Investor Style and Domicile and Financial Reporting Comparability

Abstract

We examine the association between institutional investor domicile (foreign vs. domestic) and style (active vs. passive) on the changes and levels of accounting comparability of firms with their foreign peers for a global sample of firms during 2005-2018. We document that the level and change in foreign institutional ownership significantly associate with higher levels, and more importantly, increases in comparability among firms that report under the same set of accounting rules, while the same effect for domestic institutions is found to be not significant. Similar results are obtained when assessing the effect of active vs. passive institutional holdings on comparability improvements, as the latter are mainly driven by active institutions. Importantly, we find that the combined effect of foreign and active institutional ownership positively associates with levels, and improvements in accounting comparability significantly more than any other investor style characteristics. Our research provides evidence that foreign institutional investors improve firms' informational environment via increases in the comparability of accounting information post-investment, regardless of the exact domicile of these investors. Active investor attitude also contributes towards firms' informational efficiency, as it is observed to influence financial reporting incentives that enhance comparability for a global sample of firms following the same accounting standards.

Keywords: institutional investors, accounting comparability, foreign investors, active investors

JEL classifications: M41, M48, G14, G15, G23

1. Introduction

The purpose of this paper is to examine the effect of institutional investor characteristics i.e. domicile and investment style, on the accounting comparability of firms with their foreign peers. Institutional investors have long been considered as particularly important with regard to affecting several corporate policies of their investee firms (e.g. Gillian and Starks, 2003). Past research has shown that foreign institutional investors in particular promote market efficiency and the informative content of stock prices, and that this effect is primarily driven by active investors (Kacperczyk et al., 2021). The channel through this the effect of foreign institutional investors on market efficiency has been shown to occur is via improvements in firms' information environment, as informed foreign investors enhance the efficiency of capital allocation by increasing the informational content of prices (Kacperczyk et al., 2021).

Regarding financial reporting characteristics that could facilitate the attraction of foreign investment, accounting comparability is expected to improve the information environment for foreign investors, and also facilitate international capital flows (European Council, 2002; Barth, 2008; Chung, 2017; SEC, 2008; DeFond et al., 2011). Standard setters and academics consider the improvement of financial reporting comparability as an important benefit of applying International Financial Reporting Standards (IFRS). Past research has further shown that US institutional holdings in emerging markets have led to an increase in comparability of emerging market firm financial statements with the ones of their US peer firms, given evidence by Fang et al. (2015) that US institutional investors drive the convergence of financial reporting of emerging market firms to the US. In their study, they use a sample period before the application of IFRS in the EU in 2005 (among other jurisdictions around that time), and a sample of several emerging and developed countries and firms applying different financial reporting standards. They argue that mechanisms other than mandating the use of a single set of standards should alter firms' equilibrium reporting practices, and actually contribute to the global reporting convergence observed over the last decades, as the latter has been testified by Land and Lang (2002).

In this context, the purpose of our research is to comprehensively examine the role of institutional investors for shaping cross-country accounting comparability among countries that have already adopted a single set of standards. This sample consists of firms from countries that have adopted IFRS as of 2005, following Neel (2017), and extends until 2018, using detailed data on investor domicile from Factset.

Accounting comparability is conceptually defined as the tendency of two firms that have comparable accounting systems to produce similar financial statements for a given set of economic events (De Franco et al., 2011), so the application of this definition assumes that the relative accounting rules applicable to

firms' financial reporting should be similar. We use firms which report under the very same set of rules given that firms' and countries' financial reporting practices develop to a great extent endogenously, so any changes in them occur only if combined with a shift in reporting incentives (Holthausen, 2009). Mandating the use of a common set of accounting standards alone is unlikely to achieve financial reporting convergence (Daske et al., 2008), as there exist alternative mechanisms which contribute to the significant global reporting convergence (Fang et al., 2015). One such mechanism is investor demand for more comparable reporting (Fang et al., 2015). Therefore, employing a sample of firms which report under the same rules should help explicitly focus on whether institutional investor characteristics change managerial financial reporting behaviors, which should in turn lead to more comparable reporting.

In this context, we focus on a global sample of firms that apply the same set of standards, as opposed to using a sample of countries applying different standards, which should naturally associate with different rules and thus, diverging convergence because of this very fact. The investor preferences to be examined are investor origin i.e. foreign vs. domestic, and also investor style i.e. active vs. passive. Foreign investors have been shown to improve the information environment of investee firms in other countries (Kacperczyk et al., 2021). Investor demand for more comparable reporting could promote financial reporting convergence even among firms that use the same set of standards on paper, as past research posits that foreign institutional investors prefer comparable financial reporting, because it reduces information processing costs, and improves investment efficiency (e.g., Bradshaw et al., 2004; Covrig et al., 2007; DeFond et al., 2011), as summarized in Fang et al. (2015). Foreign investors have also been shown to increase analyst following, thus indirectly improve the information environment of investee firms (Bae et al., 2006), and also to have the power to promote real changes in investee firms, such as increasing long term investment, in terms of tangible and intangible investment, human capital, and higher innovation output (Bena et al., 2017).

In this context, we expect that the presence of significant relative investments by foreign vs. domestic investors should induce a preference for firms not creating significant information processing costs, and thus work as a factor positively affecting accounting comparability among firms that apply the same set of standards within different countries. This expectation is consistent with the findings by Fang et al. (2015), however, our research is different from them as their focus is on convergence of financial reporting (using any kind of standards) with relevant financial reporting practices undertaken by US firms. Our approach is significantly more comprehensive, as we test for the differential impact of foreign (of any origin) vs. domestic investors, and we further test for convergence of reporting practices when financial reporting standards are the same across countries. This examination should permit addressing the role of foreign investors, ceteris paribus, and focusing on the differential role of foreign vs. domestic investors for financial statement comparability, no matter what the country origin of such investors is. This is because regardless of whether their country of origin is the US or not, the very fact that institutional investors could be foreign

vs. domestic is expected to differentially affect their difficulty and cost to process financial information in a given country. Therefore, we test the differential effect of foreign vs. domestic institutional ownership on the formulation of financial reporting convergence accordingly.

Regarding investor style, passive investors should prefer accounting figures that are more comparable across firms for a number of reasons (Edwards, 2018). First, accounting-based valuation tools (e.g. ratio analysis, multiples comparisons; Edwards, 2018) should be more successful when the establishment of comparable peers is easier (Bhojraj and Lee, 2002; Edwards, 2018; Lee et al., 2015; Young and Zeng, 2015). Second, according to Bradshaw et al. (2009), analyst forecasts should be more useful in more comparable industries. Finally, a comparable accounting system makes it harder for a single manager to hide bad news from investors (Kim et al., 2016).

On the contrary, active investors should trade on perceived information advantages, so may be inclined to prefer an opaquer financial environment that permits the exploitation of such advantages (Edwards, 2018). Maffett (2012) observes higher levels of privately informed trading by institutional investors for stocks with higher levels of firm-level opacity, at the same time when we expect that information advantages should be higher for domestic vs. foreign investors. Based on the above hypotheses, Edwards (2018) observes higher demand for less comparable firms from the side of active investors, and relatively stronger demand for more comparable firms from the side of passive investors. His study examines the preferences of active vs. passive investors for US firms reporting in a more vs. less comparably manner, and does not test the effect of investor style on the formulation of financial reporting convergence across firms.

Regarding the effect of investor style on the comparability of financial reporting across firms, in case active investors work in favor of promoting market information efficiency, although they could be attracted by opacity in the financial statements of firms in order to trade on information advantages, we expect that their active investment interest in firms should result in increases in information efficiency once these advantages have been exploited. Put differently, although active investors may be attracted by firms with a more obscure information environment, given that such firms offer the opportunity to trade based on informational advantages, once active investors actively exhibit their preference for such firms, relevant advantages should be expected to dissipate, and their investment presence should ultimately make firms less informationally opaque, so more comparable in terms of their reporting practices. This expectation is consistent with recent evidence from the field by Becht et al. (2021), indicating that active investors use monitoring and engagement to generate insights and information advantages that influence internal analyst recommendations, and are ultimately used for trading decisions.

Active investors increase the price efficiency of stocks though their trades (Wermers and Yao, 2010). Passive funds prefer to trade shares of firms that do not contain significant private information, already

possessing a high degree of informational efficiency, while active funds improve the informational efficiency of stocks by helping to impound firm-specific information into stock prices (Wermers and Yao, 2010). In this way, we expect that more intensive investment by active vs. passive institutional investors should increase financial reporting convergence of firms with their different country industry peers, as the relative intensity of active trading for a given stock should advance its informational efficiency, with the latter to be consistent with increases in financial reporting comparability of a firm with its peers.

For this reason, we expect that foreign ownership as well as active investor style should contribute to firm informational efficiency, and thus lead to higher levels and increases in accounting comparability among domestic firms domiciled in different countries. We, therefore, examine the effect of foreign vs. domestic institutional ownership, in combination with active vs. passive investor style, on accounting comparability to foreign industry peers for firms from IFRS adopting countries. This examination permits assessing the effect of foreign institutional ownership and investor style on market informational efficiency via accounting comparability. The ability of value estimates to explain cross-sectional variation in observed price, reflecting pricing accuracy, and also the ability of pricing multiples to predict future market-to-book multiples should improve with higher cross-border accounting comparability (Young and Zeng 2015; Lobo et al., 2018). This fact implies that improvements in accounting comparability represent manifestations of an improved market information environment, consistent with the advancement of informational efficiency, and ultimately, global market efficiency.

In this way, the examination of this research question offers the possibility to provide additional insights into how the information efficiency of financial markets is advanced by the investment behavior of foreign institutional investors, especially active ones. Kacperczyk et al. (2021) obtain results consistent with this information environment to be improving with higher foreign and especially active institutional ownership, while we argue the increased comparability could also work as a mechanism through which this information efficiency is promoted, in case foreign and actively investing institutions lead to improvements in firms' informational environment.

We examine this research question for a global sample of mandatory IFRS reporting firms from 25 countries firms with data on Compustat Global 2005-2018, and extract institutional stock ownership data from the FactSet/LionShares database. Factset represents a leading information source covering both institutions and investment destination countries located globally, and then aggregated at the country level of investing institutions (Kacperczyk et al., 2021). Active vs. passive investor style is defined based on Ferreira and Matos (2008), while we use two proxies for comparability in accordance with previous research based on De Franco et al. (2011), as employed by Cascino and Gassen (2015).

We first document that institutional ownership regardless of origin positively and significantly associates with both levels and changes in accounting comparability. Our findings further indicate that both the level and change in foreign institutional ownership positively and significantly associate with higher levels, and more importantly, changes or improvements in comparability among firms in our sample. However, we observe that changes in domestic institutional ownership do not yield similar statistically significant results for both levels and also positive changes in comparability, in contrast to our findings for foreign institutions. Interestingly, we also find that active, but not passive institutional ownership and changes in ownership positively associate with the level and more importantly, change in comparability among domestic investee firms. However, this result is not equally significant for passive institutional ownership, indicating that trading by active, as opposed to passive investors associates with increased comparability post-investment, consistent with firms' informational environment becoming more comparable as active investors exploit their information advantages.

Importantly, we observe that the combined effect of foreign and active institutional ownership associates with levels and improvements in accounting comparability significantly more strongly than any other investor style characteristics. This finding confirms our hypothesis about foreign institutional origin improving firms' informational environment via increases in financial reporting comparability after the investment, regardless of the exact domicile of foreign investors. At the same time, an active rather than a passive attitude by foreign investors in particular is found to additionally contribute towards domestic firms' information environment improvement, and thus have the power to alter managerial financial reporting incentives that increase comparability, even when firms follow the very same set of accounting rules on paper. Our results are robust to controlling for a variety of different types of fixed effects in our analysis, which additionally includes the use of firm, and country combined with year, and industry combined with year fixed effects.

At this point, one could counter-argue that foreign investors could naturally prefer firms which are already more comparable with their industry peers abroad, rather than produce an increase in accounting comparability, as hypothesized above. Such investors could take a passive investment approach and look for firms that already have high levels of accounting comparability, rather than actively promote reporting convergence (Fang et al., 2015). This conjecture constitutes the second (competing) expectation of Fang et al. (2015), which they do not verify empirically. In every case, our basic research design consists of examining the effect of foreign vs. domestic institutional ownership on levels, and, more importantly, *changes* in comparability for firms in a given country with reference to peer firms abroad, in line with the basic examination design also used by Fang et al. (2015).

Furthermore, in an effort to address the above potential criticism, following Kalay et al. (2020) and Kacperczyk et al. (2021), we exploit the fact that foreign institutions are more likely to invest in Morgan Stanley Capital International (MSCI) indexes' stocks, because international portfolios are typically benchmarked against these indexes (Cremers et al., 2016; Bena et al., 2017). Foreign institutional investors significantly increase their holdings for stocks newly added to MSCI Standard Index (Chen et al., 2016; Kacperczyk et al., 2021). Thus, we explicitly examine whether the inclusion of new stocks into the MSCI All Country World Index (ACWI) index associates with higher levels of accounting comparability for the period immediately following the investment. Upon implementing generalized and also basic difference-in-differences analyses, our results indicate that firm inclusion in the MSCI ACWI index is associated with significantly higher accounting comparability compared to propensity score-matched comparable peers from other countries, with reference to the pre-inclusion period. We consider that this evidence provides additional reassurance on the ability of particular institutional investor characteristics to produce higher levels of accounting comparability, rather than comparability already in place to be working as a factor attracting investment from particular subgroups of investors.

Institutional investor studies can be classified into two categories: preference and consequence studies (Edwards, 2018), reflecting studies which either focus on the drivers of demand from the side of institutional investors, or on the impact of institutional investment, respectively. Our study pertains into the second category, by examining the consequences of institutional investor domicile and investment style for improving cross-country firm information environment through financial reporting convergence. Only a few studies examine the consequences of comparability as argued by DeFond et al. (2011) (e.g. Bradshaw et al., 2009; De Franco et al., 2011; Barth et al., 2012). Although we acknowledge that comparability could naturally work as a factor driving the formulation of investor preferences, our dependent variable is the level, and importantly, changes in comparability, attributed to the presence and investments of institutional holdings of varying domicile and style.

We contribute to previous research for several reasons. First, past research has indicated that investor domicile is an important driver of firm stock price informativeness, however, the exact way through which this informational efficiency is achieved could benefit from additional examination. As accounting comparability has long been considered a factor that facilitates financial decision-making by reducing information processing costs, we consider that the examination of whether this financial reporting convergence is achieved by the relative presence of foreign vs. domestic institutional investors and their investment style should help better understand the way in which this process takes place. In this way, our paper contributes to the literature on the economic importance of geography (Coval and Moskowitz, 2001), and this examination goes beyond the study of Fang et al. (2015), who examine the role of US institutional investors for the convergence of the reporting practices of non-US with US firms, for firms from countries

with differing accounting regulations. On one hand, the fundamental investor distinction made by our study is foreign vs. domestic institutions, and the relative power of the two groups to enhance accounting comparability. On the other hand, we perform our examination for firms reporting under the same set of standards, so corresponding levels of financial reporting convergence should be expected to represent the result of how these uniform standards are differentially applied by preparers/firms and understood by investors.

Second, we examine the role of investor style regarding the achievement of accounting comparability for the first time in relevant research. Active investors have been considered as especially important for market efficiency achieved through stock price informativeness, and the scope of our research is to assess whether the exploitation of expected information advantages by active vs. passive investors results in the lowering of subsequent information processing costs via enhancement in reporting convergence. We explicitly examine the effect of investor characteristics on comparability by decomposing the institutional investor base into four possible groups, depending on whether investors are foreign vs. domestic, and active vs. passive in their investment style. This analysis builds on previous research by shedding light into the exact investor attributes that affect comparability in financial statements across countries, representing a fundamental argument for applying a uniform set of accounting standards across a number of countries globally. Finally, we examine the effect of institutional investor domicile and style on accounting comparability at the global level for a set of countries that apply the same set of accounting rules. This examination truly permits testing for relevant effects in the context of firms reporting under the same accounting standards, in line with the De Franco et al. (2011) definition of accounting comparability.

The rest of the paper is organized as follows. In Section 2, we provide a literature review on accounting comparability and institutional ownership characteristics, and develop our research hypotheses. Section 3 describes the sample selection process and study methodology. Section 4 reports the empirical results, while the study concludes with Section 5.

2. Literature review and hypotheses development
2.1 Financial reporting comparability

The accounting system maps economic transactions into financial statements (Yip and Young, 2012), so accounting comparability is defined as the similarity of accounting functions to translate economic transactions into accounting data (De Franco et al., 2011). The fundamental concept of financial reporting comparability is that accounting amounts are analogous for similar economic events experienced by different firms; therefore, comparability enhances the ability of investors to understand the link between accounting numbers and economic outcomes and compare performance across firms (Cheng and Wu, 2018). The importance of comparability across financial statements in judging a firm's performance using financial

ratios is consistently stressed in financial accounting textbooks (De Franco et al., 2011), while comparability allows making meaningful comparisons among firms through the existence of comparable benchmarks. The benefits from improved comparability rely on the assumption that information about a given firm is more useful when it adopts the same accounting standards as its peers (DeFond et al., 2011). Comparability is characterized by both the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) as an enhancing characteristic of useful accounting information, which is distinct from the fundamental characteristics of relevance and faithful representation.

Comparable financial statements make it easier for investors to understand and evaluate firm performance, because of the need to make fewer adjustments and apply less judgement in calculations when comparing the performance of firms with their peers (Kim et al., 2013). Financial statement comparability allows investors better assess the quality of firms, and also enhances the usefulness of accounting information and enriches the information set available to firms and potential investors, with repercussions about capital allocation and better investment decisions (Cheng and Wu, 2018). Comparability allows stakeholders to draw more accurate inferences about economic similarities and differences across comparable firms (Zhang et al., 2020), while it further improves analysts' understanding of how economic performance translates into accounting performance, resulting in more accurate and less dispersed analyst forecasts (De Franco et al., 2011). Comparability also lowers the costs of acquiring and processing information and improves information quality for financial statement users (Zhang et al., 2020), leading to reduced monitoring costs for stakeholders to the firm (De Franco et al., 2011). It further serves as an effective governance tool (Zhang et al., 20201), with a mitigating effect on undetectable opportunistic behaviors (Kim et al., 2016). Research indicates a lower incidence of accrual-based earnings management among firms with greater accounting comparability (Sohn, 2016), while comparability further helps detect tax evasion or fraudulent activities (Qingyuan and Lumeng, 2018). Comparability also affects information transfer among comparable firms, so that investors can more accurately infer their similarities and differences (De Franco et al., 2011), with additional evidence on improving the ability of current period returns to reflect future earnings (Choi et al., 2019). Overall, accounting comparability has been associated with increased analyst following and forecast accuracy, lower forecast dispersion and decreased stock price crash risk, a lower cost of equity capital (DeFond et al. 2011; De Franco et al., 2011; Wang, 2014; Fang et al., 2015, Kim et al., 2016; Imhof et al., 2017), and additional benefits for public debt (Kim et al., 2013) and private loan markets (Fang et al., 2016).

Firms' observed level of comparability is a trade-off between costs and benefits that is ultimately shaped by economic and political factors which influence the incentives of manager and auditors, rather than accounting standards *per se* (Ball et al., 2003; Fang et al., 2015). Both the FASB and the IASB expect that more comparable information enables global markets to operate with fewer frictions (Yip and Young, 2012). This is because an important factor that explains why investors are reluctant to make cross-border

investments is the high costs of acquiring and processing information about foreign companies (Kang and Stulz, 1997; Bradshaw et al., 2004; Chan et al., 2005; Covrig et al., 2007; DeFond et al., 2011). However, financial statement comparability is expected to reduce information acquisition costs for foreign investors, and, therefore, increase their investment in foreign firms (DeFond et al., 2011).

Fang et al. (2015) directly investigate whether foreign institutional investors affect the global convergence of financial reporting practices, and show that U.S. institutional ownership is positively associated with subsequent improvements in emerging market firms' accounting comparability to their U.S. industry peers. Non-U.S. firms with higher U.S. institutional investment are also found to be more likely to switch to a Big Four Auditor, and this switch is associated with a subsequent improvement in these firms' comparability to U.S. firms (Fang et al., 2015). Kalay et al. (2020), more recently, hypothesize that U.S. investors interested in investing abroad demand both comparability of foreign firms to US firms, and also comparability of foreign firms to other foreign firms which the investor is interested in investing in, labelled as regional comparability. The first channel is consistent with evidence in Fang et al. (2015), however Kalay et al. (2020) additionally show that this second demand channel for accounting comparability is also particularly important, while both demand channels are likely to co-exist with varying degrees over time, depending on differences in the investor base and their respective objectives.

2.2 Accounting comparability and IFRS adoption

The IASB argues that a single set of high-quality global accounting standards should provide market participants with comparable financial statements to help them make economic decisions (IASC Foundation, Constitution 2(a), 2005; Cascino and Gassen, 2015). According to the IASB mission statement: *"IFRS Standards bring transparency by enhancing the international accounting comparability and quality of financial information, enabling investors and other market participants to make informed economic decisions."* (IASB, 2016). Comparability is the desired outcome of adopting a uniform set of accounting standards, as is the case with IFRS, however, the requirements to adopt a uniform set of standards does not necessarily improve accounting comparability (IASB, 2008; DeFond et al., 2011). Advocates of mandatory IFRS adoption have argued that increased uniformity should improve financial statement comparability (McCreevy, 2005; Bielstein et al., 2007; DeFond et al., 2011). IFRS adoption reduces the cross-country cost of comparing firms, and should thus improve earnings quality through better monitoring by investors, by mitigating costs of acquiring expertise (Soderstrom and Sun, 2007; Cheng and Wu, 2018). Nevertheless, accounting comparability differs from uniformity, as the former reflects the propensity required for firms to adopt common methods, while uniformity refers to the rigidly or strictness of the range of admissible

methods (Fang et al., 2021).[1] Whether increased uniformity from mandatory IFRS adoption is translated into improved comparability actually depends on implementation credibility, taking the form of faithful application of IFRS by managers (DeFond et al., 2011).

A significant amount of research has examined the effect of IFRS adoption on comparability (Lang et al., 2010; DeFond et al., 2011, 2013; Barth et al., 2012, 2018; Yip and Young, 2012; Wang, 2014). Evidence is consistent with compatibility to have increased, at least on average, following mandatory IFRS adoption (Cascino and Gassen, 2015; Yip and Young, 2012; Brochet et al., 2013; Wang, 2014), while e.g. firm liquidity around mandatory IFRS adoption is also more pronounced for firms with greater increases in cross-country comparability with industry peers (Neel 2017). Li (2010) considers improvements in comparability as a possible mechanism behind cost of equity reductions in the EU after IFRS adoption. Nevertheless, Cascino and Gassen (2015) use a number of alternative comparability measures and find that that the overall comparability effect of mandatory IFRS adoption is actually marginal.

2.3 Institutional ownership characteristics

Firms should benefit from an increased investor base (Merton, 1987), and enjoy benefits from higher ownership of their shares by institutional investors (Lehavy and Sloan, 2008). Institutional ownership increases with the quality of firms' governance structure (Chung and Zhang, 2011), and tends to concentrate towards larger companies (Gompers and Metrick 2001). Past research has shown that institutional holdings play a monitoring role for investee firms (Gillian and Starks, 2003), with the potential to also limit agency problems (Shleifer and Vishny, 1986; Admati et al., 1993; Huddart, 1993; Kaplan and Minton, 1994; Bethel et al., 1998; Maug, 1998; Noe, 2002; Hartzell and Starks, 2003). Large institutional investors may additionally convey private information that they obtain from management to other shareholders (Chidambaran and John, 2000).

Financial liberalization of equity markets has steadily increased during the last decades, opening up domestic markets to foreign investors (Bae and Goyal, 2010), giving them the opportunity to invest in domestic equity securities, and also providing domestic investors with the right to transact in foreign equity securities (Bekaert et al., 2005). Openness to foreign equity investment has been further associated with improvements in firms' information environment (Bae et al., 2006), and higher rates of economic growth

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[1] DeFond et al. (2011) define improvements in comparability as credible increases in uniformity (defined in turn as large increases in the number of industry peers using the same accounting standards in countries with credible implementation). They find that foreign mutual fund ownership increases when mandatory IFRS adoption leads to improved comparability. In every case, as will be explained in more detail in Section 3.2, we consider that the De Franco et al. (2011) definition of comparability is more intuitively applied upon examining a sample of countries with uniform accounting regulation.

(Bekaert et al., 2005; Quinn and Toyoda; 2008; Bekaert et al., 2011). Foreign institutional investors are more likely to participate in domestic markets when they face lower frictions or higher benefits (Kacperczyk et al., 2021). Foreign investors have been shown to play a monitoring role for domestic firms, with firms with high foreign institutional ownership to outperform those with low foreign institutional ownership (Huang and Shiu, 2009). Foreign ownership has overall been associated with higher valuation and improved operating performance (Ferreira and Matos, 2008), changes in corporate governance following changes in foreign institutional ownership (Aggarwal et al., 2011), increases in long-term investment in several forms of capital (Bena et al., 2017), and performing a monitoring role for domestic firms (Fang et al, 2015; Bena et al., 2017). Foreign institutions are also found to have a convincing power over corporate insiders to pursue long-term projects instead of enjoying a quiet life (Bena et al., 2017). This result is attributed to a disciplinary effect of the presence of institutional investors on corporate insiders, persuading managers who might have preferred a quiet life (Hart, 1983; Bertrand and Mullainathan, 2003) to innovate, via diplomacy or activism (Bena et al., 2017).

Kim and Yi (2015) examine whether trading by foreign and domestic institutional investors improves the extent to which firm-specific information is incorporated into stock prices, as captured by stock price synchronicity, using a sample of Korean firms. They find that trading by foreign investors facilitates the incorporation of firm-specific information into stock prices to a greater extent than trading by aggregate domestic institutions. Importantly, more recently Kacperczyk et al. (2021) find that foreign institutions unambiguously increase the informational content of domestic asset prices, with this increase to arise from new information that foreign investors bring in, and the displacement of less-informed domestic retail investors. They observe that the price informativeness of companies with the highest (lowest) foreign ownership is significantly greater (lower), for both short and long investment horizons, while improvements in price informativeness are driven by active investors, with passive investors have a smaller, but still positive effect. They further argue that the mechanism through which foreign investors positively affect domestic markets' informational environment is through an information-based channel, where informed foreign investors improve the efficiency of capital allocation by increasing the informational content of prices. Specifically, their evidence indicates that foreign institutional owners improve the information environment of domestic investees through increases in market liquidity (interpreted as a reduction in information asymmetry), increases in analyst coverage and overall information production, and reduction in firms' cost of equity capital, which in turn increases market risk sharing. Finally, they find that the information contained in foreign investors' trades does not overlap with what is contained in domestic investors' trades, and is likely different from the one produced by corporate managers.

Regarding institutional investor style, the profit-making ability of sophisticated investors is based on their superior ability to interpret the implications of public signals (Kim and Verrecchia, 1994) Large institutional

investors are found to trade primarily on widely available public information (Bushee and Goodman (2007), so they can be considered as passive investors, preferring accounting figures that are more comparable across firms (Edwards, 2018). On the other hand, active investor trade on perceived comparative information advantages, given that sophisticated investors may prefer firms with a more opaque information environment, so that they can profit from their superior information processing capabilities (Kim and Verrecchia, 1994) or privately acquired information (Maffett, 2012; Edwards, 2018).

2.4 Research hypotheses

Foreign shareholders, compared to domestic ones, may incur higher information collection costs necessary in order to effectively monitor insiders, due to the geographic and cultural distance (Kang and Kim, 2008, 2010; He et al., 2013). They may have disadvantages in gaining access to private information possessed by corporate insiders, relative to domestic institutional investors, because of distance, language and culture (Kim and Yi, 2015), at the same time when domestic institutional investors are more likely to have informal channels through which they can communicate with insiders more directly (Kim and Yi, 2015). To overcome such problems, foreign investors may have to tolerate higher information costs to overcome this disadvantage, while such information problems may discourage informed trading by foreign investors (Kim and Yi, 2015), and thus impede the incorporation of firm-specific information into stock prices (Grossman and Stiglitz, 1980; Roll, 1988; Morck et al., 2000).

However, foreign investors may be better informed than domestic ones if e.g. they are located in world financial centers, giving them quick access to better information and better learning opportunities through the transfer of information and skills (Kima and Yi, 2015). Such investors could also have an improved understanding in collecting, processing and trading on information that simultaneously influences the stock prices of firms in different countries in the world (Kim and Yi, 2015). Large foreign shareholders may improve the informativeness of stock prices through informed trading, as they tend to have a stronger incentive and better capability to collect and process value-relevant information (He et al., 2013), thus facilitating the incorporation of information about fundamentals into market pricing (Admati and Pfleiderer, 2009; Edmans, 2009; Edmans and Manso, 2011; He et al., 2013). Large foreign shareholders can also enhance price informativeness by improving the corporate governance and disclosure quality of the invested firms (He et al., 2013). At the same time, such investors may be less engaged with local managers, compared to domestic investors, and thus exert more efficient monitoring (He et al., 2013). Specifically, foreign institutional investors may be in a better position than domestic ones to monitor corporate insiders and influence strategic decision making, because domestic institutions may be more likely to have business ties with local companies, or a closer relation with investee firms (Bena et al., 2017). For example, domestic institutional investors are often affiliated with banks which at the same time act as creditors, or underwriters

or even hold seats on corporate boards, making monitoring by them less effective (Gillan and Starks, 2003; Ferreira and Matos, 2008; Bena et al., 2017), while foreign investors have fewer ties with corporate insiders, so they can reduce managerial entrenchment, and promote investment in riskier opportunities for growth (Bena et al., 2017). At the same time, foreign institutional investors could possibly better tolerate the high-risk/high return trade-off associated with long-term investment by better diversifying risks through investing in international portfolios (Bena et al., 2017).[2]

Financial reporting comparability can lower users' information acquisition and processing costs, and overall increase the quality of financial information, according to evidence by a number of studies (De Franco et al., 2011; Barth et al., 2012; Kim et al., 2013; Chen et al., 2014; Kim et al., 2016). Comparability improves analysts' information environment (Horton et al., 2013), decreases the benefits of private information (Brochet et al., 2013), improves transnational information transfer (Wang, 2014), the valuation performance of peer-based valuation models (Young and Zeng, 2015), the overall usefulness of accounting information, with evidence that it also significantly decreases a number of accounting anomalies (Chen et al., 2019). Improved information understandability from comparable firms should improve investors' understanding of firms' performance, and also allow them to obtain value-relevant information through inferences based on the performance and disclosures the firm's comparable peers (Kim et al., 2016), under the expectation that the managers of firms with higher comparability have limited ability and incentives to hoard bad news (Kim et al., 2016).

In this context, we expect that increased institutional ownership by foreign vs. domestic investors should induce a preference towards firms not presenting significant information processing costs, as such costs should be comparatively larger for foreign vs. domestic institutions, and thus trigger increases in accounting comparability in firms in different countries attracting foreign institutions. This expectation is close to arguments and evidence by Fang et al. (2015), however, our approach is different, given that we test for the differential impact of foreign (not just US) vs. domestic investors, when financial reporting regulation on paper is uniform across countries. This examination allows us to directly assess the role of foreign institutional investors, and the differential impact of foreign vs. domestic investors, with their relative information and monitoring advantages and disadvantages, for shaping financial statement comparability, no matter what the country origin of such investors is, and when accounting regulation is uniform across counties. In this way, regardless of whether the country of origin of institutional investors is the US or not,

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[2] Excess market volatility induced by foreign investors has been used as an argument in favor of halting the liberalization process of global markets (Bekaert and Harvey, 2000). Despite arguments that the trades of foreign investors are highly correlated, so that they buy and sell as a herd, Choe et al. (1999) obtain evidence suggesting that trades by foreign investors did not have a destabilizing effect on Korea's stock market during Korea's economic crisis in the last months of 1997.

we test whether the very fact that institutional investors are foreign vs. domestic is expected to differentially affect the amount of difficulty and resulting costs faced by such investors in order to process financial information in another country. Despite identified arguments about relative information disadvantages by foreign investors, we expect that their identified ability to exert monitoring and discipline on managers in a more objective way than domestic investors, together with providing incentives for investee firms to reduce information processing costs post-investment, should associate with higher levels and positive changes in comparability for domestic investee firms following foreign institutional investment.

At the same time, unlike previous research, which has examined the effect of US institutional ownership on accounting comparability for firms outside of the US, by making use of foreign firm samples reporting under different GAAP, our study aims at isolating the effect of investor style and domicile on accounting comparability, by employing a set of sample countries which report under the very same set of rules. This context should permit to more efficiently isolate the effect of investor characteristics on accounting comparability, with no confounding effects stemming from the use of multiple accounting standards across countries, leading to our first hypothesis:

H1: Foreign institutional ownership positively associates with levels and changes in accounting comparability more strongly than domestic institutional ownership.

Foreign investors may prefer firms which are already reporting more comparably with their industry pears abroad, as opposed to triggering increase in accounting comparability, as hypothesized by *H1*, given arguments by Fang et al. (2015) that such investors may adopt a passive approach to investing, and search for firms with high pre-existing levels of comparability. For this reason, we explicitly examine the effect of foreign vs. domestic institutional ownership on levels, and, more importantly, *changes* in comparability for firms in a given country with reference to peer firms abroad.

Institutional stock ownership has increased over the last 35 years, owning a larger fraction of worldwide assed, while ownership mix has shifted from active towards passive investors (Kacperczyk et al., 2018). Theoretical models predict that investors' preferences for information provided by firms should depend on their level of private information (Easley and O'Hara, 2004). Investors demand accounting comparability because it reduces information processing costs (Bradshaw et al., 2004; Covrig et al., 2007; De Franco et al., 2011).[3] Accounting comparability is decision-useful, as it is important to have benchmarks to compare

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[3] The prospect of free riding by other investors lowers monitoring incentives; however, the existence of shareholder activism is found to hold despite the existence of free-rider problems, suggesting that at least in some instances, the benefits of monitoring outweigh the costs (Fang et al., 2015). Threat of exit can lead to higher firm value and better governance (Bharath et al., 2013; Edmans et al., 2013).

to e.g. another firm's financial statements (Imhof et al., 2017). The amount of effort exerted by analysts to understand and interpret financial statements is lower for firms with more comparable peers (De Franco et al., 2011), making it less costly to assess relative firm performance for outsiders (Chen et al., 2019). By holding the accounting system constant through benchmarking against firms with high financial statement comparability, investors can make better inferences at a lower cost (Chen et al., 2019).

Financial reporting opacity provides the greatest benefits to the investors with the strongest incentives and opportunities to acquire private information (Maffett, 2012). Less public disclosure may motivate the collection of more private information, resulting in information advantages to those incurring information gathering costs (Verrecchia, 1982; Diamond, 1985; Maffett, 2012). The existence of more private information in a market increases information asymmetry, and creates the possibility for more informed investors to profit at the expense of other market participants via trading on their information advantages; in this way, certain of investors may actually benefit from more opaque financial reporting (Maffett, 2012).

According to neoclassical theories, through active investing, institutional investors can remove market anomalies and reveal information to the rest of the economy (Friedman, 1953, Fama, 1965; Ye, 2012). Large active investors are more able to conduct fundamental research, and thus increase the amount of information revealed in their trading (Kacperczyk et al., 2018). Kacperczyk et al. (2018) find that increases in the size of passive investor at the expense of active investors reduces price informativeness, with this result to be providing indications about the information effect of passive investors' size on active investors' behavior. Passive investors do not trade in an informed way, and represent, for example, index funds. Passive investors aim to replicate a benchmark index, while their buying and selling activities are mainly driven by flows into and out of funds, and not actually represent responses to firm-specific information, unlike relative patterns observed in active institutional investors (Ye, 2012). Passive funds tend to prefer stocks when firm-specific information is already substantially impounded into the stock price, suggesting that trading in stocks preferred by passive funds does not contain substantial private information (Wermers and Yao, 2010).

Comparability improvements are expected to reduce information advantages for some, but not for all insiders (Cheng and Wu, 2018), as it helps some subset of investors (unsophisticated ones) to a greater extent than others (Chen et al., 2019). Investors derive greater benefits from financial statement comparability in firms whose information environments are less transparent, referring to firms with higher information asymmetry, and which also trade in less competitive (imperfect) markets (Imhof et al., 2017). Activist investors do not need to focus directly on changing a firm's reporting practices so that they can influence comparability (Fang et al., 2015), consistent with evidence by Aggarwal et al. (2011) that increased investment by foreign institutions leads to improvement in firms' corporate governance, with repercussions for financial reporting characteristics.

On one hand, passive investors may prefer accounting figures that are more comparable across firms for a number of reasons e.g. because accounting-based valuation methods, such as ratio analysis and particularly multiples comparisons, are more effective when it is easier to establish a set of comparable peers (Bhojraj and Lee, 2002; Edwards, 2018; Lee et al., 2015; Young and Zeng, 2015). On the other hand, active investors trade on perceived information advantages, so may prefer more opaque accounting systems to better exploit such advantages (Edwards, 2018). According to Maffett (2012), more intensive privately informed trading takes place by institutional investors when levels of firm-level opacity are higher for corresponding firms, while such information advantages are higher for domestic vs. foreign investors. In this way, Edwards (2018) observes higher demand for less comparable firms from by active investors, and relatively stronger demand for more comparable firms by passive investors, when examining the preferences of active vs. passive investors for more vs. less comparable US firms – but does not examine the effect of investor style on the formulation of financial reporting convergence across firms.

Under the expectation that active institutional investors should work towards promoting market information efficiency, although active investors may be attracted by opacity in the financial statements of firms to exploit their information advantages, we expect that their active investment should result in increases in information efficiency once these advantages have been exploited. In other words, even if active investors are attracted by firms with more a obscure information environment, giving them the opportunity to trade based on informational advantages, once active investors actively exhibit their preference for such firms through trading, relevant advantages should dissolve, making firms less informationally opaque, and therefore more comparable in terms of their financial reporting practices.

Active investors increase the price efficiency of stocks when trading (Wermers and Yao, 2010). At the same time, passive funds prefer to trade in stocks with a high degree of informational efficiency already in place, which do not contain significant private information, whereas active investing helps improve the firms' informational efficiency by more strongly incorporating firm-specific information into stock prices (Wermers and Yao, 2010). Thus, we expect that higher investment by active vs. passive institutional investors should increase the financial reporting convergence of firms with their different country peers, as the relative intensity of active trading enhances the informational efficiency of underlying firms, when the latter is promoted through increases in financial reporting comparability of a firm with its peers.

For this reason, we expect that foreign ownership, combined with active investor style, should contribute to the informational efficiency of firm, and therefore, improved accounting comparability. This examination permits assessing the effect of foreign institutional ownership combined with investor style on market informational efficiency via the identified channel of accounting comparability. This expectation lies on the

assumption that comparability improvements manifest enhanced informational efficiency, leading to our second hypothesis:

H2: Foreign active institutional investor style positively associates with levels and changes in accounting comparability more strongly than foreign passive investor style.

3. Sample selection and methodology

3.1 Sample selection

Our sample selection process begins with all non-financial public firms from COMPUSTAT Global during 2005-2018, from countries that had mandatorily adopted IFRS by year 2005, following the country selection by Daske et al. (2008), with the exception of Venezuela. In this respect, we exclude, for example, Korea because of adopting IFRS in 2011, so that our sample consists of mandatory IFRS adopters throughout the sample period, as the scope of our paper is to examine the effect of institutional ownership characteristics on comparability for firms which report under the same set of rules throughout our sample period. After dropping observations with fiscal years before 2005, the sample reduces to 125,779 firm-year observations[4]. We also exclude firms without data available to estimate our main comparability proxies during our sample period, and further exclude firms without data necessary to compute the institutional ownership and control variables. In this way, we obtain an estimation sample of 53,816 firm-year observations for our two comparability proxies *COMP1* and 44,016 for *COMP2*, which will be described in detail in the subsequent section. The intersection of the former two datasets represents our final constant sample of 41,524 firm-years for 5,977 unique firms from 25 countries that had adopted IFRS by year 2005.

3.2 Measures of accounting comparability

Our first measure of accounting comparability is based on De Franco et al. (2011). Its derivation entails the estimation of the so-called "accounting function" for each firm (i.e. mapping between economic events and their corresponding accounting representation) and comparing it with the one for another firm. The shorter the distance between the accounting functions for a pair of firms, the higher their comparability would be accounting-wise. The De Franco et al. (2011) approach consists of the following three steps:

1. For each firm *i,* we estimate its accounting function which, in the De Franco et al. (2011) specification, as:

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[4] However, we need data from 1999 to compute our comparability proxies.

$$NI_{it} = \alpha_i + \beta_i Return_{it} + \varepsilon_{it} \tag{1}$$

2. We compute $E(NI)_{iit}$ and $E(NI)_{ijt}$ i.e. expected net income for firm i using firm i's stock return and j's stock return, respectively.

3. For each combination of firms (i,j) in a given year t, we compute the comparability proxy $COMP_{ijt}$ as the distance between their accounting functions:

$$COMP_{ijt} = -\frac{1}{(n+1)}\sum_{t-n}^{t}|E(NI)_{iit} - E(NI)_{ijt}| \tag{2}$$

where |x| is the absolute value of x and that for all combinations (i,j), and i and j are firms in the same industry but different countries in a given year t (same 2-digit SIC code), and also share the same fiscal year-end month date.

In our context, we estimate (1) as a rolling-window time series-regression with a window size of 5 years as in Fang et al. (2015), i.e. in (2) above, we set n=4, while t ranges from 2005 to 2018. For the computation of each (i,j)-pair-year- observation, accounting comparability $COMP_{ijt}$ requires the availability of relevant data for all the five years. For net income (NI_{it}), we use income before extraordinary items, scaled by market capitalization at the beginning of year t. $Return_{it}$ is the buy-and-hold percentage stock return, computed from nine months prior to the fiscal year end t to three months after the end of the fiscal year end t. Both net income and returns are winzorized at the top and bottom 1% to account for the effect of outliers. We adjust returns for dividends and stock splits. For each firm-year observation, the variable $COMP1_{it}$ is then computed as the average of $COMP_{ijt}$ over the set of firms to which firm i is compared to (the subscript j indexes the firm i is compared to), multiplied by 100, as in Fang et al. (2015), who closely follow De Franco et al. (2011).

Our second comparability proxy uses accruals and cash flows to account for similarity in the way that accounting and economic amounts, respectively, are treated and recognized by different firms. In particular, we use the specification adopted by Cascino and Gassen (2015), and estimate the following equation instead of (1):

$$ACC_{it} = c_i + d_i CFO_{it} + \varepsilon_{it} \tag{3}$$

where total accruals (ACC_{it}) are calculated as the difference between income from continued operations and (net) operating cash flow. Both accruals and net operating cash flow (CFO_{it}) are scaled by lagged market capitalization. $COMP2_{i,t}$ is then computed following points 2 and 3 above, and then by averaging over the

set of firms to which firm i is compared. As in the case of the previous proxy, this average value is multiplied by 100. Detailed variable definitions are provided in Appendix A.

Our first proxy for comparability based on De Franco et al. (2011) (and also Yip and Young, 2012; Cascino and Gassen, 2015; Fang et al., 2015; and Neel, 2017, for global samples; and Kim, et al., 2013; Kim et al., 2016; and Imhof et al., 2017 for US firms), uses an earnings-return regression to estimate a firm's mapping between economic events and accounting outcomes. De Franco et al. (2011) construct a dynamic, firm-specific financial statement output measure of comparability, which several advantages over an input-based method. De Franco et al. (2011) use a regression-based approach to estimate the mapping of earnings on returns, for a focal firm, and then apply these to a target firm, where comparability is measured in terms of the accuracy of these projected earnings. Their measure overcomes the issue of dealing with different accounting choices made by firms e.g. how to account for variation in their implementation, etc. by employing the actual weights firms use when computing reported earnings instead. Their measure is also not affected by lack of input comparability, and can be calculated using widely available financial statement and return data (De Franco et al., 2011). The De Franco et al (2011) comparability measure focuses on earnings, and they further find that future earnings response coefficients (FERCs) are higher for firms with greater comparability, as comparability increases the communication of firm-specific information (which also involves current and future earnings) to the stock market (Cheng and Wu, 2018). At this point, there should be mentioned that output-based measures of comparability, such as the De Franco et al. (2011) are easier to construct, but more difficult to interpret (Klein, 2018; Fang et al., 2021).

Our second proxy follows from Cascino and Gassen (2015) and also Neel (2017), and does not use returns and subsequent cash flows to measure economic events based on the financial reporting objective of providing information that is useful to investors in making their capital allocation decisions, but rather uses contemporaneous cash flows and accruals to proxy for economic events and accounting amounts, respectively. This is based on the expectation that the association between contemporaneous cash flows and accruals should be informative about both the noise reduction, and the gain and loss recognition roles of accruals (Neel, 2017).

3.3 Institutional ownership

We source our ownership data directly from the FactSet database. FactSet/LionShares data has been used by Li et al. (2006), Ferreira and Matos (2008), Chen et al. (2016), and Kacperczyk et al. (2021). Data from Factset is available on a quarterly basis, however, for purposes of our research, we use the last reported value in each calendar year. The latter rarely coincides with the last day of the calendar year, except for holdings by top insiders, information about which information is retrieved from annual and periodic company reports. FactSet collects ownership data from a wide variety of sources including press releases,

news, IPO prospectuses, national regulatory agencies, stock exchange announcements, mutual fund aggregates[5], mutual fund industry directories such as European Fund Industry Directory, company proxies, SEC 13F forms, N-30D filings, annual and periodic financial reports. Moreover, it reports holdings for a wide range of institution types, such as hedge funds, mutual funds, pension funds, investment advisers, bank trusts, and insurance companies (for a description of Factset, see Ferreira and Matos, 2008 and Kacperczyk et al., 2021).

We compute our institutional ownership variables as follows. $IO_{i,t}$ is computed as the fraction of firm i's shares held by institutional investors at the end of year t [6]. We then decompose this variable in different ways, depending on different institutional investors' characteristics. First, we distinguish between domestic and foreign ownership.[7] In particular, $DOMESTIC_{i,t}$ is the fraction of firm's i shares held at time t by all institutions domiciled in the same country where the stock is listed, relative to the firm's total number of shares outstanding[8]. Similarly, $FOREIGN_{i,t}$ is the fraction of firm's i shares held at time t by all institutions domiciled in a different country from the one where the stock is listed, relative to the firm's total number of shares outstanding. $DOMESTIC_{i,t}$ is equal to zero if a stock is not held by any domestic institution, but is held by at least one foreign institution. By the same token, $FOREIGN_{i,t}$ is set to zero if a stock is not held by any foreign institution, but is held by at least one domestic institution (Kacperczyk et al. 2021). Next, we partition our institutional ownership set into active and passive holders, on the basis of institutions' investment types, following the definitions obtained by Ferreira and Matos (2008), and create respective variables. $ACTIVE_{i,t}$ measures ownership by all active institutions for firm i in year t relative to the firm's total number of shares outstanding at that time (e.g., mutual funds, independent investment advisers, hedge funds). $PASSIVE_{i,t}$ measures ownership by all passive institutions for firm i in year t relative to the firm's

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[5] As an example, FactSet reports the holding by Artisan Partners LP in Danone SA in 2019 (0.1779%) as the sum of funds of Artisan International Fund (0.1461%), Brighthouse/Artisan International Portfolio (0.0181%), Artisan Partners Global Funds Plc - Global Equity Fund (0.0091%) and Artisan Global Equity Fund (0.0045%), where all percentages are calculated based on Danone SA's total shares outstanding.

[6] The few cases where the holder is reported to hold more than 50% in a given company in a given year are reviewed individually. When it is possible to find an original source document detailing the holding, relevant numbers are corrected, for cases where the mistake is the result of a decimal separator or thousands separator error. In all other cases, we winsorize these observations to a 50% ownership level, following Ben-David et al. (2020).

[7] We obtain information on location at the subsidiary/desk level for multinational companies. For example, for State Street Corporation, we can distinguish e.g. between State Street Global Advisors, Australia Ltd, State Street Global Advisors France SA. See https://www.sec.gov/Archives/edgar/data/93751/000114544306000351/d18466_ex-211.htm for a list of "significant subsidiaries" of State Street.

[8] For example, the holding reported by FactSet for Sella SGR S.p.A. in Ferrari S.p.A. in 2019 0.0099%, which is the sum of the holdings of the following funds: Gestnord Azioni Italia, Investimenti Bilanciati Italia, Gestnord Azioni Europa) is classified as domestic.

total number of shares outstanding at that time (e.g., bank trusts, insurance companies, index funds). Finally, we combine the classification sets of active, passive and foreign, domestic, in order to create our four variables $FOR\_ACTIVE_{i,t}$ $DOM\_PASSIVE_{i,t}$ $FOR\_PASSIVE_{i,t}$ $DOM\_ACTIVE_{i,t}$. The former is the intersection of foreign and active set, and it is set to zero if at least another intersection (for example domestic and active) is non-empty. The other variables are constructed analogously. Taken together, they provide a more fine-grained partition of our original institutional ownership set.

3.4 Baseline model specification

We use regression analysis to test our research hypotheses. In order to assess the relation between accounting comparability and (lagged) institutions' ownership, we first employ the following changes-on-changes linear model, where a firm is indexed by the subscript i at time t in country c and industry j:

$$\Delta COMP_{i,t\ to\ t+1} = \alpha_0 + \beta_1 \Delta IO_{i,t-1\ to\ t} + \beta_2 \Delta CONTROLS_{i,t-1\ to\ t} +$$
$$FIXED\ EFFECTS_{t,j,c} + \varepsilon_{i,t}$$

(4)

Where $\Delta COMP_{i,t\ to\ t+1}$ is a variable indicating change in our comparability proxies $\Delta COMP1$ or $\Delta COMP2$ for firm i and from year t to $t+1$ and $\Delta IO_{i,t-1\ to\ t}$ denotes change in institutional ownership for firm i from year $t-1$ to t. Considering the panel nature of our dataset, we estimate the following sub-cases of equation (4):

$$\Delta COMP_{i,t\ to\ t+1} = \alpha_0 + \beta_1 \Delta IO_{i,t-1\ to\ t} + \beta_2 \Delta CONTROLS_{i,t-1\ to\ t} +$$
$$FIRM\ FE_i + YEAR\ FE_t + \varepsilon_{i,t}$$

(4a)

$$\Delta COMP_{i,t\ to\ t+1} = \alpha_0 + \beta_1 \Delta IO_{i,t-1\ to\ t} + \beta_2 \Delta CONTROLS_{i,t-1\ to\ t} +$$
$$COUNTRYxYEAR\ FE_{c,t} + INDUSTRY\ FE_j + \varepsilon_{i,t}$$

(4b)

As out baseline specification, we take a one fiscal year lag between the dependent and independent variables. Longer lags i.e. two or more fiscal years can be also used especially for our context, where the effect of institutional ownership changes might take more than a fiscal year to associate with a change in accounting comparability. However, other confounding effects might also have a greater bearing on comparability changes when taking longer lags. Hence, we proceed with using a one fiscal year lag in our baseline specification.

Secondly, we estimate a levels-on-levels linear model as follows:

$$COMP_{i,t \text{ to } t+1} = \alpha_0 + \beta_1 IO_{i,t-1 \text{ to } t} + \beta_2 CONTROLS_{i,t-1 \text{ to } t} + \qquad (5)$$
$$FIXED\ EFFECTS_{t,j,c} + \varepsilon_{i,t}$$

where $COMP_{i,\,t+1}$ is a variable indicating the level of comparability proxies *COMP1*, *COMP2*, for firm *i* at time *t+1*, and $IO_{i,t}$ is the level of institutional ownership for firm *i* from at time *t*.

Again, considering the panel nature of our dataset we estimate the following sub-cases of equation (5):

$$COMP_{i,t \text{ to } t+1} = \alpha_0 + \beta_1 IO_{i,t-1 \text{ to } t} + \beta_2 CONTROLS_{i,t-1 \text{ to } t} + FIRM\ FE_i + \qquad (5a)$$
$$YEAR\ FE_t + \varepsilon_{i,t}$$

$$COMP_{i,t \text{ to } t+1} = \alpha_0 + \beta_1 IO_{i,t-1 \text{ to } t} + \beta_2 CONTROLS_{i,t-1 \text{ to } t} + \qquad (5b)$$
$$COUNTRYxYEAR\ FE_{c,t} + INDUSTRY\ FE_j + \varepsilon_{i,t}$$

These specifications are more in line with exit and voice theories (e.g. Edmans, 2009), according to which what matters is the level of institutional ownership instead of changes in it, regarding its effect on firm's outcomes. In any case, the changes-on-changes specifications as well are not sufficient *per se* to suggest that changes in institutional ownership along certain types of investors might drive changes in accounting comparability manifested in the next fiscal year. This is because there could exist parallel time trends driving changes in both institutional ownership and accounting comparability, or the two variables might be related in a different and non-causal way. In this respect, in order to explore whether certain institutional investors have a particular preference for firms which are more comparable from an accounting point of view than other firms, as opposed to producing changes in accounting comparability for their investee firms in a causal way, different techniques can be employed, such as, for example, examining trends in accounting comparability for investee farms around a suitable event, which can be argued to be reasonably exogenous. We follow a relevant approach which is described in Section 3.5 that follows.

We include mainstream control variables used by previous research on accounting comparability, which are also suitable for our context. In particular, our variable $SIZE_{i,t}$ denotes firm size, calculated as the natural logarithm of market capitalization in euros at the end of fiscal year *t* for firm *i*, $ROA_{i,t}$, represents the return-on-assets ratio, and $BM_{i,t}$ is the book-to-market ratio. These variables are meant to capture fundamental accounting and market characteristics for sample firms. Another important firm characteristic of a different nature from the previous ones, is firm age, denoted by our variable $AGE_{i,t}$, which is retrieved from Orbis BvD. If not available in Orbis, $AGE_{i,t}$ is approximated by the number of years the firm has been included in Compustat by the end of fiscal year *t*. We also include a market variable which we call $RETVOL_{i,t}$, calculated as a firm's annualized stock return volatility in year *t*. Given the fact that our main explanatory

variables are measured with reference to shares outstanding and not floating shares, we include a variable which captures the percentage of closely held shares ($CLOSE_{i,t}$). Finally, we add an indicator variable that equals one if a firm is cross-listed on a U.S. stock exchange in year t, and zero otherwise ($ADR_{i,t}$). Besides indicating the existence of an American Depository Receipt (ADR) for a given firm at time t, this variable should also denote the presence of higher quality corporate governance and transparency for this particular firm due to enhanced monitoring, in line with the documented bonding hypothesis (Coffee, 1999, 2002; Stulz, 1999; Karolyi, 2012). Detailed variable definitions are provided in Appendix A.

3.5 Identification strategy - controlling for endogeneity

Following Bena et al. (2017), Kalay et al. (2020), and Kacperczyk et al. (2021), we exploit the fact that foreign institutions are more likely to invest in MSCI indexed stocks, because international portfolios are typically benchmarked against these indices (Cremers et al., 2016; Bena et al., 2017).We use additions to the MSCI ACWI in order to account for the possibility that foreign institutional investors prefer to invest in firms that are already more comparable with foreign peers from an accounting point of view, as opposed to causally produce improvements in accounting comparability for their investee forms post-investment. Our proxy for foreign institutional ownership are stock additions (and deletions) to the MSCI ACWI (Bena et al., 2017). The MSCI ACWI incorporates the largest firms from around the world, and covers about 85% of the free float-adjusted market capitalization in every country (Bena et al., 2017). As summarized by Kalay et al. (2020), the MSCI World Index is tracked by a large number of exchange trade funds. It covers both developed and emerging markets, and it is widely followed by institutional investors, while additions to and deletions from the index are closely monitored by institutions. MSCI ACWI is maintained by MSCI Inc., a leading provider of investment decision support to investment institutions worldwide. This company is headquartered in New York, and Morgan Stanley is the controlling shareholder of MSCI Inc. (Kalay et al., 2020). Foreign institutional investors include MSCI Index constituents in their portfolios (Ferreira and Matos, 2008; Leuz et al., 2009; Chen et al., 2016).

MSCI follows a proprietary methodology to maintain desired weightings of different stocks within the index, which rests upon some general criteria, like the importance of an industry, the representativeness of the firm within its industry, and the accessibility of its stock to domestic and foreign investors. In this respect, it should be safe to assume that the level or change of accounting comparability or growth expectations arising from such levels and changes do not constitute reasons behind additions and deletions decisions. Therefore, we can plausibly consider the inclusion of a stock in the MSCI ACWI index as exogenous for our setting. Previous research has used additions to MSCI ACWI as a quasi-natural experiment (e.g., Bena et al., 2017; Kacperczyk et al., 2021) forother contexts as well. The staggered nature

of our shock contributes to mitigating concerns about omitted variables bias and time-trends outlined above (Baker et al., 2021).

MSCI makes four periodic index reviews each year in February, May, August and November. The outcomes of these reviews are publicly announced at least two weeks before their effective implementation dates. For example, on November 7th 2019, MSCI published the outcome of the respective index review specifying on the top of the 8-page document that *"The following are changes in constituents for the MSCI Global Standard Indexes which will take place as of the close of November 26, 2019(…)."*[9] Beside periodic reviews, MSCI may announce immediate index adjustments dictated by corporate events, such as delisting or bankruptcies which drive deletions from the index. In our study, we consider the announcement of an index addition as the exogenous event which should associate with different levels of accounting comparability, following the above-described four regular index reviews every year.

Propensity score matching (PSM) procedure

We further use a PSM approach to identify counterfactual firms, but otherwise similar to firms added to the index in terms of ex-ante observable characteristics. The data concerning the firms added to the MSCI ACWI during 2005-2018 are hand-collected from the MSCI website. We first retrieve data on all firms added to the index during our timeframe, exclude financial firms, and then proceed by manually matching those firms with Compustat Global, to obtain obtaining 318 unique firms matched to our Compustat sample. Firms which are added to the MSCI index, later deleted to be then added back again in a future period are kept for their first inclusion only. We also require that at least six years of accounting and ownership data be available for all firms, and that comparability proxies are available for them. This procedure results in 304 unique firms. Each treated firm is then matched with a non-MSCI ACWI added control firm, representing its nearest neighbor with replacement. Matching is based on the following variables, used as matching covariates, and measured as of one year before inclusion in the index: $FOREIGN_t$ (foreign institutional ownership), $DOMESTIC_t$ (domestic institutional ownership), $SIZE_t$ (market capitalization), BM_t (book-to-market ratio), ROA_t, $ANALYST_t$ (analyst following), FOR_SALES_t (foreign sales), $INVESTMENT_t$ (computed as capital and research and development (R&D expenses), scaled by total assets), and country fixed effects. The selection of the variables used for matching is based on Kacperczyk et al. (2021). Matched firms should be from the same industry sector as treated firms, when sectors are defined according to two-digit SIC codes.

Generalized difference-in-differences estimation

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[9] Available at: https://www.msci.com/eqb/gimi/stdindex/MSCI_Nov19_STPublicList.pdf.

Given that treatment occurs at different times for different firms we first employ a generalized difference-in-differences model specified as:

$$Y_{i,t} = \alpha_0 + \gamma_t + \delta_i + \beta_t T_{it} + \varepsilon_{i,t} \tag{6}$$

Where T_{it} is a dummy variable equal to one when group i is subject to treatment at time t, and γ_t and δ_i represent time and group fixed effects, respectively. The identification of the model is obtained out of within group variation.[10]. In our setting, we use the addition to the MSCI index as our treatment event, with corresponding firms to be considered as treated firms, and we create a dummy variable named $MSCI_{it}$ taking the value of one when firm i is added to the MSCI ACWI index in year t, while γ_t and δ_i represent our year and firm dummy variables. $COMP_{i,t}$ indicates one of our two comparability proxies. We also include a vector of lagged controls $X_{i,t-1}$ as specified:

$$COMP_{i,t} = \alpha_0 + \gamma_t + \delta_i + \beta_1 MSCI_{it} + \beta_2 X_{i,t-1} + \varepsilon_{i,t} \tag{7}$$

Main PSM model specification

In addition, we further apply a PSM combined with difference-in-differences empirical approach that traditionally compares the accounting comparability of firms that are newly added to the MSCI ACWI index, to the accounting comparability of matched control firms within the same industry, from the same or different countries. In particular, we also estimate the following equation:

$$COMP_{i,t} = \alpha_0 + \beta_1 Treat_i + \beta_2 Post_t + \beta_3 Treat_i x Post_t + \beta_4 X_{i,t-1} + FE_{t,j,c} + \varepsilon_{i,t} \tag{8}$$

Where $COMP_{i,t}$ indicates one of our two comparability proxies, as previously defined, $Treat_i$ is a dummy variable taking the value of one if firm i is newly added in the index, and zero otherwise, $Post_t$ is a dummy variable taking the value of one for firm-years following firm i's index inclusion, $X_{i,t-1}$ is a vector of lagged controls including all the control variables outlined above, and $FE_{t,j,c}$ stands for time, industry and country fixed effects. The primary coefficient of interest is β_3, which captures the sign and magnitude of the level of accounting comparability following index addition. We cluster standard errors at the pair level (i.e. treated firm and PSM-matched firm level). Detailed variable definitions are provided in Appendix A.

We plot a graph with values of the comparability measures for our treated vs. matched firms over a five-year window centered around the index addition fiscal year. Graph 1 reports mean values for the comparability measure *COMP1* over this five-year window, while Graph 2 plots values for *COMP2* over

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[10] See Wooldridge (2002, 2012) for details on the generalized difference-in-differences approach.

the same time window. The x-axis indicates years relative to the addition year, and the y-axis indicates mean values for the relevant accounting comparability proxy. In this way, we assess whether the parallel trend assumption which underlies the difference-in-differences methodology has been achieved, and whether there exists indeed an increase in accounting comparability for treated firms relative to the control group following addition in the index. Indeed, the trends observed from both Graphs 1 and 2 point towards this direction.

Insert Graphs 1 and 2 about here.

4. Empirical findings

4.1 Descriptive statistics

Table 1 reports summary statistics for our sample firm-year observations, during years 2005-2018. We first observe from the Table that values for *COMP1* and *COMP2* are broadly consistent with values obtained by Cascino and Gassen (2015). Regarding changes in comparability, mean and median changes appear to be positive for both our proxies for comparability, as mean (median) change is near the levels of 13% (21%) and 18% (30%) for *ΔCOMP1* and *ΔCOMP2*, respectively. Regarding the intensity of institutional ownership, we observe that this represents about 25% of total shareholdings, on average, for our sample firms (18% for medians). Domestic ownership exceeds foreign, with average percentages of about 15% vs. 11% (6% vs. 5% for medians). Actively managed holdings strongly exceed passive ones, with mean values of approximately 15% for active vs. 4% for passive investors, and median values to follow similar trends. Relevant trends for a greater representation of active vs. passive institutions in our sample are also observed when for holdings by *FOR_ACTIVE$_t$* vs. *FOR_PASSIVE$_t$*, and holdings by *DOM_ACTIVE$_t$* vs. *DOM_PASSIVE$_t$*, in terms of median and median values. This is because active holdings exceed passive holdings when made by both foreign and domestic investors.

Regarding the behavior of other market and fundamental accounting variables, we observe that our sample firms are profitable, on average, with *ROA* values of 0.03 for means (0.04 for medians). Book value is found to represent roughly 63% of sample firm market value using medians, while firms have a median age of 21 years. Average and median values are very close for volatility of returns, with relevant values of around 0.3. The same applies for closely held shares, with mean and median values to be both close to 30%. Finally, only about 1.5% of our sample firms appear to be listed in a US stock exchange.

Insert Table 1 about here.

Table 2 reports yearly changes for our comparability proxies *COMP1* and *COMP2*, for each year separately during 2005-2018. It can be readily observable from the table that values for means and medians follow very much similar trends for all years in the sample, and this is the case for both comparability proxies.

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Interestingly, we observe that mean and median changes in comparability are positive during years 2005-2008, which is the period immediately after the mandatory application of IFRS. We then observe negative changes in comparability during years 2010-2016, turning back into positive towards the final years of the sample period, that is during 2017-2018. On average, annual changes in comparability are positive for sample firms, with mean (median) values of about 0.13 (0.18) for *COMP1* and 0.21 (0.30) for *COMP2*. Overall, descriptive statistics from Table 2 indicate that firms increased their financial reporting comparability in the years immediately after 2005, which is consistent with a positive relevant influence arising from the adoption of IFRS, but comparability then decreased after the first post-adoption years. This evidence is consistent with arguments that improvements in comparability are achieved in a much more complex way than by simply mandating the adoption of a uniform set of standards, and rather reflects changes in managerial incentives to report in a more comparable way with peers (Fang et al., 2015).

Insert Table 2 about here.

Table 3 reports pairwise Pearson correlation coefficients for the variables employed in our empirical estimations. As intuitively expected, the correlation coefficient between *COMP1* and *COMP2* is 0.7417 and strongly significant at the 1% significance level. Correlations between comparability measures and proxies for institutional ownership, either general or foreign/domestic, and active/passive, together with the intersection between active/passive and foreign/domestic ownership, are also strongly significant, with relevant coefficient values of about 0.10, and ranging between 0.05-0.10, depending on the type of ownership. This constitutes preliminary evidence on significant correlations between accounting comparability and institutional ownership, regardless of particular characteristics and different types of institutions, before moving into the examination of causality between institutional ownership characteristics and accounting comparability. Nevertheless, relevant correlations are higher for comparability and foreign vs. domestic institutions (higher vs. lower than 0.10), and active vs. passive institutions (around 0.12-0.13 vs. around 0.05). Regarding correlations among control variables, we observe they are significant in an important number of occasions, but no values exceptionally high for them in every case.

Insert Table 3 about here.

4.2 Baseline model findings

Table 4 Panel A reports ordinary least squares (OLS) regression results for equations (4), and (4a)-(4b), examining the relation between changes in institutional investors' ownership from fiscal year *t-1 to t,* and subsequent changes in firms' accounting comparability from fiscal year *t to t+1,* when using $\Delta COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), $\Delta COMP2_{t+1}$ in columns (2) and (4). Columns (1) and (2) of the Panel report results estimated with year and firm fixed effects, while columns (3) and (4) relevant

results with country×year and industry fixed effects. Panel B reports similar results for equations and (5) and (5a)-(5b), this time on the relation between the levels of institutional investors' ownership in year t and subsequent levels of in firms' accounting comparability, when using $COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), and $COMP2_{t+1}$ in columns (2) and (4). Again, columns (1) and (2) report results with year and firm fixed effects, while columns (3) and (4) report results with country×year and industry fixed effects. Standard errors are adjusted for heteroskedasticity and clustered at the firm level.

Insert Table 4 about here.

We observe from both Panels of Table 4, when examining the effect of changes in institutional ownership (ΔIO_t) on changes in accounting comparability in Panel A, or repeating this examination for the association between levels of institutional ownership (IO_t) and levels of accounting comparability in Panel B, that our independent variable of interest, measuring changes or levels in institutional ownership, is strongly positively and significantly associated with changes or levels in accounting comparability, respectively. This effect is found to hold for both our comparability proxies $COMP1$ and $COMP2$, and when applying variations in the type of fixed effects applied each time. In this way, we strongly confirm evidence by previous research that institutional ownership when defined in a generic way (so before isolating any particular characteristics it may possess), is a factor significantly explaining increases in accounting comparability (Fang et al., 2015), in addition to levels of comparability.

Regarding the behavior of the rest of the variables, firm size and profitability are observed to positively and significantly associate with comparability changes and levels, regardless of model specification, indicating that larger and more financially robust firms tend to have greater incentives to report in a more comparable way with their peers. Firms with lower changes, or in most cases, levels of the book-to-market ratio, and low volatility of returns also tend to report more comparably, and associate with improvements in comparability. This result is intuitively explainable upon considering that firms with low volatility of returns and changes in such, or low BM_t, should be firms with more stable performance compared to the rest of the sample, and this type of behavior could be reflected in their choice to report in a way that significantly compares with their peers as well. Finally, percentages of closely held shares, firms' listing in the US market and firm age do not appear to significantly associate with levels and changes in accounting comparability in a consistent way across the different model specifications.

Table 5 proceeds with reporting the results of the analysis on the effect of foreign vs. domestic institutions on changes and levels in accounting comparability post-investment. Table 5 Panel A reports regression results on the relation between changes of foreign vs domestic institutional investors' ownership from fiscal year t-1 to t and subsequent changes in firms' accounting comparability from fiscal year t to $t+1$, when using $\Delta COMP1_{t+1}$ ($\Delta COMP2_{t+1}$) as proxy for comparability in columns (1) and (3) ((2) and (4)), and when

applying year and firm fixed effects (columns (1) and (2)) or country×year and industry fixed effects (columns (3) and (4)). Panel B of the Table reports equivalent results in corresponding columns, but this time when assessing the relation between the levels of foreign vs domestic institutional investors' ownership in year *t* and subsequent levels in firms' accounting comparability.

Insert Table 5 about here.

We observe from Panel A of the Table that changes in foreign, but not domestic institutional ownership, positively and significantly (at 1% level) associates with changes in subsequent financial reporting comparability, for both comparability proxies employed and in all model specifications. Findings from Panel B indicate that levels of domestic and foreign ownership positively and significantly associate with future levels of comparability, while this result is significant at 1% level across all model specifications only in the case of foreign ownership. In this way, we find that although levels of ownership significantly relate to future levels of comparability regardless of investor domicile, changes in ownership significantly relate to future changes in comparability only for foreign institutional ownership. This result provides a direct extension to evidence by Fang et al. (2015) on US institutional holdings associating with comparability improvements in oversees investee firms. It further constitutes evidence on a significantly stronger role from the side of foreign investors to produce increases in financial reporting incentives that improve comparability for domestic firms, given that all firms in our sample report under the same set of standards on paper. Foreign investors are, thus, observed to have a relatively stronger influence on the improvement if investee firms' information environment, to the extent that comparability improvements constitute manifestations of this kind of improved informational efficiency, compared to domestic investors. Results from Table 5 confirm *H1*, and indicate that the factors identified to induce a greater tendency for foreign vs. domestic investors to trigger improvements in comparability are empirically confirmed through this evidence.

Table 6 reports results on the relation between changes of active or passive institutional ownership from fiscal year *t-1* to *t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1* (Panel A), and for levels of active or passive institutional ownership in year *t* and subsequent levels of firms' accounting comparability (Panel B), when both *ΔCOMP1$_{t+1}$* (columns (1) and (3)) and *ΔCOMP2$_{t+1}$* (columns (2) and (4)) are used as proxies of financial reporting comparability, and estimating relevant equations with either year and firm fixed effects (columns (1) and (2)), or country×year and industry fixed effects (columns (3) and (4)). There can be readily observed from Panel A of the Table that changes in active institutional ownership positively and significantly associate with subsequent changes in accounting comparability for three out of four model specifications for this panel (except when *ΔCOMP1* is used as a proxy for comparability and also year and country fixed effects are used), at 5% or 1% (for one specification)

significance levels. However, changes in passive ownership are not overall found to significantly associate with future changes in comparability, and are actually observed to negatively and significantly associate with changes in comparability in one of four model specifications.

Insert Table 6 about here.

Regarding levels of comparability in Table 6 Panel B, we observe similar trends as in Panel A, given that the levels of active, but in no case passive, institutional holdings, are found to positively and significantly associate with future levels of comparability for both proxies used and under all model alternatives. Therefore, results from Panel B confirm the direction of results from Panel A on a significant effect of active, but not passive holdings and changes thereof, on financial reporting comparability improvements, and also levels of comparability, and provide indirect support for H2 which predicts that foreign ownership combined with an active investment approach should induce improvements in comparability more intensely than passive institutional ownership. At the same time, this evidence is consistent with active institutional ownership working as a driver for improvements in accounting compatibility, after any firm-level informational opacity that could justify and make active investment management profitable has been exploited. In this way, the final result of active institutional ownership is observed to correspond with increases in comparability, representing an environment of decreased firm-level informational opacity.

Table 7 finally reports results on the relation between changes in institutional investors' ownership characteristics [(foreign,domestic)&(active,passive)] from fiscal year *t-1*, to *t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1* (Panel A), and levels of institutional investors' ownership characteristics [(foreign,domestic)&(active,passive)] in year *t*, and subsequent levels of firms' accounting comparability (Panel B), again when both $\Delta COMP1_{t+1}$ (columns (1) and (3)) and $\Delta COMP2_{t+1}$ (columns (2) and (4)) are used as proxies of financial reporting comparability, and when estimating relevant equations with either year and firm fixed effects (columns (1) and (2)), or country×year and industry fixed effects (columns (3) and (4)). Results reported in Table 7, in this way, directly address the prediction made by *H2*, expecting that foreign active institutional investor style positively associates with levels and changes in accounting comparability more strongly than foreign passive investor style, by simultaneously examining the effect of investor domicile combined with style on changes and levels of accounting comparability.

Insert Table 7 about here.

We observe from Table 7 Panel A that among the four different institutional investment type combinations assessed (foreign/domestic, combined with active or passive investment style), only for changes in foreign combined with active institutional holdings do we observe a positive and significant (at 1% level) effect on changes in comparability, regardless of proxy for comparability used or model specification. The effect of

all other investment type combinations is observed not to be statistically significant with respect to producing changes in comparability, with the exception of changes domestic and active institutional holdings for one out of four Panel A specifications, which is weakly significant at 10% level. Evidence on levels of institutional ownership and comparability from Panel B of the Table are in accordance with relevant findings from Panel A, as foreign and active ownership is observed to be positively and significantly associated with future levels of comparability, however, this same result is also found for domestic and active institutions as well. However, no significant effect is consistently observed for passive holdings associating with future levels of comparability, no matter whether they come from foreign or domestic investors.

Appendix B reports results from Tables 4, 5, 6 and 7, for changes in comparability as the dependent variable, but this time when employing firm, country×year and industry×year fixed effects (in Panel A for Table 4-equivalent results, and Panel B for results comparable to the ones reported in Tables 5, 6, and 7, instead of the simpler specifications reported in respective Tables. Regarding results reported in Panel A of Appendix B, referring to changes in institutional ownership, these have been calculated both when clustering standard errors at the institutional ownership level and the institutional ownership and year level in columns (1), (2) and (3), (4) of the Panel, respectively. There can be readily observed from both Panels of the Appendix that the use of this kind of form of more stringent fixed effects for relevant estimations leads to no qualitative changes in the direction of our results. This finding reinforces our confidence that baseline analyses remain unaffected by the quality and strength of fixed effects employed in our estimations, as the latter remain unchanged when controlling for different types of fixed effects that could alter the direction of our results.

In this way, we overall observe that our findings that foreign, but not domestic ownership positively and significantly associates with future levels, and more importantly, changes or improvements in accounting comparability post-investment, are actually driven by active investors. In other words, our evidence is consistent with foreign investors inducing improvements in domestic firms' informational environments, and being successful in this task only when they are activist investors in investee firms, and can thus exert pressure for comparability improvements upon having exploited any pre-existing informational opacity that might have attracted them in the first place. H2 is, therefore, confirmed, and evidence indicates that improvements in price efficiency brought through foreign institutional trading, especially active one, found by past research (Kacperczyk et al., 2021) should relate, at least in part, with informational environment improvements arising from the enhancement of financial reporting comparability across firms.

4.3 Identification strategy - additions to MSCI

We first report in Table 8 some preliminary results on the effect of new additions in the MSCI ACWI index on foreign/domestic, and foreign combined with active or passive institutional holdings, for newly added (treated) vs. non-added, but otherwise similar, propensity score matched firms. Using pair fixed effects, In Panel A, in columns (1)-(3), the dependent variable is foreign institutional ownership, and domestic institutional ownership in columns (4)-(6). In Panel B, in columns (1)-(3), the dependent variable is foreign and active institutional ownership, and foreign and passive institutional ownership in columns (4)-(6) (as previously defined). Our independent variable of interest is $MSCI_{i,t}$, or a binary variable equal to 1 when firm i is added to the MSCI ACWI index in year t, and 0 otherwise. Column (1) reports estimates for a 5-year window (or years [-2,2] around addition), column (2) for the 3-year window (or years [-1,1] around addition), and similarly for columns (4)-(6).

Insert Table 8 about here.

Results reported in Panels A-B of Table 8 confirm previous findings by Kacperczyk et al. (2021), for our sample as well. Judging from the sign and significance of the $MSCI_{i,t}$ binary indicator, these results show that new inclusions into the MSCI index significantly associate with higher foreign but not domestic institutional ownership (Panel A). At the same time, findings reported in Panel B of Table 8 show that MSCI inclusion significantly positively associates with higher foreign and active, but generally not passive, institutional ownership, confirming Kacperczyk et al. (2021) in this respect.

Next, Table 9 reports results for equation (7), when performing generalized difference-in-differences estimation analyses to examine whether new additions in the MSCI ACWI index are associated with subsequent higher levels of comparability for newly added vs. non-added propensity score matched firms. In results reported in columns (1)-(3), the dependent variable is comparability proxy *COMP1*, while *COMP2* is used as the dependent variable in results reported in columns (4)-(6). $MSCI_{i,t}$ is a dummy variable already defined. Column (1) reports estimates for a 6-year window (or years [-3,2] around addition), column (2) reports estimates for a 5-year window (or years [-2,2] around addition), column (3) for the 3-year window (or years [-1,1] around addition), and similarly for columns (4)-(6).

Insert Table 9 about here.

We observe from both Panels of Table 9 that inclusion in the MSCI ACWI index positively and significantly associates with the level of accounting comparability for treated firms, regardless of model specification in these panels reported in different columns. The MSCI binary indicator is almost in every model specification

positively significant at either 5% or 1% significance level, indicating that MSCI inclusion goes hand in hand with stronger financial statement comparability.

Finally, Appendix C reports results for equation (8), when applying basic difference-in-differences estimation, for comparability proxies *COMP1* (Panel A) and *COMP2* (Panel B), for a 5-year (or years [-2,2] around addition), or a 3-year window (or years [-1,1] around addition) in columns (1) and (2) of both Panels, respectively. We first observe that *Treat,* indicating that a firm has been newly added to the MSCI ACWI index in a given addition date, is not statistically significant in results reported in Panel A, but is so for in Panel B, tentatively indicating that newly added firms are characterized by lower levels of comparability on an absolute basis, compared to control firms, at least when comparability is defined in terms of *COMP2*. We do not overall observe consistent statistical significance across Panels and model specifications for the variable *Post*, indicating years after inclusion (i.e. year 1 and 2). Importantly, we observe that in both Panels, the coefficient of the interaction term *Treat×Post* is positive and statistically significant at either 10% or 5% in results for both comparability proxies reported in both Panels.

Evidence from Table 8, confirmed by findings reported in Appendix C overall indicate that recent additions to the MSCI index are associated with significantly higher levels of accounting comparability for relevant firms, compared to otherwise similar but not added to the index comparable counterparts. This evidence contradicts the criticism that institutional investors prefer firms with preexisting high levels of accounting comparability to invest in, so their holdings should not actually produce any changes in accounting comparability. This is because we find that new firm inclusions into the index, representing a fact expected to naturally attract more institutional holdings according to arguments and evidence developed by previous research, are accompanied by significantly higher levels of comparability post-event for relevant firms, compared to otherwise similar but non-added to the index firms.

5. **Conclusion**

In this paper, we examine the association between institutional investor domicile i.e. foreign vs. domestic, and style i.e. active vs. passive on levels and changes of financial reporting comparability for a large global sample firms which report under the same set of standards, referring to IFRS. Foreign investors have been shown to improve the information environment and the price informativeness of domestic firms (Kacperczyk et al., 2021). We expect that institutional investing by foreign vs. investors should associate with changes in firms' information environments by affecting managerial reporting incentives which associate with financial reporting policies involving lower information processing costs, and therefore positively affect accounting comparability even among firms that apply the same set of standards but are based in different countries. This expectation extends arguments and evidence by Fang et al. (2015) for US investors. However, our research does not examine US investors only, but rather distinguishes between the

financial reporting convergence role played by foreign vs. domestic institutions more generally, while we examine the convergence of reporting practices when financial reporting regulation is uniform across investee countries.

Furthermore, we examine the effect of investor style on financial reporting convergence formation, by distinguishing between active and passive institutions. Regarding investor style, we expect that although active investors could be attracted by firms with a more obscure information environment, given that such firms provide trading opportunities and competitive informational advantages, once active investors have actually actively traded on such advantages, these should be expected to dissipate, resulting in reductions in firms' informational opacity, and thus increased convergence in financial reporting. Thus, we expect that foreign ownership together with active investor style should contribute to the informational efficiency of firms, manifested through higher levels and more importantly, improvements in accounting comparability for domestic investee firms, and examine the combined effect of foreign vs. domestic institutional ownership, and also active vs. passive investor style, on financial reporting comparability to foreign peers for investee firms incorporated countries reporting under similar accounting standards.

We find that foreign institutional ownership, regardless of investor domicile, positively and significantly associates with both levels and, more importantly, changes in accounting comparability. However, this same result does not hold for domestic institutional ownership. We further find that active, but not passive changes (and also levels) in ownership positively associate with the level and change in future accounting comparability. As this result is not equally significant for passive institutional ownership, we interpret this evidence as an indication that trading by active, but not passive investors associates with increased accounting comparability after the investment. This interpretation is based on the expectation that the informational environment of firms improves through improvements in comparability, once active investors have exploited any information advantages that have facilitated their trading. Most importantly, we find that that the combined effect of foreign and active institutional ownership associates with levels and improvements in accounting comparability significantly more strongly than any other combination of investor style and domicile characteristics. This finding confirms our expectation that foreign institutional investment improves the informational environment of firms via increases in financial reporting comparability post-investment, regardless of the exact domicile or origin of foreign investors. Moreover, this result is found to be mainly driven by active foreign investment, observed to have the ability to alter managerial reporting incentives via increases in accounting comparability, even for firms that report under the same set of accounting regulation. Our results are robust to a battery of different types of fixed effects employed, which further includes the use of firm, together with country and year, and industry and year, fixed effects.

A counter argument at this point could be that institutional investors may tend to prefer firms which are already reporting in a more comparable manner, rather than alter managerial incentives for reporting more comparably, and thus produce increases in comparability themselves. For this reason, we explicitly examine whether the inclusion of new stocks into the MSCI ACWI index associates with higher levels of accounting comparability following the addition in the index, for firms which were newly added into this index, compared to propensity score matched firms which did not experience this event. This examination is based on similar analyses by Kalay et al. (2020) and Kacperczyk et al. (2021), under the expectation that foreign institutional holdings should increase for firms included in the MSCI index (e.g. Bena et al., 2017). After performing both generalized and traditional difference-in-differences analysis, we find that new firm additions to the MSCI ASWI index associate with significantly higher levels of accounting comparability post-event, in comparison to non-added but otherwise comparable peer firms. This evidence is, thus, indicative of foreign ownership having the ability to trigger improved comparability, as opposed to observing pre-existing comparability being the driver of increases institutional holdings.

Our evidence at this point extends Fang et al. (2015), who find that US institutional investors holdings associate with improvements in comparability for emerging market firms, which report under different accounting standards. We find that the fundamental investor distinction between foreign vs. domestic significantly associates with enhancement of accounting comparability, and this time for firms reporting under the same set of standards, providing evidence that foreign holdings can have a positive influence on managerial motivation to report more comparatively even when the same set of standards are followed across jurisdictions.

Furthermore, Kacperczyk et al. (2021) show that firms' information environment improves with higher foreign and, especially, active institutional ownership. Choi et al. (2019) also argue that their evidence on comparability helping investors to understand firm-specific information suggests that comparability is useful for investors when they evaluate alternative investments, and it also highlights the usefulness of comparability for improving capital allocation efficiency, given that more informed stock prices should lead to a more efficient allocation of wealth (Durnev et al., 2003; Durnev et al., 2004). In this way, examining whether foreign institutional investor ownership increases domestic investee firm comparability gives the opportunity to examine whether increased comparability could work as a mechanism through which the informational information efficiency of firms driven by foreign institutional ownership can be promoted. Our evidence is consistent with foreign institutional investors improving firms' informational environment via increases in the comparability of accounting information post-investment, regardless of exact investor domicile.

We further explicitly decompose investor characteristics into active vs. passive style investing, given that active investors have been associated with increased stock price informativeness to a greater extent than passive ones (Kacperczyk et al., 2021). Our research provides insights into how the exploitation of information advantages by active vs. passive investors helps decrease information processing costs, as manifested by more comparable reporting. Finally, our evidence indicates the exact investor style attributes which associate with more comparable financial reporting, and provides insights on how financial reporting comparability is achieved, either by mandating a similar set of standards, or through the existence of market mechanisms leading to this very same outcome.

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Appendix A : *Variable definitions*

Variable name	Variable definition (Source: Compustat Global)
Comparability proxies	
$COMP1_t$	First proxy for accounting comparability (as described in Section 3.2). $\Delta COMP1_t$ denotes the change in $COMP1_t$ from year $t - 1$ to t.
$COMP2_t$	Second proxy for accounting comparability (as described in Section 3.2). $\Delta COMP2_t$ denotes the change in $COMP2_t$ from year $t - 1$ to t.

Ownership Variables (Source: FactSet)	
IO_t	Fraction of a firm's shares held by institutional investors at the end of year t. ΔIO_t denotes the change in IO_t from year $t - 1$ to t.
$PASSIVE_t$	Ownership by all passive institutional investors following the definition of passive investors by Ferreira and Matos (2008) (e.g., bank trusts, insurance companies, and other institutions). $\Delta PASSIVE_t$ denotes the change in $PASSIVE_t$ from year $t - 1$ to t.
$ACTIVE_t$	Ownership by all active institutional investors following the definition of active investors by Ferreira and Matos (2008) (e.g., mutual funds, independent investment advisers, hedge funds). $\Delta ACTIVE_t$ denotes the change in $ACTIVE_t$ from year $t - 1$ to t.
$DOMESTIC_t$	Ownership by all institutions domiciled in the same country as where the stock is listed. $\Delta DOMESTIC_t$ denotes the change in $DOMESTIC_t$ from year $t - 1$ to t.
$FOREIGN_t$	Ownership by all institutional investors domiciled in a different country as where the stock is listed. $\Delta FOREIGN_t$ denotes the change $FOREIGN_t$ from year $t - 1$ to t.
FOR_ACTIVE_t	Ownership by all foreign and active institutional investors. ΔFOR_ACTIVE_t denotes the change in FOR_ACTIVE_t from year $t - 1$ to t.
DOM_ACTIVE_t	Ownership by all domestic and active institutional investors. ΔDOM_ACTIVE_t denotes the change in DOM_ACTIVE_t from year $t - 1$ to t.
$FOR\_PASSIVE_t$	Ownership by all foreign and passive institutional investors. $\Delta FOR\_PASSIVE_t$ denotes the change in $FOR\_PASSIVE_t$ from year $t - 1$ to t.
$DOM\_PASSIVE_t$	Ownership by all domestic and passive institutional investors. $\Delta DOM\_PASSIVE_t$ denotes the change in $DOM\_PASSIVE_t$ from year $t - 1$ to t.

Other Variables used in the primary analyses and PSM (Source: Compustat Global, or Orbis, Worldscope, and IBES if specifically indicated)

$SIZE_t$	Firm size, calculated as the natural logarithm of market capitalization in euros at the end of year t. $\Delta SIZE_t$ denotes the change in $SIZE_t$ from year $t-1$ to t.
ROA_t	Return-on-assets ratio, calculated as net income divided by book value of assets at the end of year t. ΔROA_t denotes the change in ROA_t from year $t-1$ to t.
BM_t	Book-to-market ratio, calculated as book value of common equity divided by market capitalization at the end of year t. ΔBM_t denotes the change in BM_t from year $t-1$ to t.
$RETVOL_t$	Annualized stock return volatility in year t, calculated as the standard deviation of monthly returns times $\sqrt{12}$. $\Delta RETVOL_t$ denotes the change in $RETVOL_t$ from year $t-1$ to t.
$CLOSE_t$	Fraction of a firm's shares closely held by insiders and controlling shareholders at the end of year t, set to zero if missing. $\Delta CLOSE_t$ denotes the change in $CLOSE_t$ from year $t-1$ to t (Source: Worldscope, item WC08021).
ADR_t	An indicator variable that equals one if a firm is cross-listed on a U.S. stock exchange, and zero otherwise as of the end of year t. ΔADR_t denotes the change in ADR from year $t-1$ to t.
AGE_t	Firm age in years, retrieved from Orbis BvD. If not available in Orbis age is approximated by the number of years the firm has been included in Compustat Global by the end of year t.
$ANALYST_t$	The number of analysts covering a stock at the end of year t (Source: IBES)
FOR_SALES_t	Foreign sales as a percentage of total sales measured at the end of year t (Source: Worldscope, item WC08731).
$INVESTMENT_t$	Computed as the sum of research and development expenses and capital expenditure divided by total assets.

Appendix B - The effect of institutional holdings on changes in accounting comparability: imposing firm, country×year and industry×year fixed effects

Panel A reports OLS regression results on the relation between changes in institutional investors' ownership from fiscal year *t-1 to t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*, when using $\Delta COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), $\Delta COMP2_{t+1}$ in columns (2) and (4), comparable to results reported in Table 4, but this time by estimating all models with firm, country×year and industry×year fixed effects. Standard errors, adjusted for heteroskedasticity and clustered at the institutional ownership level, and at the institutional ownership and year level corresponding to columns (1), (2) and (3), (4), respectively, are reported in parentheses. Panel B reports regression results comparable to relevant results reported in Tables 5, 6, and 7, in columns (1) and (2), (3) and (4), and (5) and (6), respectively. Specifically, Columns (1) and (2) of Panel B report OLS regression results on the relation between changes of foreign vs domestic institutional investors' ownership from fiscal year *t-1* to *t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*. Columns (3) and (4) of Panel B report OLS regression results on the relation between the changes of active or passive institutional ownership from fiscal year *t-1* to *t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*. Columns (5) and (6) of Panel B report OLS regression results on the relation between changes in institutional investors' ownership characteristics [(foreign,domestic)&(active,passive)] from fiscal year *t-1* to *t* and the subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*. Odd column numbers employ $\Delta COMP1_{t+1}$ as a proxy for comparability while even columns use $\Delta COMP2_{t+1}$ as the dependent variable. Again, all regression models are estimated with firm, country×year and industry×year fixed effects. Standard errors, adjusted for heteroskedasticity and clustered at the firm level, are reported in parentheses. * , **,and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

Panel A: Table 4 equivalent results, estimated with firm, country×year and industry×year fixed effects

	(1) $\Delta COMP1_{t+1}$	(2) $\Delta COMP2_{t+1}$	(3) $\Delta COMP1_{t+1}$	(4) $\Delta COMP2_{t+1}$
ΔIO_t	1.849***	2.959***	1.849***	2.959***
	(0.508)	(0.661)	(0.511)	(0.666)
$\Delta SIZE_t$	1.269***	1.659***	1.269***	1.659***
	(0.160)	(0.155)	(0.159)	(0.155)
ΔROA_t	0.0810	0.0236	0.0810	0.0236
	(0.0896)	(0.0191)	(0.0896)	(0.0191)
ΔBM_t	-0.173	-0.366***	-0.173	-0.366***
	(0.107)	(0.118)	(0.111)	(0.119)
$\Delta RETVOL_t$	-1.467***	-1.471***	-1.467***	-1.471***
	(0.277)	(0.345)	(0.279)	(0.344)

$\Delta CLOSE_t$	0.218	-0.214	0.218	-0.214
	(0.354)	(0.429)	(0.354)	(0.431)
ΔADR_t	1.170**	0.567	1.170**	0.567
	(0.538)	(0.851)	(0.538)	(0.851)
N	41,524	41,524	41,524	41,524
adj. R^2	0.190	0.211	0.190	0.211

Panel B: Table 5, 6 and 7 equivalent results, firm, country×year and industry×year fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)
	$\Delta COMP1_{t+1}$	$\Delta COMP2_{t+1}$	$\Delta COMP1_{t+1}$	$\Delta COMP2_{t+1}$	$\Delta COMP1_{t+1}$	$\Delta COMP2_{t+1}$
$\Delta FOREIGN_t$	2.671***	2.442***				
	(0.648)	(0.811)				
$\Delta DOMESTIC_t$	-0.728	1.021				
	(1.004)	(0.749)				
$\Delta ACTIVE_t$			1.192	1.200**		
			(0.778)	(0.583)		
$\Delta PASSIVE_t$			-4.127*	3.081		
			(2.332)	(2.607)		
ΔFOR_ACTIVE_t					3.616***	3.836***
					(0.977)	(1.235)
$\Delta FOR\_PASSIVE_t$					2.207	2.577
					(2.454)	(2.860)
ΔDOM_ACTIVE_t					0.0960	1.049
					(1.618)	(1.050)
$\Delta DOM\_PASSIVE_t$					-3.586	0.0527
					(2.339)	(2.699)
$\Delta SIZE_t$	0.746***	1.187***	0.735***	1.193***	0.733***	1.179***
	(0.165)	(0.165)	(0.167)	(0.165)	(0.166)	(0.165)
ΔROA_t	0.101**	0.0261**	0.100**	0.0260**	0.101**	0.0261**
	(0.0467)	(0.0102)	(0.0475)	(0.0102)	(0.0472)	(0.0103)
ΔBM_t	-0.296***	-0.474***	-0.297***	-0.473***	-0.299***	-0.476***
	(0.113)	(0.106)	(0.113)	(0.106)	(0.113)	(0.106)
$\Delta RETVOL_t$	-0.827***	-0.830**	-0.827***	-0.844**	-0.810***	-0.812**
	(0.279)	(0.357)	(0.279)	(0.357)	(0.279)	(0.357)
$\Delta CLOSE_t$	-0.0720	-0.545	-0.0554	-0.552	-0.0470	-0.534
	(0.350)	(0.457)	(0.352)	(0.456)	(0.352)	(0.457)
ΔADR_t	0.935*	-0.186	0.931*	-0.187	0.982*	-0.124
	(0.536)	(1.258)	(0.537)	(1.260)	(0.535)	(1.256)
N	41,524	41,524	41,524	41,524	41,524	41,524
adj. R^2	0.184	0.217	0.184	0.217	0.184	0.217

Appendix C - *Institutional ownership and accounting comparability: basic difference-in-differences estimation*

This Appendix reports results for equation (8) described in text. In results reported in Panel A, the dependent variable is comparability proxy *COMP1* comparability proxy, while *COMP 2* is used as the dependent variable in results reported in Panel B. *Treat* is equal to 1 for firms added to the MSCI ACWI index in a given addition date, and 0 otherwise, *Post* is equal to 1 for years after inclusion (i.e. year 1 and 2), and 0 otherwise. Treat×Post is the interaction term between the previous two variables. Regression models in columns (1) and (2) include year, country and industry fixed effects. Column (1) reports estimates for a 5-year window (or years [-2,2] around addition), column (2) for the 3-year window (or years [-1,1] around addition). The full set of control variables used in previous estimations is also included, but not reported for brevity. Robust standard errors clustered at the pair level are reported in parentheses.

* , **,and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

Panel A

	(1)	*(2)*
	COMP1	*COMP1*
Treat	-1.157	-1.359
	(1.520)	(1.395)
Post	4.100*	-0.970
	(2.105)	(1.916)
*Treat*Post*	3.440*	4.740**
	(1.922)	(2.063)
N	2,382	1,513
adj. R²	0.125	0.169

Panel B

	(1)	*(2)*
	COMP2	*COMP2*
Treat	-3.008**	-3.447***
	(1.198)	(1.281)
Post	-0.318	1.193
	(1.397)	(0.922)
*Treat*Post*	2.669**	2.196*
	(1.336)	(1.142)
N	2,031	1,270
adj. R²	0.271	0.287

Table 1 – *Summary descriptive statistics*

This table presents summary statistics for the sample used in this study. The sample period extends during 2005Q1-2018Q4, unless otherwise specified.

Variables	N	Mean	STD	P25	Median	P75
Accounting comparability variables						
$COMP1_t$	41,524	-23.485	16.88	-25.124	-18.97	-15.122
$COMP2_t$	41,524	-26.556	22.774	-30.567	-20.101	-14.187
$\Delta COMP1$	41,524	0.1249	8.4389	-1.766	0.17956	2.307
$\Delta COMP2$	41,524	0.209429	12.068	-2.755	0.293159	3.506
Ownership variables (%)						
IO_t	41,524	24.764	23.536	5.457	18.036	37.427
$FOREIGN_t$	41,524	10.593	13.188	0.745	5.426	16.060
$DOMESTIC_t$	41,524	14.527	19.939	0.787	6.3302	20.435
$ACTIVE_t$	41,524	21.258	21.797	4.448	15.045	31.034
$PASSIVE_t$	41,524	3.8620	6.8173	0	0.937	4.802
FOR_ACTIVE_t	41,524	8.9843	11.458	0.501	4.354	13.628
$FOR\_PASSIVE_t$	41,524	1.3222	3.317	0	0.160	1.632
$FOR\_PASSIVE_t$	41,524	1.3222	3.317	0	0.160	1.632
$DOM\_PASSIVE_t$	41,524	3.1429	7.272	0	0	2.948
Market and accounting variables						
$SIZE_t$	41,524	20.099	2.393	18.360	19.980	21.693
ROA_t	41,524	0.0156	0.157	-0.002	0.038	0.079
BM_t	41,524	1.0534	1.569	0.318	0.627	1.1766
$RETVOL_t$	41,524	0.3556	0.204	0.211	0.300	0.442
$CLOSE_t$	41,524	0.4204	0.263	0.195	0.432	0.627
ADR_t	41,524	0.0136	0.115	0	0	0
AGE_t	41,524	36.648	35.915	12	21	47

Table 2 - *Yearly summary statistics for proxies for accounting comparability.*

This table presents summary statistics for year-on-year changes in the comparability proxies.

	$\Delta COMP1_t$				$\Delta COMP2_t$		
Fiscal Year	*Mean*	*Median*	*STD*	*Fiscal Year*	*Mean*	*Median*	*STD*
2005	4.527	3.390	10.067	2005	5.188	2.829	14.353
2006	2.567	2.157	7.059	2006	1.923	0.927	11.025
2007	2.630	1.654	8.568	2007	3.672	2.577	11.689
2008	3.029	2.208	8.567	2008	2.657	0.900	12.985
2009	-3.290	-2.258	9.099	2009	-4.814	-2.149	13.751
2010	-0.666	-0.428	6.489	2010	0.431	0.213	10.225
2011	-1.622	-1.118	6.757	2011	-0.851	-0.514	9.8433
2012	-2.776	-1.849	8.103	2012	-3.392	-1.694	10.601
2013	-2.119	-1.202	8.194	2013	-2.372	-1.420	10.053
2014	1.857	1.924	9.661	2014	1.872	2.048	14.364
2015	-1.002	-0.106	8.762	2015	-1.442	-0.765	12.396
2016	-0.616	0.040	7.571	2016	-1.308	-0.015	10.896
2017	1.145	1.288	7.500	2017	1.662	1.472	11.557
2018	2.230	1.985	7.761	2018	4.331	3.448	11.283
Total	0.124	0.179	8.438	Total	0.209	0.293	12.068

Table 3 - *Correlations*

This table presents pairwise Pearson correlation coefficients for the variables used in the paper. One star denotes statistical significance at 1% level.

	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	$COMP1_t$	1																	
2	$COMP2_t$	0.7417*	1																
3	IO_t	0.1291*	0.1386*	1															
4	$FOREIGN_t$	0.1031*	0.1058*	0.6113*	1														
5	$DOMESTIC_t$	0.0866*	0.0966*	0.8263*	0.0976*	1													
6	$ACTIVE_t$	0.1267*	0.1356*	0.9482*	0.6266*	0.7952*	1												
7	$PASSIVE_t$	0.0476*	0.0536*	0.5676*	0.2164*	0.5711*	0.3406*	1											
8	FOR_ACTIVE_t	0.1010*	0.1065*	0.5705*	0.9608*	0.0573*	0.5943*	0.1260*	1										
9	$FOR\_PASSIVE_t$	0.0610*	0.0516*	0.2763*	0.3745*	0.0885*	0.2087*	0.3162*	0.2597*	1									
10	DOM_ACTIVE_t	0.0934*	0.1016*	0.7942*	0.0920*	0.9326*	0.8085*	0.3207*	0.0781*	0.0951*	1								
11	$DOM\_PASSIVE_t$	0.0366*	0.0507*	0.3560*	0.0086	0.4307*	0.1754*	0.7154*	0.0037	0.0358*	0.2313*	1							
12	$SIZE_t$	0.1873*	0.1651*	0.1653*	0.3576*	-0.0413*	0.1456*	0.1053*	0.3457*	0.1788*	-0.0548*	0.0513*	1						
13	ROA_t	0.0799*	0.0648*	0.0219*	0.0211*	0.0123	0.0217*	0.0075	0.0206*	0.0094	0.0133*	0.0047	0.0433*	1					
14	BM_t	-0.2188*	-0.2113*	-0.1131*	-0.0797*	-0.0849*	-0.1126*	-0.0424*	-0.0817*	-0.0355*	-0.0892*	-0.0244*	-0.2583*	0.0069	1				
15	$RETVOL_t$	-0.2859*	-0.2591*	-0.1027*	-0.1172*	-0.0444*	-0.1045*	-0.0224*	-0.1156*	-0.0667*	-0.0542*	-0.0283*	-0.2246*	-0.0664*	0.0496*	1			
16	$CLOSE_t$	-0.0147*	-0.0442*	-0.5317*	-0.3843*	-0.3906*	-0.5093*	-0.2577*	-0.3731*	-0.1599*	-0.1599*	-0.3947*	-0.0980*	-0.0074	0.0905*	-0.0450*	1		
17	ADR_t	-0.0008	0.0035	0.0316*	0.1115*	-0.0362*	0.0354*	-0.0034	0.1076*	0.0459*	-0.0314*	-0.0323*	0.1256*	0.0015	0.0024	-0,0012	-0.0639*	1	
18	AGE_t	0.0902*	0.0691*	0.0520*	0.1136*	-0.0153*	0.0432*	0.0369*	0.1134*	0.0644*	-0.0203*	0.0616*	0.1663*	0.0161*	0.0559*	-0.2157*	-0.0237*	0.0285*	1

Table 4 - *The effect of institutional holdings on accounting comparability*

Panel A reports OLS regression results on the relation between changes in institutional investors' ownership from fiscal year *t-1 to t,* and subsequent changes in firms' accounting comparability from fiscal year *t to t+1*, when using *ΔCOMP1_{t+1}* as a proxy for comparability in columns (1) and (3), *ΔCOMP2_{t+1}* in columns (2) and (4). Columns (1) and (2) report results estimated with year and firm fixed effects. Columns (3) and (4) report results estimated with country×year and industry fixed effects. Panel B reports the OLS regression results on the relation between the levels of institutional investors' ownership in year *t* and subsequent levels in firms' accounting comparability, when using *COMP1_{t+1}* as a proxy for comparability in columns (1) and (3), and *COMP2_{t+1}* in columns (2) and (4). Columns (1) and (2) report results with year and firm fixed effects. Columns (3) and (4) report results with country×year and industry fixed effects. Standard errors, adjusted for heteroskedasticity and clustered at the firm level, are reported in parentheses.

* , **,and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

Panel A

	(1) $\Delta COMP1_{t+1}$	(2) $\Delta COMP2_{t+1}$	(3) $\Delta COMP1_{t+1}$	(4) $\Delta COMP2_{t+1}$
ΔIO_t	1.644***	2.813***	1.948***	3.162***
	(0.496)	(0.748)	(0.481)	(0.716)
$\Delta SIZE_t$	0.837***	1.372***	1.374***	1.860***
	(0.171)	(0.173)	(0.177)	(0.173)
ΔROA_t	0.0987**	0.0299***	0.0761	0.0216*
	(0.0441)	(0.00799)	(0.0566)	(0.0128)
ΔBM_t	-0.295***	-0.491***	-0.182	-0.387***
	(0.111)	(0.112)	(0.111)	(0.112)
$\Delta RETVOL_t$	-0.905***	-1.120***	-1.542***	-1.704***
	(0.274)	(0.356)	(0.272)	(0.353)
$\Delta CLOSE_t$	-0.0148	-0.753	0.212	-0.529
	(0.358)	(0.474)	(0.351)	(0.441)
ΔADR_t	0.998*	-0.294	1.667***	1.051
	(0.573)	(1.346)	(0.557)	(0.904)
N	41,524	41,524	41,524	41,524
adj. R²	0.078	0.061	0.111	0.092

Panel B

	(1)	(2)	(3)	(4)
	$COMP1_{t+1}$	$COMP2_{t+1}$	$COMP1_{t+1}$	$COMP2_{t+1}$
IO_t	4.340***	6.687***	5.370***	7.154***
	(1.023)	(1.310)	(0.781)	(1.091)
$SIZE_t$	2.999***	3.863***	0.368***	0.457***
	(0.290)	(0.337)	(0.134)	(0.171)
ROA_t	0.210***	0.160***	0.566***	0.476***
	(0.0426)	(0.0548)	(0.154)	(0.149)
BM_t	-0.0950	-0.316	-2.481***	-3.121***
	(0.212)	(0.232)	(0.293)	(0.318)
$RETVOL_t$	-8.642***	-10.67***	-19.77***	-23.22***
	(0.602)	(0.761)	(0.914)	(1.152)
$CLOSE_t$	0.705	0.554	2.128***	0.606
	(0.780)	(0.945)	(0.649)	(0.940)
ADR_t	1.741	0.134	0.0322	-0.913
	(2.242)	(1.793)	(1.069)	(1.666)
AGE_t	-0.0103	-0.0858	0.0103**	0.00379
	(0.132)	(0.0783)	(0.00465)	(0.00681)
N	41,524	41,524	41,524	41,524
adj. R^2	0.128	0.113	0.272	0.251

Table 5 - *Foreign vs. domestic Institutional holdings and accounting comparability*

Panel A reports OLS regression results on the relation between changes of foreign vs domestic institutional investors' ownership from fiscal year *t-1 to t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*, when using $\Delta COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), $\Delta COMP2_{t+1}$ in columns (2) and (4). Columns (1) and (2) report results estimated with year and firm fixed effects. Columns (3) and (4) report results estimated with country×year and industry fixed effects. Panel B reports the OLS regression results on the relation between the levels of foreign vs domestic institutional investors' ownership in year *t* and subsequent levels of firms' accounting comparability, when using $COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), and $COMP2_{t+1}$ in columns (2) and (4). Columns (1) and (2) report results with year and firm fixed effects. Columns (3) and (4) report results with country×year and industry fixed effects. Standard errors, adjusted for heteroskedasticity and clustered at the firm level, are reported in parentheses.

*, **,and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

Panel A

	(1) $\Delta COMP1_{t+1}$	(2) $\Delta COMP2_{t+1}$	(3) $\Delta COMP_{t+1}$	(4) $\Delta COMP2_{t+1}$
$\Delta FOREIGN_t$	2.889***	2.752***	2.983***	2.891***
	(0.659)	(0.919)	(0.609)	(0.855)
$\Delta DOMESTIC_t$	-0.808	1.005	-0.581	1.141
	(0.987)	(0.753)	(0.889)	(0.722)
$\Delta SIZE_t$	0.845***	1.380***	1.384***	1.871***
	(0.171)	(0.173)	(0.177)	(0.173)
ΔROA_t	0.0993**	0.0304***	0.0770	0.0223
	(0.0432)	(0.00786)	(0.0552)	(0.0137)
ΔBM_t	-0.294***	-0.490***	-0.181	-0.386***
	(0.111)	(0.112)	(0.111)	(0.112)
$\Delta RETVOL_t$	-0.899***	-1.127***	-1.542***	-1.719***
	(0.274)	(0.356)	(0.272)	(0.353)
$\Delta CLOSE_t$	-0.0392	-0.786*	0.182	-0.571
	(0.358)	(0.475)	(0.351)	(0.442)
ΔADR_t	0.980*	-0.317	1.647***	1.025
	(0.573)	(1.344)	(0.558)	(0.902)
N	41,524	41,524	41,524	41,524
adj. R^2	0.078	0.061	0.111	0.092

Panel B

	(1) COMP1 $_{t+1}$	(2) COMP2 $_{t+1}$	(3) COMP1 $_{t+1}$	(4) COMP2 $_{t+1}$
FOREIGN$_t$	3.762***	5.396***	3.332***	4.960***
	(1.371)	(1.618)	(1.131)	(1.535)
DOMESTIC$_t$	1.803*	4.147***	3.967***	6.277***
	(1.001)	(1.327)	(1.207)	(1.191)
SIZE$_t$	3.020***	3.887***	0.423***	0.511***
	(0.291)	(0.338)	(0.140)	(0.177)
ROA$_t$	0.210***	0.160***	0.568***	0.477***
	(0.0430)	(0.0554)	(0.156)	(0.151)
BM$_t$	-0.0922	-0.312	-2.467***	-3.106***
	(0.212)	(0.232)	(0.294)	(0.318)
RETVOL$_t$	-8.680***	-10.73***	-19.94***	-23.36***
	(0.603)	(0.763)	(0.932)	(1.157)
CLOSE$_t$	0.539	0.355	1.652**	0.204
	(0.777)	(0.943)	(0.659)	(0.934)
ADR$_t$	1.676	0.0829	-0.00694	-0.910
	(2.240)	(1.796)	(1.069)	(1.669)
AGE$_t$	-0.00733	-0.0826	0.0103**	0.00373
	(0.129)	(0.0746)	(0.00465)	(0.00681)
N	41,524	41,524	41,524	41,524
adj. R^2	0.128	0.112	0.271	0.251

Table 6 - *Active vs. passive institutional holdings and accounting comparability*

Panel A reports OLS regression results on the relation between the changes of active or passive institutional ownership from fiscal year *t-1 to t* and subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*, when using $\Delta COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), $\Delta COMP2_{t+1}$ in columns (2) and (4). Columns (1) and (2) report results estimated with year and firm fixed effects. Columns (3) and (4) report results estimated with country×year and industry fixed effects. Panel B reports the OLS regression results on the relation between the levels of active or passive institutional ownership in year *t* and subsequent levels of firms' accounting comparability, when using $COMP1_{t+1}$ as a proxy for comparability in columns (1) and (3), and $COMP2_{t+1}$ in columns (2) and (4). Columns (1) and (2) report results with year and firm fixed effects. Columns (3) and (4) report results with country × year and industry fixed effects. Standard errors, adjusted for heteroskedasticity and clustered at the firm level, are reported in parentheses.

* , **,and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

Panel A

	(1) $\Delta COMP1_{t+1}$	(2) $\Delta COMP2_{t+1}$	(3) $\Delta COMP1_{t+1}$	(4) $\Delta COMP2_{t+1}$
$\Delta ACTIVE_t$	1.135	1.327**	1.339*	1.450**
	(0.776)	(0.607)	(0.701)	(0.570)
$\Delta PASSIVE_t$	-3.710	2.971	-3.664*	3.231
	(2.412)	(2.660)	(2.213)	(2.543)
$\Delta SIZE_t$	0.836***	1.385***	1.378***	1.877***
	(0.173)	(0.173)	(0.179)	(0.173)
ΔROA_t	0.0989**	0.0302***	0.0764	0.0221
	(0.0440)	(0.00788)	(0.0562)	(0.0136)
ΔBM_t	-0.294***	-0.489***	-0.180	-0.386***
	(0.111)	(0.112)	(0.111)	(0.112)
$\Delta RETVOL_t$	-0.900***	-1.141***	-1.544***	-1.732***
	(0.274)	(0.356)	(0.272)	(0.353)
$\Delta CLOSE_t$	-0.0294	-0.796*	0.189	-0.583
	(0.359)	(0.474)	(0.353)	(0.442)
ΔADR_t	0.987*	-0.309	1.657***	1.029
	(0.572)	(1.345)	(0.556)	(0.903)
N	41,524	41,524	41,524	41,524

| | adj. R^2 | 0.078 | 0.061 | 0.111 | 0.092 |

Panel B

	(1) $COMP1_{t+1}$	(2) $COMP2_{t+1}$	(3) $COMP1_{t+1}$	(4) $COMP2_{t+1}$
$ACTIVE_t$	3.273***	5.038***	3.937***	6.094***
	(0.922)	(1.104)	(0.985)	(1.064)
$PASSIVE_t$	-2.365	1.775	2.703	4.336
	(2.572)	(4.082)	(2.444)	(3.043)
$SIZE_t$	3.025***	3.890***	0.414***	0.492***
	(0.289)	(0.337)	(0.133)	(0.170)
ROA_t	0.209***	0.160***	0.568***	0.477***
	(0.0427)	(0.0552)	(0.156)	(0.150)
BM_t	-0.0900	-0.311	-2.470***	-3.112***
	(0.212)	(0.232)	(0.293)	(0.317)
$RETVOL_t$	-8.657***	-10.71***	-19.92***	-23.34***
	(0.601)	(0.761)	(0.933)	(1.158)
$CLOSE_t$	0.507	0.335	1.688**	0.274
	(0.777)	(0.944)	(0.664)	(0.934)
ADR_t	1.690	0.0932	-0.0350	-0.963
	(2.241)	(1.796)	(1.067)	(1.666)
AGE_t	-0.00488	-0.0812	0.0104**	0.00387
	(0.128)	(0.0742)	(0.00465)	(0.00682)
N	41,524	41,524	41,524	41,524
adj. R^2	0.128	0.112	0.271	0.251

Table 7 - *The effect of combined institutional characteristics [(foreign,domestic)&(active,passive)] on accounting comparability*

Panel A reports the ordinary least squares (OLS) regression results on the relation between changes ininstitutional investors' ownership characteristics [(foreign,domestic)&(active,passive)] from fiscal year *t-1* to *t* and the subsequent changes in firms' accounting comparability from fiscal year *t* to *t+1*, when using *ΔCOMP1$_{t+1}$* as a proxy for comparability in columns (1) and (3), *ΔCOMP2$_{t+1}$* in columns (2) and (4). Columns (1) and (2) report results estimated with year and firm fixed effects. Columns (3) and (4) report results estimated with country×year and industry fixed effects. Panel B reports the OLS regression results on the relation between the levels of institutional investors' ownership characteristics [(foreign,domestic)&(active,passive)] in year *t* and subsequent levels of firms' accounting comparability, when using *COMP1$_{t+1}$* as a proxy for comparability in columns (1) and (3), and *COMP2$_{t+1}$* in columns (2) and (4). Columns (1) and (2) report results with year and firm fixed effects. Columns (3) and (4) report results with country×year and industry fixed effects. Standard errors, adjusted for heteroskedasticity and clustered at the firm level, are reported in parentheses.

* , **,and *** indicate statistical significance at the 10%, 5% and 1% level, respectively.

Panel A

	(1) ΔCOMP1$_{t+1}$	*(2)* ΔCOMP2$_{t+1}$	*(3)* ΔCOMP1$_{t+1}$	*(4)* ΔCOMP2$_{t+1}$
ΔFOR_ACTIVE$_t$	3.770***	4.512***	3.888***	4.627***
	(0.996)	(1.383)	(0.887)	(1.240)
ΔDOM_ACTIVE$_t$	-0.134	1.107	0.477	1.724*
	(1.644)	(1.070)	(1.486)	(1.047)
ΔFOR_PASSIVE$_t$	2.117	1.487	2.713	2.894
	(2.411)	(3.146)	(1.886)	(2.716)
ΔDOM_PASSIVE$_t$	-2.214	0.696	-2.430	0.184
	(2.367)	(2.595)	(2.192)	(2.440)
ΔSIZE$_t$	0.834***	1.369***	1.370***	1.854***
	(0.173)	(0.173)	(0.179)	(0.173)
ΔROA$_t$	0.0992**	0.0304***	0.0767	0.0222*
	(0.0436)	(0.00787)	(0.0559)	(0.0133)
ΔBM$_t$	-0.297***	-0.493***	-0.184*	-0.391***
	(0.111)	(0.112)	(0.112)	(0.112)
ΔRETVOL$_t$	-0.885***	-1.110***	-1.528***	-1.700***
	(0.274)	(0.356)	(0.272)	(0.353)
ΔCLOSE$_t$	-0.0172	-0.769	0.213	-0.542
	(0.359)	(0.475)	(0.352)	(0.443)

	(1)	(2)	(3)	(4)
ΔADR_t	1.033*	-0.251	1.696***	1.091
	(0.572)	(1.339)	(0.557)	(0.895)
N	41,524	41,524	41,524	41,524
adj. R^2	0.078	0.061	0.111	0.092

Panel B

	(1) $COMP1_{t+1}$	(2) $COMP2_{t+1}$	(3) $COMP1_{t+1}$	(4) $COMP2_{t+1}$
FOR_ACTIVE_t	5.117***	7.309***	3.390***	6.140***
	(1.723)	(2.057)	(1.303)	(1.775)
DOM_ACTIVE_t	4.038**	6.678***	5.184***	7.487***
	(1.681)	(2.039)	(1.597)	(1.589)
$FOR\_PASSIVE_t$	3.553	4.877	6.878**	2.148
	(3.958)	(5.066)	(2.741)	(4.595)
$DOM\_PASSIVE_t$	-2.629	-0.974	2.329	4.910*
	(3.000)	(4.260)	(1.820)	(2.522)
$SIZE_t$	2.991***	3.850***	0.405***	0.491***
	(0.290)	(0.337)	(0.140)	(0.178)
ROA_t	0.210***	0.160***	0.567***	0.476***
	(0.0427)	(0.0550)	(0.155)	(0.150)
BM_t	-0.0988	-0.322	-2.470***	-3.108***
	(0.212)	(0.232)	(0.294)	(0.318)
$RETVOL_t$	-8.627***	-10.66***	-19.84***	-23.23***
	(0.599)	(0.758)	(0.940)	(1.159)
$CLOSEt$	0.666	0.505	1.759***	0.340
	(0.785)	(0.947)	(0.673)	(0.939)
ADR_t	1.679	0.0862	0.0306	-0.873
	(2.238)	(1.794)	(1.068)	(1.668)
AGE_t	-0.00923	-0.0865	0.0103**	0.00352
	(0.128)	(0.0732)	(0.00466)	(0.00683)
N	41,524	41,524	41,524	41,524
adj. R^2	0.128	0.113	0.271	0.251

Table 8 – *The association between new firm additions to MSCI ACWI and foreign (active and passive) and domestic institutional ownership*

This Table reports results on the effect of new additions in the MSCI ACWI index on foreign/domestic, and foreign combined with active or passive institutional holdings, for newly added (treated) vs. non-added, but otherwise similar, propensity score matched firms. In Panel A, in columns (1)-(3), the dependent variable is foreign institutional ownership, and domestic institutional ownership in columns (4)-(6). In Panel B, in columns (1)-(3), the dependent variable is foreign and active institutional ownership, and foreign and passive institutional ownership in columns (4)-(6). $MSCI_{i,t}$ is a binary variable equal to 1 when firm i is added to the MSCI ACWI index in year t, and 0 otherwise. Column (1) reports estimates for a 5-year window (or years [-2,2] around addition), column (2) for the 3-year window (or years [-1,1] around addition), and similarly for columns (4)-(6). For brevity, the full set of control variables used in previous estimations are not reported in Panel B. Robust standard errors clustered at the pair level are reported in parentheses. * , **,and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

Panel A

	(1) FOREIGN	(2) FOREIGN	(3) DOMESTIC	(4) DOMESTIC
$MSCI_t$	1.935**	1.584**	0.449	0.815
	(0.804)	(0.767)	(0.885)	(0.939)
$SIZE_t$	0.0254	-0.107	-1.508***	-1.726**
	(0.442)	(0.521)	(0.579)	(0.673)
ROA_t	-1.395	-3.116	6.985**	6.726**
	(2.101)	(2.329)	(3.005)	(3.300)
BM_t	-0.324	-0.427	-0.155	-0.156
	(0.672)	(0.926)	(0.358)	(0.377)
$RETVOL_t$	-1.950	-1.925	-2.473	0.200
	(2.818)	(3.506)	(2.188)	(2.561)
$CLOSE_t$	-24.60***	-23.86***	-24.44***	-25.00***
	(2.382)	(2.424)	(2.954)	(3.200)
ADR_t	-3.832	-7.142	-15.72**	-13.69*
	(7.046)	(6.284)	(6.934)	(7.886)
AGE_t	0.00138	0.00321	-0.0376	-0.0353
	(0.0156)	(0.0174)	(0.0252)	(0.0293)
N	2331	1478	2331	1478
adj. R^2	0.212	0.198	0.194	0.204

Panel B

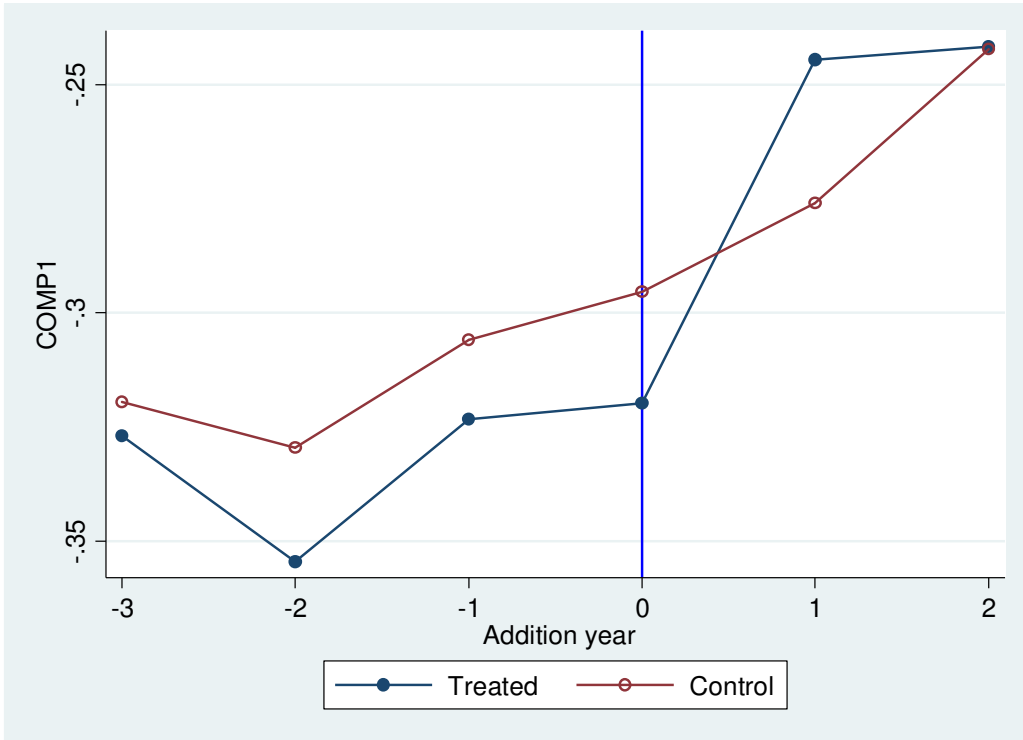|	(1) *FOR_ACTIVE*	(2) *FOR_ACTIVE*	(3) *FOR_PASSIVE*	(4) *FOR_PASSIVE*
$MSCI_t$	1.864***	1.949***	0.380*	0.229
	(0.701)	(0.677)	(0.194)	(0.179)
N	2358	1498	2358	1498
adj. R^2	0.202	0.190	0.130	0.138

Table 9 - *Institutional ownership and accounting comparability: generalized difference-in-differences estimation*

This Table reports results for equation (7) described in text. In results reported in columns (1)-(3), the dependent variable is comparability proxy *COMP1*, while *COMP2* is used as the dependent variable in results reported in columns (4)-(6). $MSCI_{i,t}$ is a dummy variable equal to one when firm *i* is added to the MSCI ACWI index in year *t*. Column (1) reports estimates for a 6-year window (or years [-3,2] around addition), column (2) reports estimates for a 5-year window (or years [-2,2] around addition), column (3) for the 3-year window (or years [-1,1] around addition), and similarly for columns (4)-(6). Robust standard errors clustered at the firm level are reported in parentheses. * , **,and *** indicate statistical significance at the 10%, 5% and 1% levels, respectively.

	(1) COMP1	(2) COMP1	(3) COMP1	(4) COMP2	(5) COMP2	(6) COMP2
$MSCI_t$	1.384**	1.564**	1.415***	2.319	3.077**	3.168**
	(0.634)	(0.642)	(0.527)	(1.413)	(1.426)	(1.289)
$SIZE_t$	0.160	0.112	-0.456	5.834**	5.492**	4.494*
	(0.639)	(0.626)	(0.664)	(2.494)	(2.494)	(2.669)
ROA_t	2.223	1.358	3.246	0.264	0.0926	16.72
	(2.163)	(2.071)	(2.224)	(1.001)	(0.838)	(15.56)
BM_t	0.181	0.879**	1.125**	3.604*	3.613*	4.118
	(0.543)	(0.405)	(0.435)	(1.910)	(1.999)	(2.791)
$RETVOL_t$	-1.377	-0.522	-2.149	-2.667	-1.411	1.872
	(1.773)	(1.989)	(1.817)	(3.657)	(4.098)	(5.035)
$CLOSE_t$	1.131	1.436	1.255	6.120*	7.880**	4.067
	(1.675)	(1.714)	(2.276)	(3.551)	(4.009)	(5.258)
ADR_t	-7.355	-9.538	2.451	3.371	7.571***	1.602
	(9.107)	(12.01)	(1.514)	(2.734)	(2.729)	(2.651)
AGE_t	-0.0337	-0.132	-0.0245	-0.483	-0.766	-0.650
	(0.239)	(0.231)	(0.235)	(0.464)	(0.485)	(0.547)
N	2240	1923	1215	2538	2193	1387
adj. R^2	0.154	0.172	0.163	0.082	0.082	0.096

Graph 1a -1b *Institutional ownership and accounting comparability surrounding the additions to the MSCI ACWI index*

Graph 1a (1b) plots the evolution of average accounting comparability as measured by our COMP1 (COMP2) proxy, computed for treated and control firms around stock additions to the MSCI ACWI index, following a propensity score matching (PSM) procedure between firms added vs. otherwise similar but not added to the MSCI index as described in section 3.5. COMP1 and COMP2 are calculated in raw form (i.e. not in percentage). Year [-1,0] is the year when the treated firms are added to the MSCI ACWI index.

Graph 1b