales revenue less than 8,000 thousand Euros; and average number of employees lower than 50.⁶ Irrespective of the company's size, audit is mandatory also for listed companies, companies issuing bonds, those dedicated to financial intermediation or receiving subsidies, and companies providing services or

⁵ A new oversight body was established in 2016, a Committee of European Auditing Oversight Bodies (CEAOB) replacing the existing European Group of Auditor Oversight Bodies (EGAOB), to improve cooperation between the national oversight bodies in the EU that still remain responsible for supervision at a member state level.

⁶ In the EU member states are allowed to increase the thresholds referring to small companies up to 6,000 thousand Euros for the assets and 12,000 thousand Euros for the net turnover. The UK, Germany and the Netherlands are some of the countries that have relaxed these size thresholds up to the maximum permitted, allowing more private companies to qualify for the audit exemption. At the other end of the spectrum, countries like Finland, Norway, and Sweden grant exemption only for micro-companies.

Figure 1: Historical view of audit regulation in the EU and Spain.

selling goods to the State and/or public entities. Additionally, a shareholder or group of shareholders representing at least 5 percent of the voting rights may request the audit of the company's accounts.

2.2. The audit report

Structure

The content and the format of the audit report have changed over the years. During the sample period analyzed there are basically two formats, presented in Figure 2. According to the Technical Auditing Standards (TAS) approved by the Institute of Accounting and Auditing in 1991 (ICAC, 1991), the audit report should include, at least, the following elements: a title; the addressee/s; the name of the company whose financial statements are audited; the scope paragraph identifying the financial statements audited and making reference to the auditing standards applied during the audit; an opinion paragraph; a paragraph regarding the management report; the auditor's name and address; the auditor's signature; and the date of the report. If the audit opinion is modified (i.e., not clean), the auditor should describe the reasons giving rise to the modification in a basis for modification paragraph which is placed before the opinion paragraph. When financial statements incorporate comparative information from the previous period, the auditor has to include an intermediate paragraph stating that his/her opinion refers to the current period only. Additionally, the audit report might include an emphasis-of-matter paragraph that is situated before the basis for modification paragraph (in case of modified reports) or the opinion paragraph (in case of clean reports) in which the auditor draws the users' attention to some situations disclosed in the financial statements. This additional paragraph is not a modification to the auditor's opinion, but an additional communication.

In 2010, the TAS were modified in response to the Law 12/2010 (ICAC, 2010). Some of the changes incorporated were related to the content and format of the audit

Figure 2: Comparison of the structure of the audit report.

1991 TAS	2010 TAS
	Title
	Addressee/s
	Name of the auditee
	Scope paragraph
Comparative information paragraph	
Emphasis-of-matter paragraph/s	
Basis for modification paragraph/s	Basis for modification paragraph/s
Opinion paragraph	Opinion paragraph
	Emphasis-of-matter paragraph/s
	Other-matter paragraph/s
	Paragraph regarding the management report
	Auditor's name and address
	Auditor's signature
	Date of the report

report, however they did not affect its basic elements. The structure of the audit report was modified as follows: the comparative information paragraph is no longer required; the emphasis-of-matter paragraph is placed after the opinion paragraph; and one or several additional paragraphs (called other-matter paragraphs) may be included to describe other relevant matters than those disclosed in the financial statements. Similar to the emphasis-of-matter paragraph, the other-matter paragraphs are not modifications to the auditor's opinion.

The auditor's opinion

The auditor issues: (1) a qualified opinion when they find any aspect which does not comply with GAAP; (2) an adverse opinion, when they consider that the financial statements are materially misstated or false and, taken as a whole, not in line with GAAP; (3) a disclaimer of opinion, when they are unable to perform their work and cannot issue an opinion on the financial statements; and (4) a clean opinion, otherwise (see Appendix

1 for examples of each type of opinion paragraphs). Thus, an MAO is any opinion that is not clean (i.e., qualified, adverse, or disclaimer of opinion).

According to the 1991 TAS, the main reasons that determine the issuance of a modified audit report are the following:

(a) Misstatements

A misstatement is an infringement of an accounting principle or recognition and measurement rule (i.e., GAAP violation) and/or an omission of information. If the misstatement relates to specific amounts in the financial statements, the auditor should describe and quantify its effects in the basis for modification paragraph. Otherwise, the report should state that the effects are not determinable. As for the omitted information, the auditor should describe the nature of the information not disclosed in the financial statements. Some examples of misstatements related to GAAP violations are the use of tax depreciation rates when calculating the depreciation of fixed assets instead of its useful life, or the reporting of inventories at acquisition cost when it exceeds the net realizable value. Sometimes, financial statements do not disclose relevant information. For instance, some income statement or balance sheet items are not broken down into more specific categories, the gain or loss of discontinued operations is not separately presented in the income statement, or additional information is missing from the notes to the financial statements (e.g.: disclosures related to capital and operating leases, or concerning transactions and outstanding balances with related parties).

(b) Limitations on the scope of the audit

Limitations on the scope of the audit reflect the auditor's inability to obtain sufficient audit evidence due to a restriction imposed by the client (e.g.: keeping the auditor from obtaining confirmations from clients, suppliers, banks etc.), or by

circumstances beyond the client's control (e.g.: loss of financial data due to system breakdown) or related to the nature or timing of the audit procedures (e.g.: the physical inventory has been conducted before the appointment of the auditor). The situation when the auditor is unable to perform a certain procedure but can obtain sufficient audit evidence by applying alternative procedures is not considered a scope limitation. If this is not the case, the audit report has to describe the reasons that prevented the auditor from performing the corresponding procedures.

(c) Uncertainties (including GCUs)

Uncertainties refer to those circumstances when the auditor is unable to form an opinion on the outcome of future events. In these situations, the company's management is required to estimate the effect of future events on the financial statements in accordance with the applicable GAAP or to determine that it is impossible to make a reasonable estimate. The auditor is responsible only for the assessment of whether the audit evidence is sufficient to support the management's estimates, and not for the estimates *per se*. Litigations, tax contingencies, and doubts about the entity's ability to continue as a going concern are some examples of situations whose final outcome cannot be estimated and are, therefore, uncertainties.

(d) Lack of uniformity

The lack of uniformity indicates the violation of the uniformity principle, which aims to ensure that the comparability of the financial statements over time is not significantly affected by changes in the application of accounting principles and standards. Thus, the lack of uniformity indicates that financial statements are not comparable over time. Unlike the other reasons for modification which are mentioned in the basis for modification paragraph, the auditor makes reference to the uniformity principle in the opinion paragraph.

Figure 3: Type of MAOs depending on the reasons for modification.

Type of reasons for modification	Importance	Type of MAOs	
		1991 TAS	2010 TAS
<i>Misstatements</i>	Material but not pervasive	Qualified	Qualified
	Material and pervasive	Adverse	Adverse
<i>Scope limitation</i>	Material but not pervasive	Qualified	Qualified
	Material and pervasive	Disclaimer	Disclaimer
<i>Uncertainties</i>	Significant	Qualified	N/A
	Very significant	Disclaimer	Disclaimer
<i>Lack of uniformity</i>		Qualified	N/A

Apart from the structure of the audit report, the changes incorporated by the 2010 TAS also affected the reasons for modification. Figure 3 illustrates the type of MAOs that each reason for modification may give rise to under the 1991 and 2010 TAS. Appendix 2 includes examples of basis for modification paragraphs for each type of MAO and underlying reason. When misstatements and scope limitations have a material effect (i.e., they can influence the decisions of the financial statements' users causing them to reach wrong conclusions), they result in MAOs. But whether or not they are pervasive to the financial statements (i.e., their effects are not confined to specific elements, accounts, or items of the financial statements, and even if they are confined, they represent or could represent a substantial proportion of the financial statements - IAASB, 2015) is what determines the type of MAO (qualified or adverse opinion). According to the 1991 TAS, uncertainties can result in a qualified or disclaimer of opinion based on their significance, while the lack of uniformity gives rise to a qualified report. After 2010 the uncertainties and the lack of uniformity are no longer reasons for issuing qualified audit opinions: the uncertainties are described in an emphasis-of-matter

paragraph and the uniformity requirement disappears. However, very significant uncertainties remain one of the reasons for disclaiming an opinion.

3. Related literature

3.1. The importance of auditing in private companies

Although the usefulness of the accounting information is likely lower in private companies than in listed companies (Burgstahler et al., 2006), in the private setting there is also demand for good quality accounting information, and thus for external audits. This demand arises mainly from the needs of debt contracting. Bank loan officers consider that audited financial statements are more credible than non-audited financial statements (McKinley, Pany, & Reckers, 1985) and that audit reports are a primary financial information source (Guiral-Contreras, Gonzalo-Angulo, & Rodgers, 2007). Additionally, auditing fosters accounting accuracy since audited accounts are approximately half as likely as unaudited accounts to contain errors (Clatworthy & Peel, 2013). Consequently, it is not surprising that lenders often require private companies to undergo audits (Collis, 2012; Collis, Jarvis, & Skerratt, 2004; Dedman, Kausar, & Lennox, 2014; Senkow, Rennie, Rennie, & Wong, 2001), and are less likely to deny credit to companies with audited financial statements (Allee & Yohn, 2009; Hope et al., 2011). This implies that external audits make financial information more useful for pricing debt (Minnis, 2011), and audited companies are perceived as less risky, which should result into lower interest rates (Lennox & Pittman, 2011).

Research conducted in the US (Blackwell, Noland, & Winters, 1998; Minnis, 2011), Korea (Kim, Simunic, Stein, & Yi, 2011), the UK (Dedman & Kausar, 2012; Lennox & Pittman, 2011), as well as some international-based research (Hope et al., 2011), associates voluntary audits with a reduction in the cost of debt financing in the private setting. In contrast, Allee and Yohn (2009) and Cassar (2011) in the US, and

Huguet and Gandía (2014) in Spain, find no significant association between voluntary audits and the cost of debt. However, Huguet and Gandía (2014) observe that there is a penalty, in terms of higher interest costs, for companies that do not comply with the mandatory audit requirement.

3.2. *The audit opinion and financial reporting quality*

Clean audit reports increase the credibility of the accounting information because of the assurance that the financial statements faithfully represent the financial position and the results of the company's operations. In turn, MAOs are *prima-facie* evidence of poor financial reporting quality (Chen, He, et al., 2016; Karjalainen, 2011) and have negative consequences for the company (Chen, Su, & Zhao, 2000).

Given that the role of the auditor is to detect and report any situation that may distort a company's financial position and the results of its operations, some studies have investigated the association between earnings management, as measured by discretionary accruals, and the likelihood of receiving an MAO. Prior research, mostly conducted in the US, obtains mixed evidence. A number of studies provide evidence supporting the positive association between accruals and MAOs. Francis and Krishnan (1999) show that auditors are more likely to issue MAOs to companies with high level of total accruals, and that this is only the case of Big audit firms. In the same line, Bartov et al. (2001) find a positive relation between the absolute value of discretionary accruals and the likelihood of receiving an MAO, but only for two of the seven discretionary accruals models tested.

In contrast, Bradshaw, Richardson, and Sloan (2001) fail to find evidence that the incidence of MAOs is higher in companies with high accruals and conclude that auditors do not alert investors to the subsequent problems associated with high levels of accruals (i.e., future earnings declines and GAAP violations) because such issues are beyond the scope of the audit. Butler, Leone, and Willenborg (2004) posit that companies receiving

MAOs do not manage earnings more than companies with clean audit reports. They find a negative relation between MAOs and signed discretionary accruals which they argue is driven by companies with GCUs that have large negative discretionary accruals which are likely due to severe financial distress. Herbohn and Rangunathan (2008) and Tsipouridou and Spathis (2014) use Australian and Greek data respectively and obtain evidence consistent with Butler et al. (2004), concluding that MAOs do not highlight earnings management practices.

In the Spanish setting, Arnedo, Lizarraga, and Sánchez (2008) use a sample of pre-bankrupt companies and confirm the results of Butler et al. (2004) but they claim that the negative relation between discretionary accruals and GCUs is a consequence of auditor conservatism rather than a result of the company's distressed status and tactics for survival. However, they find a positive association between discretionary accruals and MAOs for reasons other than GCUs.

Overall, the results in this stream of research suggest that, although MAOs could in some cases be indicative of earnings management, it is not necessarily the rule. MAOs related to GAAP violations are the most likely to reflect earnings management. However, it is entirely possible that MAOs do not capture earnings management, since earnings management practices are frequently within GAAP while auditors must report GAAP violations. Additionally, MAOs likely capture other dimensions of the company's financial reporting quality, which earnings management proxies, like DAC, do not capture at all. Therefore, analysing MAOs, and in particular the different reasons for MAOs, offers a more detailed picture of the companies' financial reporting quality.

3.3. The consequences of MAOs

Modified audit reports have negative consequences because they draw attention from regulators, investors, lenders, and the media, which is likely to result in increased political and economic costs (Chen, Chen, & Su, 2001; Chen, Peng, Xue, Yang, & Ye, 2016c). Extant literature investigating the effects of MAOs has mainly focused on listed companies. On the one hand, there is research documenting that MAOs are viewed by the market as bad news about the company, and this is why MAOs are associated with negative stock price reactions (Chen et al., 2000; Choi & Jeter, 1992; Dopuch, Holthausen, & Leftwich, 1986). On the other hand, MAOs are relevant to debt contracting since they influence the access to credit and the credit terms. Firth (1980) use a questionnaire approach and obtain evidence that the bankers' and credit analysts' decisions are affected by MAOs. In the same vein, Bamber and Stratton (1997) conduct an experiment and observe that bank loan officers find MAOs informative since they influence their risk assessment, loan interest premium, and decision to grant or deny a loan. In Spain, there is also experimental evidence that the audit report is useful in loan rating decisions (Guiral-Contreras et al., 2007; Guiral, Ruiz, & Choi, 2014). Recently, Chen, He, et al. (2016) use a large sample of listed Chinese companies and observe that loans granted to companies after receiving an MAO are associated with higher cost of debt and likelihood of requiring collateral, smaller loan size, and shorter maturity.

Although research is scant, there is also evidence that MAOs have adverse effects in the private setting. Clearly, in private companies, MAOs mainly affect the debt terms. In this regard, Karjalainen (2011) provides evidence that companies with MAOs pay higher interest rates than those with clean audit reports.

Because of their negative effects, companies have incentives to avoid MAOs. However, there are settings where avoiding MAOs is costlier than receiving them. For

example, Chen et al. (2001) examine a sample of listed Chinese companies during the period 1995-1997 and posit that MAOs were preferred to reporting losses because market regulation required the shares of loss-making companies to be suspended or delisted. The authors argue that the Chinese market regulation in force during their sample period made no reference to audit opinions as opposed to that in the US, where the Securities and Exchange Commission (SEC) banned listed companies from filing financial statements with MAOs for GAAP violations. Thus, the Chinese regulatory environment induced earnings management since meeting profitability targets in order to avoid the suspension or delisting of shares was more important than having an MAO. However, China has undergone significant reforms in the last decades, market regulation included. Indeed, a recent study by Chen et al. (2016c) points out that managers have great incentives to avoid MAOs because modified reports bring about significant regulatory costs for the companies receiving them, since companies are required to explain in their annual reports the reasons for MAOs, they are not allowed to conduct seasoned equity offerings until resolving the reasons giving rise to MAOs, and their shares might even be delisted.

The potential negative consequences of receiving MAOs are also limited when companies are able to obtain financing from sources other than the market or banks. This is the case of state-owned companies which can be subsidized by the government when they face financial distress (Faccio, 2006). Consistent evidence is obtained by Chen, Chen, Lobo, and Wang (2011) who document that the effects of auditor size on earnings management and cost of equity capital are more pronounced for non-state-owned companies than for state-owned enterprises, and they conclude that this is because the former rely more on the capital market for external financing. Similarly, Chen, Ding, Hou, and Johan (2016) argue that state-owned enterprises receive preferential treatment from the government and have better access to low cost capital from state-owned banks.

Therefore, they have lower incentives than non-state-owned companies to increase the quality of financial information, and thus to avoid MAOs.

4. Hypotheses development

4.1. Foreign ownership and MAOs

There are two main arguments that lead to predict that the probability of receiving a modified audit report is higher for foreign-owned subsidiaries than for their locally-owned counterparts. On the one hand, MAOs are seen as an indicator of poor financial reporting quality (Chen, He, et al., 2016), since auditors are independent professionals who assess the company's financial reporting quality. In the second paper of this thesis we find that in the setting analyzed, namely private Spanish subsidiaries, foreign shareholders are associated with low financial reporting quality, *proxied* with earnings management practices through accrual manipulation. Therefore, to the extent that MAOs capture earnings management we should observe a higher frequency of MAOs in foreign group than in local group subsidiaries.

On the other hand, as indicated in the previous section, the literature documents that MAOs have a negative impact on the terms of debt contracting, which is the main context where auditing is demanded in private companies. Therefore, the incentives of companies to avoid MAOs will be greater the higher their dependence on external sources of finance. Subsidiaries are an example where bank monitoring might become of second order importance because they are frequently funded with intercompany loans (Dewaelheyns & Van Hulle, 2010). And this is especially the case of subsidiaries owned by foreign groups, which literature documents to be more financially dependent on the parent and other group companies than subsidiaries of local groups. Desai, Fritz Foley, and Forbes (2008) document that subsidiaries of US multinationals (MNCs) in emerging markets have lower financing constraints than local companies because their parent

companies provide additional financing during currency depreciation. Wang and Wang (2015) also provide evidence on the advantages of foreign ownership in relaxing credit constraints in the Chinese setting. Specifically, they investigate the effects of foreign acquisitions relative to domestic acquisitions and find that after foreign acquisitions companies rely less on external short-term debt and more on internal capital. Nguyen (2013) and Nguyen and Rugman (2015) reach a similar conclusion using data of subsidiaries of British MNCs in South East Asia.⁷ Therefore, since local group subsidiaries rely more on bank loans they will be more prone to accepting the auditor's modifications and recommendations in order to avoid receiving an MAO. In contrast, companies under foreign control might care less about having MAOs given their lower dependence on bank financing.

In sum, either because MAOs reflect earnings management practices or because of the lower incentives of foreign group subsidiaries to avoid MAOs, we expect that MAOs are more frequent in foreign-owned subsidiaries. To test this prediction we state the following hypothesis:

H1: Subsidiaries of foreign groups are more likely to receive MAOs than locally-owned companies.

4.2. Foreign ownership and reasons for MAOs

MAOs are issued for several reasons, and the above arguments should be put into context when we consider the different types of reasons for MAOs. In particular, MAOs can be classified into three main categories depending on the underlying reasons that motivate them: (1) related to GAAP violations, meaning that the auditor reports infringements of

⁷ We are able to collect information on the debt with related parties for a subsample of our subsidiaries sample, where we find evidence consistent with this line of research. Indeed, the mean (median) of the ratio of debt with related parties to total assets is 0.17 (0.06) in subsidiaries of local groups and 0.24 (0.14) in foreign group subsidiaries, being the differences statistically significant.

any accounting principle or recognition and measurement rule applicable to the financial statements items; (2) related to lack of transparency (or opacity), which are modifications due to infringements of information disclosure requirements or unwillingness to provide the auditor the information needed to carry on his/her work; and (3) related to uncertainties, either for going-concern or for other issues like litigations or tax inspections. MAOs issued for reasons of type (1) or (2) are the result of the auditor's assessment of the company's financial reporting quality, so that they are potentially avoidable by the company, which could have implemented the appropriate measures to solve the specific problem referred to in the audit report. In turn, assuming auditor's independence, it is unlikely that the client could avoid an uncertainty related MAO, since these depend on whether the circumstances that underlie them occur or not.

Regarding our first argument, the results of prior research on earnings management at the subsidiary level would be consistent with finding higher probability of receiving MAOs that detect earnings management. As indicated in section 3.2., these are potentially the GAAP violation related MAOs, since lack of transparency related MAOs capture a different dimension of financial reporting quality. However, it is entirely possible that even GAAP violation related MAOs do not capture the same dimension of reporting quality as DAC. This would be the case if, as pointed out by DeFond and Zhang (2014), DAC capture within GAAP earnings manipulation. By specifically looking at GAAP violation related MAOs we could contribute to the literature that relates MAOs with the company's financial reporting quality.

Our second argument assumes that the main negative consequences of MAOs, which relate to debt contracting terms, are lower for foreign group subsidiaries because they are less dependent on bank financing than local group subsidiaries, and so their willingness to invest in providing good quality information is lower. We might

additionally argue that the cost-benefit relation of avoiding an MAO is likely different for the different reasons for MAOs. For example, avoiding opacity related MAOs (i.e., for omitted information and scope limitations) implies incurring in significant additional costs of preparing financial information; and avoiding GAAP violation related MAOs would imply accounting policy changes, although such costs are potentially lower than those of producing additional information on a yearly basis. On the other hand, a GAAP violation MAO likely generates more doubts about the usefulness of financial statements of the company to make decisions, so that avoiding them might bring about more benefits. Overall, we argue that the expected difference in the cost-benefit relation of receiving MAOs between foreign and locally-owned subsidiaries is not the same in all type of MAOs.

Finally, none of the two arguments is valid to predict a different incidence of uncertainty related MAOs in foreign and local group subsidiaries, since the incidence of these MAOs basically depends on whether the circumstances that underlie them occur, for example that the company has serious financial problems in the case of GCUs. Nevertheless, for the sake of completeness, we also investigate whether the probability of receiving uncertainty related MAOs differs in foreign and local group subsidiaries, where we distinguish GCUs from the rest of uncertainty related MAOs.

In sum, in order to better understand the potential effects of FDI on the financial reporting quality of the host-country companies, we disaggregate our hypothesis H1 into the following four:

H1a: Subsidiaries of foreign groups are more likely to receive MAOs for GAAP violations than locally-owned companies.

H1b: Subsidiaries of foreign groups are more likely to receive MAOs related to transparency concerns than locally-owned companies.

H1c: Subsidiaries of foreign groups are more likely to receive MAOs for GCUs than locally-owned companies.

H1d: Subsidiaries of foreign groups are more likely to receive MAOs for non-GCUs than locally-owned companies.

5. Sample

5.1. Sample selection process

Our sample consists of private Spanish companies that are controlled by either a local or a foreign group during the period 1997-2013. Our main source of data is the Bureau Van Dijk's SABI database. We started the sample selection process by selecting all the non-financial private subsidiaries that presented full financial statements in 2011 because these companies have to audit their accounts mandatorily.⁸ We define subsidiary as a company controlled by another company (the parent company) that holds at least 50.01 percent of the voting rights, directly or indirectly.

Since the database does not provide historical information on the companies' ownership structure, we had to manually gather the information on each subsidiary's controlling shareholder/s for the whole sample period. In particular, we checked both the group's and the subsidiary's corporate websites to identify the date when each parent company became the controlling shareholder of the corresponding subsidiary. Additionally, we used FACTIVE, which is an international news database produced by Dow Jones, to search for information related to ownership changes. We assume that a company belongs to a specific group from the date when that group's parent company

⁸ With respect to a company's ownership structure, SABI provides access only to the most recent information available. At the time we began our sample selection process, 2011 was the year for which SABI offered this information. According to Spanish standards, full financial statements are required only for large companies. In 2011, companies meeting two out of the following criteria during two consecutive years had to present full financial statements: total assets higher than 11,400 thousand Euros; net sales revenue higher than 22,800 thousand Euros; and average number of employees higher than 250.

became its controlling shareholder and until the date when a new group gained control or it became a stand-alone company (i.e., a company that is not a subsidiary). In companies where we identify a controlling shareholder that took control prior to 1997 and no control change was identified later on, we assume that this group exerted control during the entire sample period. We discarded observations where control is exerted by a financial or an institutional investor because this type of investors do not consolidate their invested companies' accounts. Each controlling group was classified as local or foreign according to the country of origin of its parent company. We also collected information on the listing status of all the parent companies during the entire sample period. This selection process resulted in a sample of 2,081 companies that complied with our requirements.

To carry out our empirical analyses, we additionally need audit and financial statements data, which we collected from SABI. The sample selection process is synthesized in Table 1. We collected an initial non-balanced panel of 24,073 company-year observations with information on the name and the type of audit opinion for our list of subsidiaries during the period 1997-2013. Thus, we are able to identify whether each subsidiary-year observation is audited by a Big audit firm and whether its audit report is clean or modified (i.e., qualified, adverse, or disclaimer of opinion).⁹

When the opinion is modified, the database provides the text of the report where the auditor explains the reasons giving rise to the modification (the basis for modification paragraph). But SABI does not provide the text of the opinion paragraph, which is where the auditor mentions if the company complies with the uniformity principle. For this

⁹ The database offers historical information on the auditor's name as a literal, where one specific auditor may appear in several different ways. For example, Deloitte & Touche appears under 415 different literals (e.g.: "DELOITTE, SL.", "DELOITTE & TOUCHE ESPANA SL", "DELOITTE SL"). The Big audit firms present in our sample are Arthur Andersen (which disappeared after 2002); Coopers & Lybrand; Deloitte & Touche; KPMG; and PriceWaterhouse (which after 1998 became PriceWaterhouseCoopers). This required and additional effort to manually codify the auditors' names.

reason, we cannot determine which of the MAOs are issued for lack of uniformity. In addition, since 2010, the database offers the text of the emphasis-of-matter paragraphs. As of 2010 the significant uncertainties are no longer reasons for modification and they should be mentioned in an emphasis-of-matter paragraph. Hence, the clean reports containing emphasis-of-matter paragraphs related to uncertainties would have been modified reports according to the 1991 TAS. To be consistent over the entire sample period, we identify which of the clean reports issued from 2010 onwards have emphasis-of-matter paragraphs related to uncertainties and consider them as modified. This definition of MAOs is similar to that used in previous research, where MAOs also refer to clean opinions with emphasis-of-matter paragraphs (e.g.: Chan, Lin, & Mo, 2006; Chen et al., 2000; DeFond, Wong, & Li, 2000; Ratzinger-Sakel, 2013).

We discarded 792 observations where the opinion is not clean and the basis for modification paragraphs are not available or are incomplete. In addition, we exclude 3,423 observations because the financial information required to calculate our research variables is missing. This leaves us with a final auditing sample consisting of 19,858 company-year observations out of which the MAOs sample represents 25 percent (4,951 company-year observations): in 4,431 observations the opinion is qualified, in 441 observations the opinion is clean but there is an emphasis-of-matter paragraph related to uncertainties, and in 43 and 36 observations there is an adverse and a disclaimer of opinion respectively.

Given that all the companies in our sample are privately held, they draw up their financial statements according to the local accounting standards, namely the Spanish General Accounting Plan (GAP), which was changed in 2007 to harmonize with IFRS. In addition, our sample companies exceed the size thresholds that make audit mandatory. Therefore, our sample does not contain companies auditing their accounts voluntarily.

Table 1: Sample selection process.

	Observations
Obs. with available auditor's data	24,073
Less: Obs. with MAO and unavailable text of the basis for modification paragraph	(552)
Less: Obs. with MAO and incomplete text of the basis for modification paragraph	(240)
Less: Obs. without all the required financial information	(3,423)
Auditing sample:	19,858
• Obs. with clean audit opinion	14,907
• Obs. with modified opinion:	4,951
○ Obs. with qualified opinion	4,431
○ Obs. with clean opinion and emphasis-of-matter paragraph related to uncertainties	441
○ Obs. with adverse opinion	43
○ Obs. with disclaimer of opinion	36

5.2. The reasons for modifications

As previously mentioned, a more detailed analysis of the reasons for MAOs offers a more complete picture of the company's financial reporting quality. With this aim, we carry out a detailed content analysis of the MAOs sample. We read the basis for modification paragraph/s of each report and identified the reason/s for modification. The descriptives of this detailed analysis are shown in Table 2.

For the sake of clarity, it is important to notice that some modified audit reports contain more than one reason for modification. In particular, in 3,975 reports there is one reason for modification; in 848 there are two reasons; in 109 there are three; in 16 there are four; and in two and one reports there are five and six alluded reasons respectively. Therefore, we identified a total of 6,078 individual reasons in the 4,951 modified reports analyzed.

Following the regulation in force during the period analyzed, we are able to identify three main types of underlying reasons for audit report modifications (see section 2.2. for a detailed description of each type of reason):

A. Misstatements, which we further classify into two sub-groups:

A.1. GAAP violations: where we identify the main recognition and measurement standard/s that companies violate.

A.2. Omitted information: where we identify the nature of the information that companies omit from the financial statements.

B. Limitations on the scope of the audit: where we identify the accounting standard/s whose application the auditors find impossible to ascertain.

C. Uncertainties: where we identify the situation/s whose aftermath cannot be predicted.¹⁰

In Table 2 we provide the number of modified reports in our sample that make reference to at least one of the corresponding reasons. Nearly 57 percent of the modified reports in the sample relate to misstatements, and within this category the omission of information is more frequent than the infringement of recognition and measurement standards: in 32.2 percent of the MAOs there is a reason related to omitted information while the percentage of MAOs with at least one GAAP violation is 26.5 percent. Untabulated results indicate that the difference between the likelihood of receiving MAOs for omitted information and that of MAOs for GAAP violations is statistically significant at conventional levels (z -statistic for the proportions test equals -6.17). Undisclosed information (i.e., opacity) is thus more frequently alluded by auditors in our sample subsidiaries than GAAP violations.

¹⁰ As mentioned previously, we cannot identify the MAOs for lack of uniformity because SABI does not offer the text of the opinion paragraph.

Table 2: Reasons identified for issuing MAOs.

This table presents the number of modified reports in our sample that contain at least one reason for modification of the corresponding type, as well as the percentage that these observations represent over the total MAOs sample ($N = 4,951$). Notice that each modified report might contain several reasons for modification, and this is why the numbers in the table are not disaggregated totals. In the GAAP violations category we list the recognition and measurement rules that are more likely to be violated; in the omitted information category we disaggregate considering the nature of the information more likely to be omitted; in the scope limitations category we show the main accounting rules whose compliance is impossible to check; and in the uncertainties category we indicate the most common situations whose outcome cannot be predicted.

Reasons for modified audit opinions	<i>N reports</i>	% of total reports
A. Misstatements	2,807	56.7%
<i>A.1. GAAP violations</i>	<i>1,314</i>	<i>26.5%</i>
A.1.1. PP&E, intangibles, and investment property	373	7.5%
A.1.2. Financial instruments	224	4.5%
A.1.3. Provisions and contingent liabilities	155	3.1%
A.1.4. Intra-group restructuring	105	2.1%
A.1.5. Corporate income tax	100	2.0%
A.1.6. Changes in accounting policies, estimates, and errors	81	1.6%
A.1.7. Classification of BS and IS items	80	1.6%
A.1.8. Other	325	6.6%
<i>A.2. Omitted information</i>	<i>1,594</i>	<i>32.2%</i>
A.2.1. Directors' remuneration and conflicts of interests	1,474	29.8%
A.2.2. Other information	175	3.5%
B. Scope limitations	1,384	28.0%
B.1. Financial instruments	542	10.9%
B.2. PP&E, intangibles, and investment property	274	5.5%
B.3. Provisions and contingent liabilities	239	4.8%
B.4. Inventories	114	2.3%
B.5. Corporate income tax	73	1.5%
B.6. Other	301	6.1%
C. Uncertainties	1,268	25.6%
C.1. Going concern	497	10.0%
C.2. Tax inspections	431	8.7%
C.3. Intra-group transactions and balances related to financial assets	84	1.7%
C.4. Litigation	74	1.5%
C.5. Other	244	4.9%
Opacity (omitted information and/or scope limitations)	2,855	57.7%

The recognition and measurement rules that are generally infringed are those related to (ordered by frequency):

- *Property, plant, and equipment (PP&E), intangibles, and investment property*, identified in 373 reports (7.5 percent of the sample). The majority of the observations in this category do not comply with the accounting rules related to depreciation of PP&E (this reason appears in 232 reports), and that of intangible assets (mentioned in 63 reports), while others concern the impairment of PP&E and intangible assets (mentioned 39 in cases). A small number of reports refer to the depreciation of investment property, and the initial measurement and revaluation of PP&E and intangibles.
- *Financial instruments*, which we identify in 224 reports (4.5 percent of the sample). The vast majority of subsidiaries in our sample that violate the financial instruments standards use financial assets to distort their financial position and their results of operations (212 reports). More precisely, 127 reports refer to infringements of the standards in the accounting of financial investments in related parties and 63 concern the recognition and measurement of accounts receivable.
- *Provisions and contingent liabilities*, which standards are said to be violated in 155 reports (3.1 percent of the sample). More precisely, the infringements included in this category refer to future liabilities arising from employee benefits (32 reports), restructuring (32 reports), and taxes (24 reports). A few violations relate to the measurement of provisions for commercial operations, other responsibilities, responsibilities arising from investments in related parties, environmental actions, and decommissioning and restoring costs. In some cases,

the initial recognition conditions are not satisfied (reason mentioned in 20 reports).

- *Intra-group restructuring* accounting is a reason for modification in 105 reports (2.1 percent of the sample). All the 105 modifications for this reason are consequence of asset revaluations in intra-group mergers & acquisitions, spin-offs, or partial contributions of assets (i.e., transactions whereby a company transfers part of its assets to a new or existing company within the group). These GAAP violations affect the valuation of PP&E (mentioned in 61 reports), financial investments in related parties (referred to in 37 reports), and intangible assets (alluded in 7 reports).
- *Corporate income tax* standards violation is mentioned in 100 reports (2.0 percent of the sample). Almost all the violations of the income taxes recognition and measurement standards have to do with deferred taxes, and especially deferred tax assets (mentioned in 87 reports). Only 17 reports refer to deferred tax liabilities.
- *Changes in accounting policies and estimates, and correction of errors* is alluded in 81 reports (1.6 percent of the sample). These GAAP violations mainly have to do with the correction of prior period errors regarding the recognition and measurement of financial assets (21 reports), deferred tax assets (16 reports), provisions (14 reports), and fixed and intangible assets (14 reports).
- *Classification of balance sheet and income statement items* is a reason for modification in 80 reports (1.6 percent of the sample). In this category we include the GAAP violations related to the drawing up of financial statements, since the Spanish GAP requires mandatory formats. In particular, 55 reports mention any violation related to the classification of items in the balance sheet and 25 to that

in the income statement. Companies are more prone to misclassify assets, which are sometimes classified correctly as current or non-current but incorrectly within current or non-current subcategories (this is mentioned in 17 reports), or classified as current assets instead of long term assets (referred to in 11 reports). Regarding liabilities, the most common violation is that short term items are misclassified as long term (reason included in 16 reports).

- *Other.* In this line we aggregate the rest of the recognition and measurement rules infringed, which individually are mentioned in less than 1.5 percent of the reports. These GAAP infringements are related to government grants, inventories, leases, revenues from the sale of goods and rendering of services, foreign currency transactions, and transactions recognized directly in equity.

We identify reasons for modification associated with the omission of information in 1,594 reports (32.2 percent of the MAOs sample). In most of these reports the type of information omitted concerns the directors' remuneration and their conflicts of interests with the entity, which is required by the Spanish standards: this reason is included in 1,474 reports, representing 29.8 percent of the sample. In 175 reports (3.5 percent of the sample) we find reasons related to other undisclosed information in the financial statements (e.g.: transactions and balances with related parties, foreign currency transactions, or the consolidation effect).

Limitations on the scope of the audit are reported in 1,384 reports (28.0 percent of the sample). Auditors have significantly more difficulties to obtain sufficient audit evidence on the compliance of the accounting rules related to the following items (in order of frequency):

- *Financial instruments*, referred to in 542 reports (almost 10.9 percent of the sample). Similar to the infringements of the financial instruments accounting rule

(i.e., GAAP violations), almost all the scope limitations in this category refer to financial assets (mentioned in 499 reports). In particular, in 422 cases the modification arises from the auditor's inability to check the recognition and measurement of financial investments in related parties, and 90 MAOs concern accounts receivable.

- *PP&E, intangibles, and investment property*, included in 274 reports (5.5 percent of the sample). The measurement subsequent to initial recognition of fixed and intangible assets constitutes the most important issue in this category since the auditor cannot perform the necessary audit procedures to obtain sufficient evidence on the depreciation and potential impairment of PP&E (78 and 115 reports contain these reasons, respectively) and intangible assets, where the lack of information mainly relates to impairments (93 reports refer to this issue while only 7 mention depreciation of intangibles).
- *Provisions and contingent liabilities*, mentioned in 239 reports (4.8 percent of the sample). The auditor's inability to form an opinion on the recognition and measurement of provisions and contingent liabilities generally relates to future liabilities arising from other responsibilities (e.g.: litigation, guarantees) (mentioned in 50 reports), taxes (in 46 reports), commercial operations (in 40 reports), employee benefits (in 35 reports), and investments in related parties (in 33 reports). Only a few observations refer to provisions for share-based payments, decommissioning and restoring costs, restructuring, and environmental actions.
- *Inventories* are referred to in 114 reports. The situations where the auditor cannot obtain sufficient audit evidence on the accounting treatment for inventories mainly concern the write-down to net realizable value (mentioned in 51 reports),

physical inventories (26 reports), and the initial measurement of inventories at cost (23 reports).

- *Corporate income tax.* All the 73 reports included in this category relate to circumstances where the auditor is prevented from checking the application of the recognition and measurement rule concerning the deferred tax assets.
- *Other.* The scope limitations aggregated in this line relate to reasons that individually are found in less than 1.5 percent of the reports analyzed, and are connected with the following issues: the classification of balance sheet and income statement items, the application of the accrual principle, transfer prices, information disclosed in the financial statements, revenues from the sale of goods and rendering of services, leases, and business combinations.

Untabulated results also reveal that in about 38 percent of the reports including scope limitations (525 out of 1,384) the reasons concern transactions and balances with related parties, and in particular are related to financial assets (447), transfer prices (41), and provisions and contingent liabilities (37).

Finally, 1,268 reports (25.6 of the sample) mention at least one reason related to uncertainties, where the most frequent types are the following:

- *Going concern (GCU).* We find this kind of uncertainty in 497 reports (10.0 percent of the sample). This modification expresses the auditor's doubt about the going concern assumption, and, therefore, it represents a warning for the financial statement users about the company's poor financial condition which may lead to business failures. Notice that, although poor financial condition has been related to higher levels of earnings management (e.g.: Burgstahler & Dichev, 1997), this type of modification does not indicate *per se* poor financial reporting quality,

since the auditor in this case is not reporting on his assessment of the company's reporting quality.

- *Tax inspections* uncertainties are referred to in 431 reports (8.7 percent of the sample). Tax compliance checks carried out by the tax authority are aimed at detecting and imposing penalties for tax evasion and avoidance.
- *Intra-group transactions and balances related to financial assets* are mentioned in 84 reports (1.7 percent of the sample). In this category we include the circumstances whose future outcomes might have an effect on the valuation of financial assets with related parties, and especially that of investments in related parties (71 reports mention this reason). Such situations refer to related parties that received a GCU, are subject to an ongoing tax inspection or group restructuring, incurred in losses etc.
- *Litigation* related uncertainties are referred to in 74 reports (1.5 percent of the sample). Litigation is a form of dispute resolution that implies filing or answering a complaint through a court of law.
- *Other*. The uncertainties aggregated in this line represent situations that might affect the valuation of assets (deferred tax assets, financial assets, PP&E and intangible assets, and inventories) and liabilities (i.e., provisions and contingent liabilities other than those included in the above mentioned categories). A few uncertainties arise from group or company restructuring and the change of regulations.

Overall, the content analysis carried out in this section allows us to present a clear picture of the auditors' assessment of financial reporting quality in our sample. Interestingly, the majority of the MAOs, even those included in the misstatements category, have to do with lack of information. Indeed, almost 58 percent of the modified

audit reports analyzed inform about omission of information and/or scope limitations, while recognition and measurement issues (GAAP violations) and uncertainties are referred to in 26.5 percent and 25.6 percent of the reports respectively. We consider these MAOs as an indication of firm opacity because they are issued to companies unwilling to disclose the required information and/or to allow the auditor to carry on his/her duties.

To test our hypotheses, in the subsequent empirical tests, we consider MAOs containing any type of reason for modification (H1), and the following categories: only MAOs containing at least one GAAP violation (H1a); only MAOs reporting at least one of the reasons related to lack of transparency (or opacity, i.e., modification related to omitted information and/or scope limitations) (H1b); only going concern related MAOs (H1c); and only MAOs referring to at least one uncertainty other than going concern (H1d). Therefore, the sample size varies depending on the type of MAO considered.

6. Empirical model

To examine the association between foreign ownership and the subsidiary's propensity to receive MAOs we estimate the model presented in equation (1), where we omit coefficients for simplicity and subscripts i and t represent company and year respectively.

$$\begin{aligned} Pr(OP_{i,t} = 1) = & Foreignown_{i,t} + Size_{i,t} + Lev_{i,t} + Roa_{i,t} + Liq_{i,t} + Lag_OP_{i,t} \\ & + Big_{i,t} + ListedP_{i,t} + Period\ Effects_{i,t} + Industry\ Effects_{i,t} \end{aligned} \quad (1)$$

The definitions of all the variables are provided in the Appendix 3. *OP* stands for our five measures capturing the likelihood of receiving modified audit reports: *MAO*, *GAAP_violation*, *Opacity*, *GCU*, or *Non_GCU*. *MAO* is a dummy variable that equals 1 if the company receives a modified audit report independent of the underlying reason/s, and 0 if the opinion is clean; *GAAP_violation* is a dummy equaling 1 if the MAO reports at least a GAAP violation, and 0 if the opinion is clean; *Opacity* is a dummy variable set

to 1 if the MAO makes reference to omitted information or at least one scope limitation, and 0 if the opinion is clean;¹¹ *GCU* is a dummy variable that equals 1 if the MAO mentions a going concern uncertainty, 0 if the opinion is clean; and *Non_GCU* is a dummy variable set to 1 if the MAO reports at least one uncertainty related to reasons other than going concern, 0 if the opinion is clean.

Our main experimental variable is *Foreignown*, a dummy equaling 1 if the parent company is foreign, and 0 if it is local. We expect a positive coefficient for this variable in all estimations, indicating a higher incidence of modified opinions in foreign-owned subsidiaries.

Model (1) includes a set of control variables for several firm characteristics that prior research has documented to be associated with the probability of receiving a modified audit report. To control for firm size we use the logarithm of total sales (*Size*). Some studies suggest a negative relation between firm size and the likelihood of receiving an MAO (Carey & Simnett, 2006), while others find the opposite (Reynolds & Francis, 2000). We control for financial risk with leverage (*Lev*), defined as total debt over total assets, which prior studies have found to be positively associated with the audit modification rates (Beatty & Weber, 2003; Mutchler, Hopwood, & McKeown, 1997). Another important determinant of the probability of receiving an MAO is firm performance, which is controlled for with the return on assets ratio (*Roa*), defined as net income over total assets. The probability of receiving an MAO increases as profitability declines since lower profits likely increase the probability of bankruptcy, lead to earnings management in an attempt of managers to maintain their compensation, increase the probability of litigation by stakeholders against the auditor, and increase the probability

¹¹ Conclusions are the same whether we use separate variables for each type of reason for modification associated with firm opacity (i.e., a dummy for omitted information and one for scope limitations).

of being reviewed more thoroughly by auditors (Nelson, Ronen, & White, 1988). We also include the liquidity ratio, calculated as current assets over current liabilities (*Liq*), which some studies on auditor reporting use to proxy for the company's financial health (Kida, 1980; Mutchler, 1985).

In line with prior literature on auditor reporting behaviour, model (1) includes two additional controls: the previous year's audit opinion (*Lag_MAO*; *Lag_GAAP_violation*, *Lag_Opacity*, *Lag_GCU*, or *Lag_Non_GCU*), to control for the documented persistence of the auditor's opinion (Monroe & Teh, 1993; Mutchler, 1985); and auditor size (*Big*), since literature indicates that larger auditors have greater capacity and incentives to detect and reveal misstatements (DeAngelo, 1981; Kim, Chung, & Firth, 2003).

Another control variable included in model (1) is the listing status of the parent company (*ListedP*). Because of the market pressures they face, listed companies could have higher incentives to avoid modified audit reports than private firms. However, it is unclear whether this argument is valid at the subsidiary level, especially when subsidiaries are non-listed since there is evidence that listed parent companies allocate earnings manipulation in their private subsidiaries in order to overcome the restrictions imposed by capital markets (e.g.: Bonacchi, Cipollini, & Zarowin, 2017). We also control for the effect of the audit regulation on the propensity of auditors to issue modified opinions. In particular, we distinguish three regulatory periods, delimited by two milestones, the Laws 44/2002 and 12/2010. Therefore, *Period2* and *Period3* equal to 1 for the periods 2002 to 2009 and 2010 to 2013 respectively, and 0 otherwise. Thus, the reference is the earliest period in our sample (1997-2001). Finally, model (1) includes industry effects, which are based on the SIC classification.

We winsorize all the continuous variables at the 1 percent and 99 percent levels to alleviate problems related to the presence of outliers in our empirical tests.¹²

7. Results

7.1. Univariate tests and correlations

Descriptive statistics of our research variables are reported in Table 3, where we split the sample into two subsamples based on the type of parent company, local or foreign. Note that the sample size is reduced when we consider the dependent variable restricted to specific types of reasons for MAOs (i.e., *GAAP_violation*, *Opacity*, *GCU*, and *Non_GCU*). This is because in those cases we discard the other reasons for issuing MAOs, and also because we lose additional observations since the model includes the lagged value of the dependent variable. We use a t-test, a Kruskal-Wallis test, and a proportions test to test the null hypothesis that the two subsamples have respectively identical means, distributions, and proportions. Additionally, Table 4 presents Pearson pair wise correlations between the research variables.

In Table 3, we observe a higher proportion of overall modified audit reports in foreign-controlled than in local group subsidiaries (mean *MAO* of 0.307 vs. 0.182),¹³ being the difference statistically significant (z -statistic = -20.40). When we consider the different types of reasons for MAOs, we see that, although the proportion of GAAP violation related MAOs, opacity related MAOs, and MAOs for non-GCUs is higher among foreign-owned subsidiaries, the difference is much higher in the opacity related ones: the proportion of MAOs for GAAP violation (non-GCUs) in the foreign and local

¹² Our conclusions hold if we drop the observations below percentile 1 and above percentile 99 of the variables *Size*, *Lev*, *Roa*, and *Liq*.

¹³ The rate of MAOs in Spain is higher than in other settings, like the US or the UK. Prior Spanish-based research confirms this high rate of audit modifications in Spain (e.g.: Ruiz-Barbadillo, Gómez-Aguilar, & Biedma-López, 2006: 72).

control groups is 7.3 (5.4) percent and 5.9 (2.2) percent respectively, while regarding MAOs related to lack of transparency the percentages are 19.4 in the foreign-owned subsidiaries vs. 6.9 in their locally-owned counterparts. Additionally, as shown in Table 4, the correlation between *Foreignown* and *GAAP_violation (Non_GCU)* is 0.03 (0.08) while that between *Foreignown* and *Opacity* is 0.18, although they are all statistically significant at 1 percent level. As for the MAOs for GCUs, they are more frequent in local group subsidiaries (3.1 percent) than in foreign group subsidiaries (2.4 percent), and *Foreignown* is negatively correlated with *GCU*.

Foreign ownership relates to a higher probability of receiving an MAO (H1). When looking at the reasons for MAOs, we see that the proportion of MAOs for all the identified reasons, except for GCUs, is significantly higher in foreign-owned subsidiaries. In contrast, foreign group subsidiaries have significantly lower proportion of GCUs. Nevertheless, there are also significant differences between the two groups of subsidiaries in terms of firm-specific characteristics that are deemed to affect the probability of receiving MAOs, which is also indicated by the significant correlations of *MAO*, *GAAP_violation*, *Opacity*, *GCU*, *Non_GCU*, and *Foreignown* with the rest of the research variables. Companies under foreign control are, on average, larger (*Size*), and have a higher liquidity ratio (*Liq*) than local group subsidiaries. Moreover, subsidiaries of foreign groups are significantly more likely to hire international auditors (*Big*) and to be part of a group whose parent company is listed (*ListedP*). Thus, in order to get valid conclusions regarding the relations of interest, we turn our attention to the multivariate analysis results.

Table 3: Descriptive statistics of research variables.

This table presents the descriptive statistics of the research variables for the two subsamples of subsidiaries (with local or foreign control), as well as the tests that compare the characteristics of the two subsamples. Variable definitions are in the Appendix 3. In the last three columns we report respectively the *t*-statistics, χ^2 -statistics and *z*-statistics of the tests where the null is that the two groups have identical means, distributions, or proportions. Statistical significance is indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variable	Local control				Foreign control				Means diff.	Kruskal Wallis	Proportions diff.
	N	Mean	Median	Stddev	N	Mean	Median	Stddev			
<i>MAO</i>	9,177	0.182	0.000	0.386	10,681	0.307	0.000	0.461			-20.40***
<i>GAAP_violation</i>	7,621	0.059	0.000	0.235	7,401	0.073	0.000	0.260			-3.47***
<i>Opacity</i>	7,706	0.069	0.000	0.254	8,666	0.194	0.000	0.395			-23.23***
<i>GCU</i>	7,340	0.031	0.000	0.173	6,946	0.024	0.000	0.153			2.57**
<i>Non_GCU</i>	7,302	0.022	0.000	0.148	7,233	0.054	0.000	0.225			-9.83***
<i>Sales</i> (million €)	9,177	217.937	60.822	541.482	10,681	268.241	104.511	536.173	-6.56***	803.30***	
<i>Size</i>	9,177	11.181	11.016	1.341	10,681	11.639	11.557	1.237	-25.04***	803.30***	
<i>Lev</i>	9,177	0.650	0.673	0.240	10,681	0.646	0.660	0.265	1.19	6.39**	
<i>Roa</i>	9,177	0.037	0.032	0.091	10,681	0.034	0.033	0.109	2.70***	0.04	
<i>Liq</i>	9,177	1.434	1.156	1.385	10,681	1.515	1.202	1.389	-4.12***	49.30***	
<i>Big</i>	9,177	0.795	1.000	0.404	10,681	0.911	1.000	0.285			-23.33***
<i>ListedP</i>	9,177	0.475	0.000	0.499	10,681	0.758	1.000	0.428			-41.21***

Table 4: Correlations between research variables.

This table reports Pearson pair wise correlations between the research variables. Variable definitions are in the Appendix 3. Statistical significance is indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>MAO</i>		<i>GAAP</i> <i>violation</i>	<i>Opacity</i>	<i>GCU</i>	<i>Non</i> <i>GCU</i>							
(6) <i>Foreignown</i>	0.14***	0.03***	0.18***	-0.02**	0.08***	1.00						
(7) <i>Size</i>	-0.01*	-0.004	0.02***	-0.07***	-0.001	0.18***	1.00					
(8) <i>Lev</i>	0.04***	-0.02***	-0.004	0.17***	0.02**	-0.01	0.04***	1.00				
(9) <i>Roa</i>	-0.16***	-0.07***	-0.09***	-0.24***	-0.05***	-0.02***	0.08***	-0.38***	1.00			
(10) <i>Liq</i>	0.02**	0.02***	0.02**	-0.04***	0.02**	0.03***	-0.13***	-0.43***	0.12***	1.00		
(11) <i>Big</i>	0.06***	0.02***	0.07***	0.02**	0.002	0.17***	0.14***	0.0004	0.004	0.002	1.00	
(12) <i>ListedP</i>	-0.03***	-0.03***	-0.01	-0.03***	-0.01	0.29***	0.13***	0.01	0.04***	0.02**	0.27***	1.00

7.2. Regression analysis

Table 5 reports the results of the estimation of model (1). Panels A, B, C, D, and E present the results using *MAO*, *GAAP_violation*, *Opacity*, *GCU*, and *Non_GCU* as the dependent variable, respectively. We employ several estimation procedures:

- Column (1) shows the results of a logistic regression, where we correct standard errors by clustering on both company and year following Cameron, Gelbach, and Miller (2011).
- In column (2) we see the results using the Fama-MacBeth approach (Fama & MacBeth, 1973), which is commonly used to correct for cross-sectional dependence problems.
- In column (3) we employ a random effects estimation following the constrained version of the Wooldridge's (2005)¹⁴ approach proposed by Rabe-Hesketh and Skrondal (2013), to deal with the unobserved firm heterogeneity problem. This approach implies the estimation of an extended version of model (1) which is obtained by adding some additional regressors: (a) the dependent and explanatory variables measured at the initial period; and (b) the mean of each explanatory variable. To solve the problem of missing data, we follow the recommendation of Skrondal and Rabe-Hesketh (2014) and require sequences of at least two consecutive non-missing observations. Since we might utilize several sequences of non-missing data for a given company, we allow the initial values of the dependent and explanatory variables to change between sequences. In addition, we calculate the mean of the explanatory variables only with the observations that are valid for the estimation. Given that our main experimental variable,

¹⁴ Wooldridge (2005) indicates that fixed effects approaches for dynamic logit models have many limitations, and develops a random effects estimation.

Foreignown, is time invariant for many companies in the sample, this random effects estimation is done in the subsample of observations belonging to companies which are always controlled by either a local or a foreign parent company. Therefore, the sample is considerably reduced in this estimation.

- Finally, in column (4) we show the results where we implement the coarsened exact matching (CEM) procedure (Blackwell, Iacus, King, & Porro, 2009).¹⁵ In this approach we match foreign group subsidiaries with local group subsidiaries by size, year, and industry,¹⁶ and subsequently estimate the model in the matched subsample using logistic regression and clustering standard errors on both company and year. Matching is a nonparametric approach that reduces model dependence and statistical bias (Ho, Imai, King, & Stuart, 2007), and is generally used to improve causal inference (Stuart, 2010). The CEM approach determines the matching as follows. First, it determines several cut points for the variables used for matching based on which it obtains different strata. Then, it classifies the observations into strata and matches the treated (i.e., foreign group subsidiaries) and control (i.e., local group subsidiaries) observations that are within the same stratum. In order to use the maximum information available, we do not impose a matching restriction regarding the number of treated and control observations within each stratum, meaning that some strata may have different numbers of treated and control observations.

When *MAO* is the dependent variable (Table 5, Panel A), the coefficient on the foreign control dummy (*Foreignown*) has the expected positive sign and is statistically

¹⁵ Propensity score matching (PSM) is one of the most popular matching methods. Nonetheless, King and Nielsen (2016) point out that CEM solves some of PSM's issues and that *for data with continuous, discrete, and mixed variables [...], CEM is the most natural* (King & Nielsen, 2016: 26).

¹⁶ Results are similar when matching by size, profitability, year and industry, although the matched sample is considerably smaller.

significant irrespective of the estimation technique employed. Therefore, after controlling for the potential confounding effects of factors that are associated with both foreign control and the likelihood of receiving a modified audit report, subsidiaries of foreign groups are significantly more prone to having MAOs than local group subsidiaries, which is consistent with H1.

When we estimate model (1) with *GAAP_violation* as the dependent variable (results reported in Panel B), we observe that the coefficient of *Foreignown* is not significantly different from zero, meaning that there are no significant differences in the probability of receiving MAOs for GAAP violations between subsidiaries of foreign and local groups. This result is inconsistent with H1a, which predicts a positive association between foreign control and GAAP violations. So, the higher prevalence of earnings manipulation in foreign group subsidiaries previously documented using discretionary accruals to measure earnings manipulation, does not result into significantly higher modification rates for GAAP violations. This suggests that discretionary accruals and MAOs for GAAP violations capture different dimensions of accounting quality. Likely DAC capture on average within GAAP earnings management, which auditors are not obliged to report.

In addition, when the dependent variable of model (1) is *Opacity* (Panel C), we observe that the coefficient of *Foreignown* is significant at the 1 percent level in all the estimations, indicating that foreign-controlled companies are more prone to omit information from their financial statements and/or deter the auditor from checking the application of accounting rules. Thus, foreign group subsidiaries are less transparent than locally-owned companies. This supports our prediction in H1b.

Table 5: Foreign control and MAOs. Regression analysis.

This table presents the results of the estimation of model (1) employing several approaches: logistic regression in column (1), the Fama-MacBeth procedure in column (2), a random effects estimation in column (3), and logistic regression (matched sample) in column (4). Variable definitions are in the Appendix 3. The model estimated in column (3) includes the additional regressors mentioned in section 7.2. (untabulated). Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

<i>Panel A: Foreign control and all types of MAOs (dependent variable: MAO)</i>				
Variables	(1)	(2)	(3)	(4)
Constant	-2.897*** [-10.39]	0.121*** [4.24]	-3.450*** [-6.77]	-2.978*** [-10.46]
Foreignown	0.489*** [5.73]	0.043*** [5.85]	0.607*** [6.88]	0.509*** [6.23]
Size	-0.051** [-2.04]	-0.006* [-1.83]	-0.121 [-1.61]	-0.050** [-2.28]
Lev	0.064 [0.38]	0.017 [0.85]	0.037 [0.13]	0.110 [0.64]
Roa	-2.457*** [-5.60]	-0.188*** [-3.74]	-3.020*** [-6.24]	-2.396*** [-5.35]
Liq	0.007 [0.35]	0.000 [0.04]	0.022 [0.59]	0.019 [0.81]
Lag_MAO	3.655*** [34.57]	0.651*** [38.82]	2.989*** [34.93]	3.652*** [32.48]
Big	0.363*** [4.77]	0.035*** [2.96]	0.130 [0.64]	0.371*** [4.89]
ListedP	-0.279*** [-3.81]	-0.010 [-0.67]	-0.359 [-1.55]	-0.285*** [-4.25]
Period2	0.254** [2.02]	-	0.159 [1.48]	0.276** [2.17]
Period3	0.633*** [3.46]	-	0.414*** [2.71]	0.641*** [3.51]
Industry effects	Yes	Yes	Yes	Yes
Additional controls	No	No	Yes	No
No. observations	19,858	19,858	11,915	18,457
Pseudo R ² /R-squared	0.432	0.490	0.302	0.433
Wald χ^2/F -statistic	6,321.91***	536.61***	3,226.74***	5,932.38***

Panel B: Foreign control and MAOs for GAAP violation (dependent variable: GAAP_violation)

Variables	(1)	(2)	(3)	(4)
Constant	-3.612*** [-5.27]	0.034 [1.07]	-3.742*** [-4.16]	-3.650*** [-4.57]
Foreignown	0.152 [1.50]	0.004 [0.97]	0.250 [1.51]	0.187* [1.73]
Size	-0.026 [-0.53]	-0.003 [-0.97]	-0.317** [-2.05]	-0.031 [-0.55]
Lev	-0.460** [-2.07]	-0.007 [-0.97]	-0.719 [-1.18]	-0.372 [-1.47]
Roa	-2.610*** [-3.75]	-0.114** [-2.39]	-2.072* [-1.95]	-2.407*** [-3.83]
Liq	-0.024 [-0.56]	0.001 [0.28]	-0.020 [-0.26]	-0.001 [-0.03]
Lag_GAAP_violation	5.023*** [25.67]	0.652*** [12.63]	3.844*** [18.89]	5.019*** [25.13]
Big	0.228** [2.38]	0.011** [2.84]	0.126 [0.32]	0.233** [2.35]
ListedP	-0.317** [-2.33]	-0.001 [-0.15]	-0.170 [-0.36]	-0.340** [-2.39]
Period2	0.147 [0.98]	-	0.293 [1.46]	0.142 [0.71]
Period3	0.131 [1.26]	-	0.268 [0.88]	0.149 [0.93]
Industry effects	Yes	Yes	Yes	Yes
Additional controls	No	No	Yes	No
No. observations	15,022	15,022	9,206	13,880
Pseudo R ² /R-squared	0.504	0.499	0.341	0.505
Wald χ^2 /F-statistic	2,633.17***	93.95***	1,154.47***	2,464.28***

Panel C: Foreign control and MAOs for opacity (dependent variable: Opacity)

Variables	(1)	(2)	(3)	(4)
<i>Constant</i>	-4.307*** [-13.32]	0.015 [0.75]	-5.439*** [-7.17]	-4.404*** [-13.70]
<i>Foreignown</i>	0.885*** [8.80]	0.037*** [6.67]	1.144*** [7.87]	0.864*** [8.18]
<i>Size</i>	-0.019 [-0.54]	-0.002 [-0.70]	-0.003 [-0.03]	-0.020 [-0.57]
<i>Lev</i>	-0.169 [-1.10]	0.013 [0.63]	0.062 [0.14]	-0.169 [-1.06]
<i>Roa</i>	-1.647*** [-2.73]	-0.014 [-0.21]	-1.069 [-1.38]	-1.588*** [-2.68]
<i>Liq</i>	-0.004 [-0.14]	0.001 [0.40]	0.001 [0.01]	-0.005 [-0.18]
<i>Lag_Opacity</i>	4.616*** [19.93]	0.684*** [14.16]	3.465*** [25.01]	4.599*** [19.38]
<i>Big</i>	0.465*** [3.25]	0.019*** [2.47]	0.371 [1.17]	0.536*** [3.81]
<i>ListedP</i>	-0.358*** [-4.29]	-0.004 [-0.34]	-0.207 [-0.56]	-0.342*** [-4.13]
<i>Period2</i>	0.445** [2.05]	-	0.272 [1.58]	0.470** [2.19]
<i>Period3</i>	0.683*** [4.15]	-	0.209 [0.92]	0.706*** [4.22]
Industry effects	Yes	Yes	Yes	Yes
Additional controls	No	No	Yes	No
No. observations	16,372	16,372	10,288	15,219
Pseudo R ² /R-squared	0.535	0.497	0.404	0.536
Wald χ^2/F -statistic	4,081.79***	1,762.78***	2,694.79***	3,888.27***

Panel D: Foreign control and MAOs for GCUs (dependent variable: GCU)

Variables	(1)	(2)	(3)	(4)
Constant	-4.383*** [-5.56]	0.057* [2.09]	-9.609** [-2.46]	-3.957*** [-5.25]
Foreignown	-0.336 [-1.62]	-0.004 [-1.00]	1.057 [1.49]	-0.299 [-1.40]
Size	-0.230*** [-2.59]	-0.003* [-1.77]	-0.057 [-0.10]	-0.275*** [-3.77]
Lev	1.984*** [6.57]	0.032** [2.73]	2.723 [1.22]	2.052*** [5.93]
Roa	-5.826*** [-9.72]	-0.120*** [-2.97]	-8.510*** [-3.09]	-6.056*** [-8.17]
Liq	-0.054 [-0.76]	0.000 [0.74]	0.103 [0.61]	-0.055 [-0.48]
Lag_GCU	3.954*** [11.80]	0.437*** [5.63]	3.657*** [3.26]	4.070*** [11.12]
Big	0.414 [1.55]	0.006 [1.36]	-1.561 [-0.94]	0.354 [1.38]
ListedP	-0.090 [-0.32]	-0.000 [-0.13]	-0.031 [-0.02]	-0.054 [-0.19]
Period2	-0.022 [-0.07]	-	0.566 [0.85]	0.081 [0.21]
Period3	1.977*** [4.09]	-	1.757 [1.30]	2.018*** [4.03]
Industry effects	Yes	Yes	Yes	Yes
Additional controls	No	No	Yes	No
No. observations	14,286	14,286	6,371	13,173
Pseudo R ² /R-squared	0.462	0.346	0.379	0.465
Wald χ^2 /F-statistic	838.32***	17.06***	137.07***	789.65***

Panel E: Foreign control and MAOs for uncertainties other than GCUs (dependent variable: Non_GCU)

Variables	(1)	(2)	(3)	(4)
Constant	-4.831*** [-7.68]	0.003 [0.22]	-4.357*** [-4.18]	-4.834*** [-7.30]
Foreignown	0.802*** [5.29]	0.015*** [5.94]	0.710*** [3.45]	0.816*** [5.30]
Size	0.020 [0.45]	-0.001 [-0.81]	0.038 [0.22]	0.016 [0.31]
Lev	0.258 [0.63]	0.010 [0.83]	-1.409* [-1.94]	0.420 [0.97]
Roa	-2.125*** [-2.86]	-0.047** [-2.90]	-2.945** [-2.40]	-1.811** [-2.40]
Liq	0.076** [1.96]	0.001 [0.70]	0.044 [0.56]	0.088** [2.02]
Lag_Non_GCU	4.853*** [22.04]	0.556*** [8.93]	4.255*** [16.19]	4.786*** [20.97]
Big	-0.006 [-0.03]	0.003 [0.59]	-0.076 [-0.14]	-0.049 [-0.23]
ListedP	-0.372*** [-2.81]	-0.002 [-0.34]	-1.608*** [-3.04]	-0.383*** [-2.91]
Period2	-0.165 [-0.80]	-	-0.229 [-1.00]	-0.171 [-0.78]
Period3	-0.537 [-1.02]	-	-1.113*** [-3.09]	-0.557 [-1.04]
Industry effects	Yes	Yes	Yes	Yes
Additional controls	No	No	Yes	No
No. observations	14,535	14,535	8,903	13,442
Pseudo R ² /R-squared	0.437	0.376	0.280	0.431
Wald χ^2 /F-statistic	1,749.18***	95.17***	680.68***	1,634.31***

Finally, when focusing on the MAOs for uncertainties, we obtain results that are consistent with H1d but not with H1c. Specifically, in Panel D we see that the coefficient of *Foreignown* is not significant in any estimation. This is compatible with the results of the first paper in this thesis, where we identified a competitive advantage of foreign-owned companies in terms of sales turnover, despite their lower profitability. Although a company's profitability has been linked to its bankruptcy risk (Nelson et al., 1988), its ability to generate sales has also been associated with company survivorship (Parker et al., 2002). In turn, results in Panel E indicate that foreign shareholding is positively and

significantly related to the probability of receiving an MAO for non-GCUs reasons. Most uncertainties in this category relate to tax inspections and litigations, and their higher incidence in foreign-owned companies might be reflecting the unfamiliarity of foreign investors with the local regulations.

With regard to the control variables, results are overall consistent with prior literature. The probability of receiving a modified audit report in general (*MAO*) is significantly higher when the previous year's report is also modified (*Lag_MAO*), confirming the high persistence of the auditor's opinion (e.g.: García-Osma, Gill-de-Albornoz, & de las Heras, 2016). This is also true when considering only the MAOs issued for any specific reason (*GAAP_violation*, *Opacity*, *GCU*, or *Non_GCU*), where we see that MAOs are very likely to inform about the same underlying reasons as the year before. In contrast, it is significantly less likely to have a modified report (in general or for a specific reason) as the company's profitability (*Roa*) increases and when the parent company is listed (*ListedP*), suggesting that the negative consequences of MAOs, even at the subsidiary level, are greater for listed companies because of their higher reputational costs, so that subsidiaries of listed groups may make a bigger effort to avoid them. The coefficient of *Big* is generally positive and statistically significant at conventional levels suggesting that multinational audit firms are more prone to issue modified reports.

7.3. Robustness tests

We conduct a number of sensitivity tests to check the robustness of our results where we use logistic regression and cluster standard errors by company and year (untabulated). Our results are similar in different subsamples obtained after imposing several sample restrictions. First, we exclude from the sample the observations of financially distressed companies – companies with two consecutive years of net losses (Kaplan & Williams,

2013) or those that received a modified report for GCUs – because these companies have lower financial reporting quality (Dechow & Dichev, 2002). Second, we restrict the sample to the subsidiaries that hire international audit firms because high quality auditors are more likely to issue MAOs (Chen, Sun, & Wu, 2010; DeFond et al., 2000; Frankel, Johnson, & Nelson, 2002; Reynolds & Francis, 2000). Third, we focus only on the subsample of subsidiaries whose parent companies are listed given that publicly traded companies are faced with capital markets pressures which might imply that MAOs bring higher reputational costs, even at the subsidiary level. Fourth, we require at least 10 observations for each home country of the foreign parent companies in our sample to minimize bias.

Our results also hold when we divide the sample into sub-periods: (a) before and after 2008; and (b) depending on the Spanish audit reform (i.e., 1997-2001, 2002-2009, and 2010-2013).¹⁷ This indicates that our main results are not affected by: (1) the global financial crisis that began in 2008; (2) the harmonization of Spanish local accounting standards with the IASB model which took place in 2008; and (3) the changes in audit regulation.

We also extend model (1) with several control variables, whose calculation reduces the sample size considerably, such as: the absolute value of total accruals calculated as the annual change in non-cash current assets less the annual change in current liabilities, and less the annual depreciation expense; the cash flow from operations calculated as earnings before taxes less total accruals; the 5-year rolling standard deviation of cash flow from operations from year t to $t - 4$; the 5-year rolling standard deviation of sales from t to $t - 4$; and the number of banks the company works with. All

¹⁷ In these estimations we include year effects instead of period effects.

these additional regressors are divided by total assets, except for the number of banks. We obtain consistent results.

Finally, we take into account the fact that a number of modified audit reports contain multiple reasons for modification and so we attempt to isolate the effect of simultaneous reasons. To do so, we redefine the variables *GAAP_violation*, *Opacity*, *GCU*, and *Non_GCU* as follows: 1 if the company receives an MAO 'only' for the corresponding reason, and 0 if the audit opinion is clean. Overall, these tests indicate that our results are robust.

8. The impact of control changes

In an attempt to alleviate concerns about potential endogeneity related to reverse causality, in this section we examine the impact of control changes on the likelihood of receiving MAOs. In particular, we conduct a differences-in-differences (DID) type analysis where the control sample is composed of subsidiaries that during the entire sample period have local controlling shareholders, and the treatment sample includes subsidiaries that during the period analyzed change from a local to a foreign controlling shareholder.¹⁸ We estimate the model presented in expression (2), where we omit coefficients for simplicity.

$$Pr(OP_{i,t} = 1) = Treat_{i,t} + Foreignown_{i,t} + Control\ Variables_{i,t} \quad (2)$$

As in model (1), *OP* stands for *MAO*, *GAAP_violation*, *Opacity*, *GCU*, or *Non_GCU*. *Treat* is a dummy variable equaling 1 for observations included in the treatment sample, and 0 for those from the control sample. The rest of the control

¹⁸ We identify 149 subsidiaries where the parent company changes from local to foreign, and 717 that are owned by local groups during the whole sample period.

variables are as defined in model (1). The model is estimated using logistic regression and we correct standard errors by clustering on both company and year.¹⁹

In this analysis we compare how has the likelihood of receiving MAOs changed for local group subsidiaries after foreign takeovers (i.e., in the period when they become part of a foreign group), with respect to that of subsidiaries that remain under local control during the entire sample period. The coefficient of *Treat* captures the differences in the frequency of MAOs between the control and the treatment samples other than those related to foreign takeovers, while the coefficient of *Foreignown* shows the effect of foreign takeovers on the likelihood of having MAOs.

Results reported in Table 6 indicate that the switch from local to foreign control does not affect the overall incidence of MAOs and neither that of modified reports for GAAP violations or uncertainties other than GCUs. However, it increases the likelihood of receiving MAOs for lack of transparency (omitted information and/or scope limitations). Consequently subsidiaries are less transparent after they become part of a foreign group, which provides additional evidence supporting H1b. Foreign takeovers are also associated with a lower probability of receiving MAOs for GCUs, which is consistent with performance improvements and a higher dependence on intra-group loans after the takeover occurs.

¹⁹ Results remain substantively unchanged when using the DID design in the CEM-matched sample.

Table 6: Control changes and MAOs.

This table presents the results of the estimation of model (2). We report z-statistics adjusted for clustering on both company and year. Variable definitions are in Appendix 3. Statistical levels are indicated by *** for $p < 0.01$, ** for $p < 0.05$, and * for $p < 0.1$.

Variables	MAO	GAAP_violation	Opacity	GCU	Non_GCU
Constant	-2.525*** [-4.24]	-4.112*** [-4.73]	-4.024*** [-4.51]	-3.862*** [-3.05]	-4.683*** [-4.85]
Treat	0.214 [1.52]	0.312* [1.68]	-0.237 [-0.56]	1.042** [2.07]	0.205 [0.45]
Foreignown	-0.028 [-0.14]	-0.534 [-1.61]	1.021** [2.49]	-1.219** [-1.99]	-0.217 [-0.35]
Size	-0.080 [-1.45]	0.008 [0.12]	-0.048 [-0.51]	-0.291* [-1.83]	0.048 [0.60]
Lev	0.394* [1.73]	-0.452 [-1.19]	-0.122 [-0.36]	2.108*** [5.03]	0.330 [0.57]
Roa	-3.825*** [-6.80]	-3.222*** [-3.41]	-2.988** [-2.38]	-6.799*** [-5.03]	-2.377** [-2.07]
Liq	0.004 [0.12]	-0.048 [-0.88]	-0.006 [-0.10]	-0.080 [-1.31]	0.079 [0.92]
Lag_MAO	3.609*** [32.37]				
Lag_GAAP_violation		4.699*** [19.48]			
Lag_Opacity			5.046*** [21.78]		
Lag_GCU				3.477*** [14.12]	
Lag_Non_GCU					4.661*** [16.07]
Big	0.353*** [3.45]	0.628*** [3.73]	0.549* [1.71]	-0.062 [-0.25]	-0.440 [-1.39]
ListedP	-0.664*** [-4.23]	-0.854*** [-4.07]	-0.912*** [-5.32]	-0.175 [-0.44]	-0.644* [-1.89]
Period2	0.022 [0.14]	-0.095 [-0.42]	0.501 [1.42]	-0.494 [-0.89]	-0.243 [-0.72]
Period3	0.608*** [2.72]	0.008 [0.05]	0.798** [2.51]	2.712*** [4.85]	-0.289 [-0.53]
Industry effects	Yes	Yes	Yes	Yes	Yes
No. observations	8,394	7,000	7,015	6,762	6,659
Pseudo R ²	0.417	0.468	0.545	0.462	0.378
Wald χ^2	2,119.54***	1,004.31***	1,216.43***	397.19***	584.76***

9. Concluding remarks

Using a sample of large private Spanish subsidiaries, we investigate how the type of the controlling shareholder, local or foreign, relates to the probability of receiving a modified audit report. Controlling for other factors that the literature relates to both foreign shareholding and auditor reporting behavior, we find that companies with foreign controlling shareholders are significantly more likely to receive MAOs. Based on the research that relates foreign shareholding with earnings management in private subsidiaries, and MAOs with poor financial reporting quality, this result could be interpreted as auditors reporting the higher propensity of foreign-owned subsidiaries to incur earnings manipulation practices. Additionally, this result is consistent with the thesis that foreign-owned subsidiaries have lower incentives to avoid MAOs, which derives from their documented lower dependence on external (bank) financing.

Looking at the relation of interest after disaggregating MAOs considering their underlying reasons leads to reject the first interpretation mentioned above, and allows for a deeper understanding of the relation between foreign shareholding and financial reporting quality of invested companies.

Firstly, we find that the incidence of MAOs related to GAAP violations does not significantly differ between subsidiaries of foreign and local groups. Even though, as found in the second paper of this thesis, foreign group subsidiaries engage in accruals manipulation to a greater extent than local group subsidiaries, they are as likely as the latter to infringe the accounting standards. This result is consistent with some studies documenting that MAOs do not highlight earnings management practices (e.g.: Butler et al., 2004; Herbohn & Rangunathan, 2008; Tsipouridou & Spathis, 2014), and support the claim that DAC likely capture within GAAP earnings management (DeFond & Zhang, 2014: 287).

Secondly, subsidiaries of foreign groups are more likely to receive MAOs associated with opacity, or lack of transparency, issues (i.e., for omitted information and/or scope limitations). Like GAAP violation related MAOs, opacity related MAOs are potentially avoidable by the company. Had the company implemented the actions to correct the corresponding lack of information or GAAP violation, the auditor wouldn't have reported it. Therefore, taken as a whole, our results suggest that the cost-benefit relation of MAOs differs when the reason for the modification is GAAP violation or opacity related. It could be the case that opacity related MAOs are costlier to avoid than GAAP violation related MAOs, and/or that avoiding MAOs for GAAP violations brings about higher benefits than avoiding opacity related MAOs. Further research is needed to disentangle the role in our results of the cost-benefit relation of MAOs.

Finally, despite that they are not avoidable by the company nor they reflect the auditor's assessment of the company's financial reporting quality, for the sake of completeness, we also investigate whether foreign shareholding relates to the probability of receiving uncertainty related MAOs. Results indicate that subsidiaries owned by foreign groups are not more likely to receive GCU related MAOs than those owned by local groups, which is consistent with the findings of the first paper in this thesis, where we observe a sales advantage in the case of foreign group subsidiaries, and to prior literature documenting a lower bankruptcy risk when subsidiaries rely more on intra-group loans; while uncertainties other than GCUs are more frequent in foreign-owned companies, which might reflect the unfamiliarity of foreign investors with the local regulations.

Overall, our findings are consistent with the notion that foreign ownership does not enhance accounting quality in the private setting. Instead, foreign controlling

shareholders are associated with more opaque companies where the auditor is not allowed to perform his/her work.

Although the results are robust to a battery of robustness checks, our research is prone to limitations. We cannot rule out the possibility that any omitted variables problem drives our results, like other characteristics of the parent company not controlled for, or the auditor independence, which we assume orthogonal to foreign shareholding. Finally, the results of the differences-in-differences analysis is based on a limited number of takeovers. However, we believe that these limitations should not detract from our conclusions.

References

- Allee, K. D., & Yohn, T. L. (2009). The demand for financial statements in an unregulated environment: An examination of the production and use of financial statements by privately held small businesses. *The Accounting Review*, 84(1), 1-25.
- Arnedo, L., Lizarraga, F., & Sánchez, S. (2008). Discretionary accruals and auditor behavior in code-law contexts: An application to failing Spanish firms. *European Accounting Review*, 17(4), 641-666.
- Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics*, 39(1), 83-128.
- Bamber, E. M., & Stratton, R. A. (1997). The information content of the uncertainty-modified audit report: Evidence from bank officers. *Accounting Horizons*, 11(2), 1-11.
- Bartov, E., Gul, F. A., & Tsui, J. S. L. (2001). Discretionary-accruals models and audit qualifications. *Journal of Accounting and Economics*, 30(1), 421-452.
- Bhattacharya, U., Daouk, H., & Welker, M. (2003). The world price of earnings opacity. *The Accounting Review*, 78(3), 641-678.
- Beatty, A., & Weber, J. (2003). The effects of debt contracting on voluntary accounting method changes. *The Accounting Review*, 78(1), 119-142.
- Beuselinck, C., Cascino, S., Deloof, M., & Vanstraelen, A. (2017). Earnings management within multinational corporations. *Working Paper*, available at SSRN: <http://ssrn.com/abstract=1599678>.
- Blackwell, M., Iacus, S., King, G., & Porro, G. (2009). CEM: Coarsened exact matching in Stata. *The Stata Journal*, 9(4), 524-546.
- Blackwell, D., Noland, T., & Winters, D. (1998). The value of auditor assurance: Evidence from loan pricing. *Journal of Accounting Research*, 36(1), 57-70.
- Bonacchi, M., Cipollini, F., & Zarowin, P. (2017). Parents' use of subsidiaries to 'push down' earnings management: Evidence from Italy. *Working Paper*, available at SSRN: <http://ssrn.com/abstract=2262042>.
- Bradshaw, M., Richardson, S., & Sloan, R. (2001). Do analysts and auditors use information in accruals? *Journal of Accounting Research*, 39(1), 45-74.
- Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24(1), 99-126.
- Burgstahler, D., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: Earnings management in European private and public firms. *The Accounting Review*, 81(5), 983-1016.
- Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2004). What determines corporate transparency? *Journal of Accounting Research*, 42(2), 207-251.
- Butler, M., Leone, A. J., & Willenborg, M. (2004). An empirical analysis of auditor reporting and its association with abnormal accruals. *Journal of Accounting and Economics*, 37(2), 139-165.
- Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2011). Robust inference with multiway clustering. *Journal of Business and Economic Statistics*, 29(2), 238-249.
- Carey, P., & Simnett, R. (2006). Audit partner tenure and audit quality. *The Accounting Review*, 81(3), 653-676.
- Cassar, G. (2011). Discussion of "the value of financial statement verification in debt financing: Evidence from private US firms". *Journal of Accounting Research*, 49(2), 507-528.

- Central Intelligence Agency (CIA). (2016). *Spain*. In *The World Factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/sp.html>.
- Chan, K. H., Lin, K., & Mo, P. (2006). A political-economic analysis of auditor reporting and auditor switches. *Review of Accounting Studies*, 11(1), 21-48.
- Chen, H., Chen, J. Z., Lobo, G. J., & Wang, Y. (2011). Effects of audit quality on earnings management and cost of equity capital: Evidence from China. *Contemporary Accounting Research*, 28(3), 892-925.
- Chen, C., Chen, S., & Su, X. (2001). Profitability regulation, earnings management, and modified audit opinions: Evidence from China. *Auditing: A Journal of Practice and Theory*, 20(2), 9-30.
- Chen, J., Ding, R., Hou, W., & Johan, S. (2016). Do financial analysts perform a monitoring role in China? Evidence from modified audit opinions. *Abacus*, 52(3), 473-500.
- Chen, P. F., He, S., Ma, Z., & Stice, D. (2016). The information role of audit opinions in debt contracting. *Journal of Accounting and Economics*, 61(1), 121-144.
- Chen, F., Peng, S., Xue, S., Yang Z., & Ye, F. (2016c). Do audit clients successfully engage in opinion-shopping? Partner-level evidence. *Journal of Accounting Research*, 54(1), 79-112.
- Chen, C. J., Su, X., & Zhao, R. (2000). An emerging market's reaction to initial modified audit opinions: Evidence from the Shanghai Stock Exchange. *Contemporary Accounting Research*, 17(3), 429-455.
- Chen, S., Sun, S. Y. J., & Wu, D. (2010). Client importance, institutional improvements, and auditor independence in China: An office and individual auditor level analysis. *The Accounting Review*, 85(1), 127-158.
- Choi, S. K., & Jeter, D. C. (1992). The effect of modified audit opinion on earnings response coefficients. *Journal of Accounting and Economics*, 14(2-3), 229-247.
- Clatworthy, M. A., & Peel, M. J. (2013). The impact of voluntary audit and governance characteristics on accounting errors in private companies. *Journal of Accounting and Public Policy*, 32(3), 1-25.
- Collis, J. (2012). Determinants of voluntary audit and voluntary full accounts in micro and non-micro small companies in the UK. *Accounting and Business Research*, 42(4), 1-29.
- Collis, J., Jarvis, R., & Skerratt, L. (2004). The demand for the audit in small companies in the UK. *Accounting and Business Research*, 34(2), 87-100.
- DeAngelo, L. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183-199.
- Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(Suppl.), 35-59.
- Dedman, E., & Kausar, A. (2012). The impact of voluntary audit on credit ratings: Evidence from UK private firms. *Accounting and Business Research*, 42(4), 397-418.
- Dedman, E., Kausar, A., & Lennox, C. (2014). The demand for audit in private firms: Recent large-sample evidence from the UK. *European Accounting Review*, 23(1), 1-23.
- DeFond, M. L., Wong, T. J., & Li, S. (2000). The impact of improved auditor independence on audit market concentration in China. *Journal of Accounting and Economics*, 28(3), 269-305.
- DeFond, M. L., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3), 275-326.
- Desai, M. A., Fritz Foley, C., Forbes, K. J. (2008). Financial constraints and growth:

- Multinational and local firm responses to currency crises. *Review of Financial Studies*, 21(6), 2857-2888.
- Dewaelheyns, N., & Van Hulle, C. (2010). Internal capital markets and capital structure: Bank versus internal debt. *European Financial Management*, 16(3), 345-373.
- Dewing, I. P., & Russell, P. O. (2004). Accounting, auditing and corporate governance of European listed countries: EU policy development before and after Enron. *Journal of Common Market Studies*, 42(20), 289-319.
- Dopuch, N., Holthausen, R. W., & Leftwich, R. W. (1986). Abnormal stock returns associated with media disclosures of 'Subject to' qualified audit opinions. *Journal of Accounting and Economics*, 8(2), 93-117.
- Durnev, A., Li, T., & Magnan, M. (2017). Beyond tax avoidance: Offshore firms' institutional environment and financial reporting quality. *Journal of Business Finance and Accounting*, 44(5-6), 646-696.
- Dyreng, S., Hanlon, M., & Maydew, E. (2012). Where do firms manage earnings? *Review of Accounting Studies*, 17(3), 649-687.
- European Central Bank (ECB). (2013). Valuation of foreign direct investment positions - Final report. *Statistics Paper Series*, 4.
- European Commission (EC). (1984). Eighth Council Directive 84/253/EEC of 10 April 1984 based on Article 54(3)(g) of the Treaty on the approval of persons responsible for carrying out the statutory audits of accounting documents. *Official Journal of the European Union*, L126.
- European Commission (EC). (2001). Commission Recommendation 2001/256/EC of 15 November 2000 on quality assurance for the statutory audit in the European Union: Minimum requirements. *Official Journal of the European Union*, L91/91.
- European Commission (EC). (2002). Commission Recommendation 2002/590/EC of 16 May 2002: Statutory auditors' independence in the EU: A set of fundamental principles. *Official Journal of the European Union*, L191/22.
- European Commission (EC). (2006). Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC. *Official Journal of the European Union*, L157/87.
- European Commission (EC). (2010). *Green Paper. Audit policy: Lessons from the crisis*. Brussels, October 13.
- European Commission (EC). (2013). Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC. *Official Journal of the European Union*, L182.
- European Commission (EC). (2014a). Directive 2014/56/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2006/43/EC on statutory audits of annual accounts and consolidated accounts. *Official Journal of the European Union*, L158/196.
- European Commission (EC). (2014b). Regulation No 537/2014 of the European Parliament and of the Council of 16 April 2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC. *Official Journal of the European Union*, L158/77.
- Evans, L., & Nobes, C. (1998). Harmonization relating to auditor independence: The Eighth Directive, the UK and Germany. *European Accounting Review*, 7(3), 493-

- 517.
- Faccio, M. (2006). Politically-connected firms. *American Economic Review*, 96(1), 369-386.
- Fama, E. F., & MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *Journal of Political Economy*, 81(3), 607-636.
- Firth, M. (1980). A note on the impact of audit qualifications on lending and credit decisions. *Journal of Banking and Finance*, 4(3), 258-267.
- Francis, J., & Krishnan, J. (1999). Accounting accruals and auditor reporting conservatism. *Contemporary Accounting Research*, 16(1), 135-165.
- Frankel, R. M., Johnson, M. F., & Nelson, K. K. (2002). The relation between auditors' fees for non-audit services and earnings management. *The Accounting Review*, 77(Suppl.), 71-105.
- García-Benau, M. A., Ruiz-Barbadillo, E., Humphrey, C., & Al Husaini, W. (1999). Success in failure? Reflections on the changing Spanish audit environment. *European Accounting Review*, 8(4), 701-730.
- García-Osma, B., Gill-de-Albornoz, B., & de las Heras, E. (2016). Opinion-shopping: Partner versus firm-level evidence. *IVIE Working Paper*, WP-EC 2016-02, available at: <http://www.ivie.es/es/wp-ec/2016-2-opinion-shopping-partner-versus-firm-level-evidence.php>.
- Gopalan, R., Nanda, V., & Seru, A. (2007). Affiliated firms and financial support: Evidence from Indian business groups. *Journal of Financial Economics*, 86(3), 759-795.
- Guiral, A., Ruiz, E., & Choi, H. J. (2014). Audit report information content and the provision of non-audit services: Evidence from Spanish lending decisions. *Journal of International Accounting, Auditing and Taxation*, 23(1), 44-57.
- Guiral-Contreras, A., Gonzalo-Angulo, J. A., & Rodgers, W. (2007). Information content and recency effect of the audit report in loan rating decisions. *Accounting and Finance*, 47(2), 285-304.
- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1-3), 85-107.
- Herbohn, K., & Rangunathan, V. (2008). Auditor reporting and earnings management: Some additional evidence. *Accounting and Finance*, 48(4), 575-601.
- Ho, D. E., Imai, K., King, G., & Stuart, E. A. (2007). Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference. *Political Analysis*, 15(3), 199-236.
- Hope, O. K., Thomas, W. B., & Vyas, D. (2011). Financial credibility, ownership, and financing constraints in private firms. *Journal of International Business Studies*, 42(7), 935-957.
- Hope, O. K., Thomas, W. B., & Vyas, D. (2013). Financial reporting quality of US private and public firms. *The Accounting Review*, 88(5), 1715-1742.
- Huguet, D., & Gandía, J. L. (2014). Cost of debt capital and audit in Spanish SMEs. *Revista Española de Financiación y Contabilidad*, 43(3), 266-289.
- Institute of Accounting and Auditing (ICAC). (1991). ICAC Resolution of 19 January 1991 on the Technical Auditing Standards. *BOICAC*, 4.
- Institute of Accounting and Auditing (ICAC). (2010). ICAC Resolution of 21 December 2010 amending Section 3 of the Technical Auditing Standards, published by the Resolution of 19 January 1991 related to the Technical Standards on Reports.
- International Auditing and Assurance Standards Board (IAASB). (2015). ISA 705 (revised), Modifications to the opinion in the independent auditor's report.
- Jiang, L., & Kim, J. B. (2004). Foreign equity ownership and information asymmetry:

- Evidence from Japan. *Journal of International Financial Management and Accounting*, 15(3), 185-211.
- Kang, J., & Stulz, R. M. (1997). Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan. *Journal of Financial Economics*, 46(1), 3-28.
- Kaplan, S. E., & Williams, D. D. (2013). Do going concern audit reports protect auditors from litigation? A simultaneous equations approach. *The Accounting Review*, 88(1), 199-232.
- Karjalainen, J. (2011). Audit quality and cost of debt capital for private firms: Evidence from Finland. *International Journal of Auditing*, 15(1), 88-108.
- Kida, T. (1980). An investigation into auditors' continuity and related qualification judgments. *Journal of Accounting Research*, 18(2), 506-523.
- Kim, J. B., Chung, R., Firth, M. (2003). Auditor conservatism, asymmetric monitoring, and earnings management. *Contemporary Accounting Research*, 20(2), 323-359.
- Kim, J. B., Simunic, D., Stein, M., & Yi, C. (2011). Voluntary audit and the cost of debt capital for privately held firms: Korean evidence. *Contemporary Accounting Research*, 28(2), 585-615.
- King, G., & Nielsen, R. (2016). Why propensity scores should not be used for matching. *Working Paper*, available at: <http://gking.harvard.edu/files/gking/files/psnot.pdf>.
- Law 19/1988 of 12 July on Auditing. *Spanish Official State Gazette*, 169.
- Law 44/2002 of 22 November on Measures to Reform the Financial System. *Spanish Official State Gazette*, 281.
- Law 12/2010 of 30 June amends Audit Law 19/1988 of 12 July 1988, Securities Market Law 24/1988 of 28 July 1988 and the consolidated text of the Public Limited Companies Law enacted by Royal Decree 1564/1989 of 22 December 1989 to adapt them to Community law. *Spanish Official State Gazette*, 159.
- Law 22/2015 of 20 July on Auditing. *Spanish Official State Gazette*, 173.
- Lennox, C. S., & Pittman, J. A. (2011). Voluntary audits versus mandatory audits. *The Accounting Review*, 86(5), 1655-1678.
- McKinley, S., Pany, K., & Reckers, P. M. J. (1985). An examination of the influence of CPA firm type, size, and MAS provision on loan officer decisions and perceptions. *Journal of Accounting Research*, 23(7), 887-896.
- Minnis, M. (2011). The value of financial statement verification in debt financing: Evidence from private US firms. *Journal of Accounting Research*, 49(2), 457-506.
- Monroe, G. S., & Teh, S. T. (1993). Predicting uncertainty audit qualifications in Australia using publicly available information. *Accounting and Finance*, 33(2), 79-106.
- Mutchler, J. F. (1985). A multivariate analysis of the auditor's going-concern opinion decision. *Journal of Accounting Research*, 23(2), 668-682.
- Mutchler, J. F., Hopwood, W., & McKeown, J. C. (1997). The influence of contrary information and mitigating factors on audit opinion decisions on bankrupt firms. *Journal of Accounting Research*, 35(2), 295-310.
- Nelson, J., Ronen, J., & White, L. (1988). Legal liabilities and the market for auditing services. *Journal of Accounting, Auditing and Finance*, 3(3), 255-285.
- Nguyen, Q. (2013). Can British multinational enterprises finance economic development in South East Asia? *Multinational Business Review*, 21(2), 122-147.
- Nguyen, Q., & Rugman, A. (2015). Internal equity financing and the performance of multinational subsidiaries in emerging economies. *Journal of International Business Studies*, 46(4), 468-490.

- Nobes, C., & Parker, R. (2008). *Comparative international accounting*. Harlow, UK: Prentice Hall.
- Parker, S., Peters, G. F., & Turetsky, H. F. (2002). Corporate governance and corporate failure: A survival analysis. *Corporate Governance*, 2(2), 4-12.
- Rabe-Hesketh, S., & Skrondal, A. (2013). Avoiding biased versions of Wooldridge's simple solution to the initial conditions problem. *Economics Letters*, 120(2), 346-349.
- Ratzinger-Sakel, N. V. S. (2013). Auditor fees and auditor independence: Evidence from going concern reporting decisions in Germany. *Auditing: A Journal of Practice & Theory*, 32(4), 129-168.
- Reynolds, J., & Francis, J. (2000). Does size matter? The influence of large clients on office-level auditor reporting decisions. *Journal of Accounting and Economics*, 30(3), 375-400.
- Ruiz-Barbadillo, E., Gómez-Aguilar, N., & Biedma-López, E. (2006). Long-term audit engagements and opinion shopping: Spanish evidence. *Accounting Forum*, 30(1), 61-79.
- Senkow, D., Rennie, M., Rennie, R., & Wong, J. (2001). The audit retention decision in the face of deregulation: Evidence from large private Canadian corporations. *Auditing: A Journal of Practice and Theory*, 20(2), 101-113.
- Skrondal, A., & Rabe-Hesketh, S. (2014). Handling initial conditions and endogenous covariates in dynamic/transition models for binary data with unobserved heterogeneity. *Journal of the Royal Statistical Society*, 63(3), 211-237.
- Soltani, B. (2007). *Auditing. An international approach*. Essex: Prentice Hall.
- Stuart, E. A. (2010). Matching methods for causal inference: A review and a look forward. *Statistical Science*, 25(1), 1-21.
- Tsipouridou, G., & Spathis, C. (2014). Audit opinion and earnings management: Evidence from Greece. *Accounting Forum*, 38(1), 38-54.
- Wang, J., & Wang, X. (2015). Benefits of foreign ownership: Evidence from foreign direct investment in China. *Journal of International Economics*, 97(2), 325-338.
- Wooldridge, J. M. (2005). Simple solutions to the initial conditions problem in dynamic, nonlinear panel data models with unobserved heterogeneity. *Journal of Applied Econometrics*, 20(1), 39-54.

Appendix 1: Examples of opinion paragraphs.

Type of audit opinion	Company	Date	Opinion paragraph
<i>Qualified opinion</i>	Centros Comerciales Carrefour S.A.	31st December 2006	In our opinion, except for the effects of the matter described in paragraph 4, the financial statements referred to above present fairly, in all material aspects, the financial position of Centros Comerciales Carrefour S.A. as of December 31, 2006, and the results of its operations and its cash flows for the year then ended, and they contain the necessary and sufficient information for their interpretation and adequate understanding, in accordance with generally accepted accounting principles and standards, which are consistent with those applied in the previous year.
<i>Adverse opinion</i>	Novapet S.A.	31st December 2010	In our opinion, because of the significance of the matter discussed in the previous paragraph, the financial statements referred to above do not present fairly the financial position of Novapet S.A. as of December 31, 2010, or the results of their operations or their cash flows for the year then ended, and they do not contain the necessary and sufficient information for their interpretation and adequate understanding, in accordance with generally accepted accounting principles and standards.
<i>Disclaimer of opinion</i>	Kone Elevadores S.A.	31st December 2007	Because of the significance of the matter described in the prior paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion. Accordingly, we do not express an opinion on these financial statements.
<i>Clean opinion</i>	Repsol Petroleo S.A.	31st December 2009	In our opinion, the financial statements referred to above, present fairly, in all material respects, the financial position of Repsol Petroleo S.A. as of December 31, 2009, and the results of its operations and its cash flows for the year then ended, and they contain the necessary and sufficient information for their interpretation and adequate understanding, in accordance with generally accepted accounting principles and standards, which are consistent with those applied in the previous year.

Appendix 2: Examples of basis for modification paragraphs.

Audit opinion	Reason for modification	Company	Year	Basis for modification paragraph
<i>Qualified opinion</i>	Misstatement (material but not pervasive) - GAAP violation	Centros Comerciales Carrefour S.A.	31st December 2006	As indicated in Note 4-C) to the financial statements, the company follows the criteria of depreciating the elements of property, plant and equipment on a systematic basis over their useful life. Since 1st January 2005, Carrefour SA, the company's controlling shareholder, estimated a new useful life for the group's constructions based on its historical experience, establishing lower depreciation coefficients than those used by the company in its annual accounts. However, the company has not changed its depreciation coefficients in order to adapt them to the new useful lives estimated by the group. If the new depreciation rates defined by the group were applied, the item "Tangible fixed assets" would be increased by 73.2 million euros at 31 December 2006, of which 35.6 million euros would correspond to previous years.
<i>Qualified opinion</i>	Misstatement (material but not pervasive) - omitted information	Volkswagen Audi España S.A.	31st December 2011	The notes to the financial statements do not include the information required by Article 260 of the Companies Act relating to the remuneration of directors and members of senior management. In the financial statements for the year ended December 31, 2010, this information was not included either, so our audit report on the annual accounts for that year contained a misstatement in this regard.
<i>Qualified opinion</i>	Scope limitation (material but not pervasive)	Primark Tiendas S.L.	13th September 2008	As indicated in Note 11 to the financial statements, the company carries out significant transactions with other group companies. During the course of our work, we did not have access to the documentation which would have enabled us to assess whether the transfer prices applied in these transactions were market prices and their effect on the accompanying financial statements.
<i>Qualified opinion</i>	Uncertainties	Samsung Electronics Iberia S.A.	31st December 1999	The company is being subject to a tax inspection for the periods 1994 to 1998 and for all taxes that are applicable to it. As of the date of issuance of this report, this tax inspection has not been terminated, and the result of the inspection is therefore unknown.

Appendix 2: Examples of basis for modification paragraphs (Cont'd).

Audit opinion	Reason for modification	Company	Year	Basis for modification paragraph
<i>Adverse opinion</i>	Misstatement (material and pervasive)	Novapet S.A.	31st December 2010	The accounting is carried out in accordance with the generally accepted accounting principles and standards approved by Royal Decree 1514/20007, applying the accounting principles and the rules of recognition and measurement established therein, except for the matter described in paragraph 2 above. However, the financial statements do not conform to the structure, grouping, breakdown and information required in said decree, and the notes to the financial statements do not contain part of the required information.
<i>Disclaimer of opinion</i>	Scope limitation (material and pervasive)	Kone Elevadores S.A.	31st December 2007	Note 7 to the financial statements states that the company owns 80 percent of the share capital of Kone Ireland, Ltd. with an acquisition cost amounting to 17.4 million euros. We have not been provided sufficient supporting documentation of the percentage of share capital acquired or of the total amount of the acquisition cost and, consequently, of the valuation of such investment. As indicated in note 7, the company holds 99 percent of the share capital of Kone Portugal - Elevadores, S.L. and 100 percent of the share capital of Funchalift - Elevadores e Escadas Rolantes, Lda. with a net book value of 2.1 million euros and 0.6 million euros respectively. As of the date of issuance of this report, the audited annual accounts of these companies are not available, so we have not been able to verify whether these long-term investments are adequately valued.
<i>Disclaimer of opinion</i>	Uncertainties (significant)	Mac-Puar Servicios Industriales S.L.	31st December 2011	Note 1 to the financial statements indicates that the shareholders of Mac-Puar Corporación, S.L., based on certain agreements reached between them, started a process of restructuring and corporate reorganization in 2010. The final terms and form of execution of the restructuring are not yet closed, so the consequences that such a process might have on the different group companies and the possible effects on their annual accounts are not yet objectively determinable.

Appendix 3: Variable definitions.

Variable	Definition
<i>Big</i>	Dummy variable that equals 1 if the company is audited by a multinational audit firm, 0 otherwise.
<i>Foreignown</i>	Dummy variable that equals 1 if the parent company is foreign, 0 if it is local.
<i>GAAP_violation</i>	Dummy variable that equals 1 if the MAO refers to at least one GAAP violation, 0 if the opinion is clean.
<i>GCU</i>	Dummy variable that equals 1 if the MAO mentions a going concern uncertainty, 0 if the opinion is clean.
<i>Lag_X</i>	Variable <i>X</i> in <i>t</i> -1.
<i>Lev</i>	Ratio of total debt to total assets.
<i>Liq</i>	Current assets over current liabilities.
<i>ListedP</i>	Dummy variable that equals 1 whether the parent company is listed, 0 otherwise.
<i>MAO</i>	Dummy variable that equals 1 if the company receives a modified audit opinion, 0 if the opinion is clean.
<i>Non_GCU</i>	Dummy variable that equals 1 if the MAO reports at least one uncertainty related to reasons other than going concern, 0 if the opinion is clean.
<i>OP</i>	Stands for <i>MAO</i> , <i>GAAP_violation</i> , <i>Opacity</i> , <i>GCU</i> , or <i>Non_GCU</i> .
<i>Opacity</i>	Dummy variable that equals 1 if the MAO makes reference to omitted information and/or at least one scope limitation, 0 if the opinion is clean.
<i>Period2, Period3</i>	Dummy variables equaling 1 for the periods 2002 to 2009 and 2010 to 2013 respectively, and 0 otherwise.
<i>Roa</i>	Ratio of net income over total assets.
<i>Sales</i>	Total sales revenues.
<i>Size</i>	Natural logarithm of <i>Sales</i> .
<i>Treat</i>	Dummy variable that equals 1 for observations of companies that change from local to foreign control during the sample period, and 0 for observations of companies that are under local control during the entire sample period.