

INTERNATIONAL EARNINGS ANNOUNCEMENTS: TONE, FORWARD- LOOKING STATEMENTS, AND INFORMATIVENESS

Elaine Henry, James Thewissen, Wouter
Torsin

REPRINT • 2022 / 02



LFIN

Voie du Roman Pays 34, L1.03.01 B-1348 Louvain-la-Neuve

Tel (32 10) 47 43 04

Email: lidam-library@uclouvain.be

<https://uclouvain.be/en/research-institutes/lidam/lfin/publications.html>

International Earnings Announcements: Tone, Forward-looking Statements, and Informativeness

Elaine Henry

ehenry1@stevens.edu

Stevens Institute of Technology, New Jersey, USA
School of Business

James Thewissen

james.thewissen@uclouvain.be

Université catholique de Louvain, Belgium
Louvain Finance (LIDAM), Louvain School of Management

Wouter Torsin[♦]

wouter.torsin@kuleuven.be

University of Liège, Belgium
Department of Finance, HEC Management School

July 2021

[♦] *Corresponding Author:* wtorsin@uliege.be, Department of Finance, HEC Management School, University of Liège, 14 Rue Louvrex, 4000 Liège

International Earnings Announcements: Tone, Forward-looking Statements, and Informativeness

ABSTRACT

This paper examines two attributes of earnings press releases issued by firms cross-listed on U.S. stock exchanges: the tone and frequency of forward-looking statements. A more conservative tone and a greater proportion of forward-looking statements are often viewed as contributing to more credible disclosures. Our analysis indicates that culturally and institutionally more distant firms are generally less positive in their disclosures and include more forward-looking statements than U.S. firms. Further, we find that the tone and frequency of forward-looking statements of cross-listed firms' earnings announcements are more informative than those of U.S. firms in predicting future firm performance, and this informativeness generally increases with the cultural and institutional distance of the home country from the U.S. In explaining market reaction to earnings announcements, tone informativeness in particular increases with the cultural distance of the home country from the U.S. Overall, in the context of home bias theory, we interpret our findings as suggesting that a cautious disclosure tone and more forward-looking information serve to mitigate potential home bias-related credibility and asymmetric information concerns arising from cultural and institutional distance.

Keywords: disclosure; tone; forward-looking; credibility; home bias; cross-listed firms.

I. Introduction

This paper examines international differences in two important attributes of financial narrative disclosure: tone and forward-looking statements (FLS). Using a sample of earnings announcements by cross-listed and U.S. firms, all of which are in the English language and all of which have been filed in accordance with U.S. securities regulations, we first examine how the two disclosure attributes are associated with the cultural and institutional distance between the U.S. and a cross-listed firm's home country.¹ Furthermore, we examine whether cultural and institutional distances moderate the informativeness of the tone of disclosures and FLS. Our examination of the informativeness of these disclosure attributes focuses on predictive power in terms of future firm performance and explanatory power in terms of market reaction.

In international markets, information asymmetry due to “poor quality and low credibility of financial information in many countries” is cited as a major determinant of home bias by Ahearne, Grier, and Warnock (2004, 313), who present evidence suggesting that cross-listing in the U.S. reduces home bias. Although cross-listed firms are subject to U.S. securities regulations which can result in more credible financial information, a cross-listed firm's home-country environment nonetheless influences not only reporting quality (Chen and Zhang 2010; Lang, Smith Raedy, and Wilson 2006) but also the valuation of the firm's growth opportunities (Doidge, Karolyi, and Stulz 2010). The influence of cross-listed firms' home-country environment on corporate choices and firm value implies that cross-listing can reduce, but not eliminate, home bias. Given the costs of home bias at the individual, firm and societal levels, it is important to examine aspects of financial disclosures that are potentially related to this bias. Prior evidence

¹ We use the term ‘cross-listed firms’ to refer to non-U.S. firms that are listed on a U.S. stock exchange. SEC regulations also refer to cross-listed firms as foreign private issuers (FPIs). FPIs can list their securities on a U.S. stock exchange either directly or via a depositary receipt DR (i.e., an American Depositary Receipt, ADR).

suggests that cross-listed firms use aspects of their written disclosures to overcome investors' home bias by reducing information asymmetry through more readable and numerically intensive information (Lundholm, Rogo, and Zhang 2014). Our paper extends the work of Lundholm et al. (2014) by examining international differences in additional attributes of written disclosure, tone and FLS and their impact on informativeness.²

The credibility of a disclosure may be as important in explaining investors' reactions as the amount of new information (Jennings 1987), and tone has been linked to disclosure credibility. Drawing from persuasion models, Mercer (2004) corroborates the importance of disclosure credibility and shows that disclosure characteristics, including inherent plausibility, support the credibility of financial information. Bad news forecasts are inherently more credible than good news and have a much larger effect on stock prices than good news (Hutton, Miller, and Skinner 2003). Investors place less weight on positive qualitative disclosure than on negative qualitative disclosure, and the stock reaction to negative words is greater than the reaction to positive words (Henry and Leone 2016; Tetlock 2007). Overall, a clear relation exists between credibility and the choice of language in investor relations: 'Hyperbole can be adopted to explain how well management is performing but the *more objective the language of investor relations the more it can contribute to the concepts of trust and credibility*' (Westbrook 2014, 91, emphasis added). In addition to its potentially greater inherent credibility, a more cautious disclosure tone can avoid unduly raising expectations, given that prior research has shown that disclosure tone influences investor expectations about future performance (e.g., Henry 2008). Therefore, the higher hurdles

² Our paper differs from that of Lundholm et al. (2014) in several ways. In contrast with their focus on disclosure readability and numerical intensity, our focus is on different disclosure attributes, namely, a cautious tone and more FLS. In addition, we focus on cultural distances from the U.S. as well as institutional distances. Moreover, in contrast with their focus on the outcome of whether U.S. institutional investors buy more of certain cross-listed firms' stock, our outcome measures are whether more cautious and forward-looking disclosures made by more distant cross-listed firms are more informative in terms of predicting future firm performance and incrementally explaining market reaction.

associated with credibility and home bias faced by cross-listed firms could motivate more cautious (e.g., less optimistic) disclosures than domestic firms.³ Alternatively, it could be argued that potential home bias would motivate cross-listed firms to avoid communicating with a negative tone that may dissuade investor interest. This paper addresses these alternatives empirically and provides evidence of more cautious disclosures by cross-listed firms.

Another communication attribute that prior research has linked to enhanced disclosure credibility is the proportion of FLS (Bozanic, Roulstone, and Van Buskirk 2018). In the context of management forecasts, forward-looking statements can help justify and explain optimism about earnings (Dye 1986), and such supplementary statements include commitments to a specific way of reaching an earnings goal (Hutton et al. 2003). Commitments to meet earnings forecasts in particular ways can constrain earnings management. This can be important as Kasznik (1999) shows that managers sometimes manage earnings upward to meet their own previous forecasts, a practice that likely increases investors' scepticism about forecasts and reduces credibility. Given cross-listed firms' incentive to increase the credibility of their disclosures, we expect that the disclosures of cross-listed firms contain a higher proportion of FLS than domestic firms.

Our sample includes 11,948 earnings press releases of U.S. and cross-listed firms. We measure tone based on frequency counts of positive and negative words as in Henry (2008) and FLS based on forward-looking sentences as identified in Muslu et al. (2015). Our cultural distance measures rely on methodology from Kogut and Singh (1988) and alternately incorporate the cultural dimensions of Hofstede (2001) and of Global Leadership & Organizational Behavior Effectiveness ('GLOBE' 2007). Our institutional distance measures use the same methodology

³ While we do not presuppose that U.S. investors are the only audience for cross-listed firms' English language earnings announcements, we argue that U.S. investors are a particularly important audience because of the relative size of the U.S. investor base compared to most cross-listed firms' home markets.

and alternately incorporate factors from the World Bank (2017) and from La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998).

We first provide evidence of clear differences between the disclosure tone and FLS in the earnings announcements of cross-listed and domestic firms. Specifically, we find that compared to domestic firms' earnings announcements, cross-listed firms' earnings announcements are significantly less positive (i.e., more cautious) and contain a significantly higher proportion of FLS. Furthermore, the proportions of FLS and tone cautiousness increase for both greater cultural and institutional distances from the U.S.

Our examination of the informativeness of disclosure attributes focuses on predictive power in terms of future firm performance and explanatory power in terms of market reaction. The results indicate that the informativeness of tone is greater for cross-listed firms, and cultural distance moderates the informativeness of tone such that tone informativeness increases with the cultural distance of the firm's home country from the U.S. The moderating impact of institutional distance on tone informativeness is somewhat sensitive to measurement choices. We also find that institutional distance moderates the predictive power of FLS, while the moderating impact of cultural distance is sensitive to measurement choices. Evidence of a moderating impact of distance (either cultural or institutional) on the market reaction to FLS is more limited. Combined with our previous evidence that cross-listed firms use a more conservative tone and more FLS in earnings announcements, the greater informativeness of cross-listed firms' tone and FLS is consistent with communication aimed at increasing credibility through cautious yet more informative financial reporting language.

Several additional analyses further an understanding of the narrative attributes of cross-listed firms' earnings announcements. First, our findings related to informativeness of the tone and

FLS of cross-listed firms' disclosures are corroborated by an analysis using bid-ask spread as an alternative proxy for informativeness. Second, we find the negative relation between tone and distance is robust to five alternative measures of distance. Third, we examine the impact of an increase in one aspect of international distance, namely, reporting distance, proxied by the SEC's elimination of the reconciliation requirement for foreign private issuers reporting under IFRS (International Financial Reporting Standards) in 2007. Results suggest that for cross-listed firms reporting under IFRS, the tone of corporate disclosures became less positive in the post-reconciliation period. Finally, an analysis of the separate cultural Hofstede dimensions indicates that disclosures by firms from home countries with more individualistic and masculine cultures have a more positive tone, while those from cultures with greater uncertainty avoidance have a more negative tone. The disclosures of firms from home countries with a more long-term orientation are more negative and contain a higher proportion of FLS.

Our study contributes both to the home bias and the financial disclosure literature. Prior research presents both theoretical arguments and empirical evidence supporting the importance of cultural and institutional distances in determining investors' behaviour (e.g., Karolyi 2016). Lundholm et al. (2014) examine the relation between institutional distance and two attributes of the financial disclosure narrative (complexity and numerical intensity), and we extend that examination to other important disclosure attributes. In addition, while some research has addressed the relation between cultural attributes and certain disclosures (e.g., Hooghiemstra, Hermes, and Emanuels, 2015), the question of whether cultural distance impacts financial disclosures by cross-listed firms has been largely unexplored. Our study aims to fill these gaps by examining the impact of both cultural and institutional variables on additional important aspects of cross-listed firms' financial disclosure narrative, tone and FLS, as well as by assessing the

interrelationship between cultural and institutional variables and the informativeness of these disclosure aspects. We offer evidence that more culturally distant cross-listed firms use a more cautious tone and include more forward-looking statements in financial disclosures. We also find that the tone of these financial disclosures along with the forward-looking statements provide a more informative signal of future performance. We interpret our findings in the context of cross-listed firms using aspects of their disclosure narrative to alleviate potential lack of credibility, which Ahearne et al. (2004) link to information asymmetry, a primary theoretical underpinning of investors' home bias.

II. Hypotheses Development

Prior research has established that the accounting systems and procedures that produce the financial content of disclosure narratives are affected by countries' cultural values and institutional context (e.g., Bik and Hooghiemstra 2018; Ding, JeanJean, and Stolowy 2005; Han, Salter, and Yoo 2010; Hope 2003; Jaggi and Low 2000; Shao, Kwok, and Guedhami 2010, Hooghiemstra et al. 2015). This study focuses on the relationship between cultural and institutional variables and aspects of financial disclosure narratives.

Disclosure attributes and cultural and institutional distance

Two attributes of financial disclosure narratives are often viewed as relevant for credibility: tone and forward-looking statements. While disclosure tone has an information component that can explain market reaction and future firm performance, in addition to quantitative information (e.g., Henry 2008; Boudt, Thewissen and Torsin 2018; Davis et al. 2012), disclosure tone can also have a promotional component (e.g., Arslan-Ayaydin, Boudt, and Thewissen 2016; Huang, Teoh, and Zhang 2014). A substantial amount of empirical research has established that the tone in financial reporting for U.S. firms tends to be positive (e.g., Davis et al. 2012; Henry 2008) despite

evidence that an overly positive tone has costs. Biased disclosures generally can have reputational costs (Stocken 2000); specifically, overly optimistic language can result in a higher risk of litigation (Rogers, Van Buskirk, and Zechman 2011). In contrast, more objective language can contribute to increasing the credibility of the disclosure (Westbrook 2014).

The credibility of disclosures can also be supported by increased FLS. Beyond using FLS to make corporate annual reports more informative about future performance (Bozzolan et al. 2009), FLS can enhance credibility in two ways. First, managers can supplement forecasts with these statements to help justify and explain their optimism about earnings (Dye 1986). The more line items managers forecast, the more easily outsiders can evaluate the plausibility of firms' ability to meet managers' earnings forecasts (Hutton et al. 2003). Second, managers can use supplementary statements to commit themselves to a specific way of reaching an earnings goal. Kasznik (1999) shows that managers sometimes manage earnings upward to meet their own previous forecasts of good earnings news, a practice that likely increases investors' scepticism about these forecasts and reduces the credibility of the forecasts. FLS about earnings components commit managers to meeting the earnings forecast in particular ways and reduce the ways in which they might manage earnings to achieve the forecast. If managers achieve the earnings forecast in a manner inconsistent with their line-item forecasts, this will increase investors' scrutiny of the results and possibly raise questions about management ability (Trueman 1986). In line with this evidence, Hutton et al. (2003) find that managers provide soft talk disclosures with similar frequency for good and bad news forecasts but are more likely to supplement good news forecasts with forward-looking information, supporting the argument that FLS bolster the credibility of good news forecasts. Collectively, this research suggests that managers rely on FLS to enhance the perceived credibility of their disclosures. In combination with tone, the proportion of FLS can

therefore serve as a useful management credibility cue to investors in deciding whether to rely on corporate disclosures.

To the extent that a more cautious tone and a greater proportion of FLS in financial disclosures could foster greater credibility of corporate disclosures, we expect to see a linkage between a cautious tone, more FLS and investee attributes that potentially pose greater challenges to establishing such credibility. One attribute that poses a challenge to establishing credibility is investors' lack of familiarity. For cross-listed firms, the potential credibility concerns associated with domestic investors' lack of familiarity pose economic costs, specifically costs arising from investors' home bias (Barberis and Thaler 2003; Guiso et al. 2009). Home bias refers to the phenomenon of investor portfolios containing a limited number of stocks of foreign firms relative to those of domestic firms, even where there exist clear benefits of international diversification (Grauer and Hakansson 1987; Grubel 1968). The home bias phenomenon has been well documented at both the country level (e.g., French and Poterba 1991; Karolyi and Stulz 2003) and the individual level (Grinblatt and Keloharju 2001). Moreover, home bias has been shown to increase with the geographical, cultural, and institutional distances between investors and investees (Karolyi 2016). Greater cultural and institutional distances increase unfamiliarity and decrease bilateral trust (Guiso et al. 2009).

We posit that cross-listed firms have greater motivation to overcome the lower perceived credibility of their disclosures by communicating more cautiously, such as using less optimistic language and including more FLS. In contrast, domestic firms lack a similar motivation and are thus less constrained in making optimistic disclosures or including FLS. We therefore expect that the tone of cross-listed firms' disclosure is less positive on average than the tone of U.S. firms' disclosure. We further expect cross-listed firms' disclosures to use more FLS than U.S. firms.

Finally, we expect these effects to be even greater as the cultural and institutional distances increase between the U.S. and the cross-listed firm's home-country environment.

H1: On average, the tone of cross-listed firms' disclosures is more negative than the tone of U.S. firms' disclosures.

H2: On average, cross-listed firms' disclosures contain more forward-looking statements than U.S. firms' disclosures.

H3: The tone of firms' financial disclosures is negatively associated with the institutional distance and cultural distance of the firm's home country from the U.S.

H4: The proportion of forward-looking statements is positively associated with the institutional distance and cultural distance of the firm's home country from the U.S.

The information value of disclosure attributes

Research indicates that the tone of firms' earnings announcements provides a signal about future performance such that a more positive tone is associated with better future firm performance (Davis et al. 2012) and a more positive market reaction to the earnings announcement (e.g., Henry 2008; Henry and Leone 2016). Similarly, evidence shows that disclosures with more forward-looking information are associated with a stronger market reaction (Bozanic et al. 2018). We argue that cultural and institutional distances can affect the informativeness of those signals in predicting future firm performance and explaining the market reaction. In the same way that distance increases incentives for foreign firms to communicate more clearly than U.S. firms to overcome home bias predicated on information asymmetry (Lundholm et al. 2014), greater distances can create incentives to communicate more informatively to overcome home bias predicated on credibility deficits. Where the institutional and cultural distances of firms' home country are greater, the informativeness of tone and FLS may increase as firms have a greater incentive to provide a more accurate signal to overcome home bias. Unlike domestic firms' financial reporting, where FLS and a more positive tone might stem from opportunistic use, we posit that foreign firms

facing home bias would be less likely to attempt such manipulation and therefore that the tone and FLS of foreign firms' financial disclosure have a greater element of informativeness. Thus, we hypothesize that the informativeness of tone and FLS in predicting future firm performance and explaining market reaction increases as the cultural and institutional distance of firms' home country increases.

H5A: The information value of the tone and FLS of firms' financial reporting in predicting future firm performance increases with the cultural distance of firms' home country from the U.S.

H5B: The information value of the tone and FLS of firms' financial reporting in predicting future firm performance increases with the institutional distance of firms' home country from the U.S.

H6A: The information value of the tone and FLS of firms' financial reporting in explaining market reaction increases with the cultural distance of firms' home country from the U.S.

H6B: The information value of the tone and FLS of firms' financial reporting in explaining market reaction increases with the institutional distance of firms' home country from the U.S.

III. Data and Descriptive Statistics

We focus on earnings press releases as the disclosure medium because extensive research documents the economic importance of earnings announcements as a means by which firms communicate with investors (e.g., Kothari 2001) and provides evidence that earnings announcements generally spark a higher market reaction than other SEC filings (Li and Ramesh 2009). Furthermore, the type of information disclosed in earnings announcements is not as strictly specified by the SEC relative to more highly regulated documents such as annual reports.⁴ As such,

⁴Annual reports typically include 'boilerplate' resulting in increased semantic and linguistic duplicates within and across firms (Dyer, Lang, and Stice-Lawrence 2017). To the extent that annual reports are increasingly used as compliance documents rather than a means of conveying firm-specific information, they are less valuable for a comparative analysis of disclosure.

earnings press releases leave more discretion to freely express linguistic and stylistic content, particularly for cross-listed firms.⁵

Disclosure and distance variables

We define the tone of earnings press releases, *TONE*, as the difference between the frequency count of positive and negative words divided by the sum of positive and negative frequency counts, using the methodology from Henry (2008). We follow the methodology in Muslu et al. (2015) to identify forward-looking statements and define *FLS* as the number of sentences containing forward-looking words divided by the total number of sentences in the earnings press release.

Our proxy for the cultural distance between the U.S. and a cross-listed firm's home country uses a Kogut-Singh (1988) measure incorporating the five Hofstede cultural dimensions we consider most relevant to financial disclosure choices (Hofstede 2001; Hofstede et al. 2010), namely, (i) *power distance*, (ii) *individuality*, (iii) *masculinity*, (iv) *uncertainty avoidance*, and (v) *long-term orientation*.⁶ The measure is aggregated as follows:

$$CULTDIST_{Hj} = \frac{\sum_{k=1}^5 \frac{(H_j^k - H_{U.S.}^k)^2}{VAR(H^k)}}{5}, \quad (1)$$

⁵ For example, cross-listed firms are generally exempt from the SEC regulation most pertinent to earnings announcements – Regulation G, which restricts the manner in which U.S. firms disclose non-GAAP metrics. Regulation G requires SEC registrants using non-GAAP measures to provide ‘a presentation, with equal or greater prominence, of the most directly comparable financial measure calculated and presented in accordance with GAAP’ (SEC 2003). Cross-listed firms are exempt from Regulation G if they are listed on an exchange outside the U.S., have also made disclosures outside the U.S., and do not derive the non-GAAP measure from U.S. GAAP-based amounts (SEC 2017).

⁶ Our measure includes the five Hofstede cultural dimensions we consider to be most relevant to financial disclosure choices. The results (untabulated) remain qualitatively similar when including all dimensions. In addition, this paper, like the vast majority of related literature, relies on the cultural index formula utilized in Kogut and Singh (1988). The Kogut and Singh distance measure has been shown to be a ‘special’ case of the Mahalanobis distance that assumes that the dimensions used in computing cultural distance are not correlated (Kandogan 2012). Several papers rely on the Mahalanobis measure (e.g., Beugelsdijk et al. 2018), whereas others take the square root of the index, relaxing the assumption of uncorrelated dimensions (e.g., Karolyi 2016). We examine various alternatives in composing the cultural distance measure, including the Mahalanobis distance and the square root, and our results remain qualitatively similar.

where H_j^k represents the k -th Hofstede cultural dimension (of the considered five) for country j , $H_{U.S.}^k$ represents the U.S. value of the k -th Hofstede cultural dimension, and $VAR(H^k)$ is the variance of the k -th Hofstede cultural dimension across all available countries in our sample. Overall, $CULTDIST_H$ represents the average scaled difference across the five Hofstede dimensions for country j relative to the U.S.

An alternative to the Hofstede cultural dimensions is the GLOBE database, which has been used in a growing body of related research (e.g., Karolyi 2016; Beugelsdijk, Kostova, Kunst, Spadafora, and van Essen 2018; Chand, Cummings, and Patel 2012). The GLOBE dataset defines nine separate cultural dimensions. The dimensions common to Hofstede and GLOBE are (i) *uncertainty avoidance*, (ii) *future orientation*, (iii) *power distance*, (iv) *institutional collectivism*, (v) *in-group collectivism*, and (vi) *gender egalitarianism*. The additional three dimensions found in GLOBE are (vii) *humane orientation*, (viii) *performance orientation*, and (ix) *assertiveness*. Our cultural distance measure, $CULTDIST_{GL}$, uses a Kogut-Singh distance, similar to Equation (3), and incorporates the nine cultural dimensions of GLOBE.

Parallel to our cultural distance approach, we compute two Kogut-Singh style measures of institutional distance. The first institutional distance measure, $INSTDIST_{WBJ}$, incorporates the following world governance indicators (World Bank 2017): (i) *voice and accountability*, (ii) *political stability*, (iii) *government effectiveness*, (iv) *regulatory quality*, (v) *rule of law*, and (vi) *control of corruption*. These six measures are used in various studies of the institutional distance between countries (e.g., Hakanson and Ambos 2010). The second institutional distance measure, $INSTDIST_{LP}$, incorporates the dimensions identified by La Porta et al. (1998) as relevant to investor protection, including (i) *legal origin*, (ii) *legal tradition*, (iii) an *anti-director rights index*, (iv)

importance of equity markets, (v) an index for the *rule of law*, (vi) an index for the *level of corruption*, and (vii) an index of the *legal system's efficiency*.

Model description and control variables

Our first and second hypotheses pertain to the difference between cross-listed and domestic firms' disclosure attributes and to the relation between these attributes and the cultural and institutional distance of the cross-listed firm's home country from the U.S. We estimate the following equation, which we also refer to as the determinants model:

$$DISCLOSURE_{it} = \alpha + \alpha_1 DF_i + \alpha_2 DIST_j + \alpha_3 ROA_{it} + \alpha_4 RETURN_{it} + \alpha_5 RISK_{it} + \alpha_6 BTM_{it} + \alpha_7 LOSS_{it} + \alpha_8 SIZE_{it} + Year + Industry + \varepsilon_{it} \quad (2)$$

where *DISCLOSURE* is alternately *TONE* and *FLS*. *DF* is an indicator variable equal to one if firm *i* is a cross-listed firm. *DIST* is alternately one of the four cultural and institutional distances of firm *i*'s home country.⁷ Following prior research (Huang et al. 2014; Henry 2008), we control for the following firm fundamentals: return on assets (*ROA*) as a measure of operational performance, an indicator variable (*LOSS*) equal to one (1) if net income is less than zero, the 12 month buy-and-hold returns (*RET*) as a proxy for stock performance, the standard deviation of the stock returns over the last year (*RISK*) as a proxy for riskiness, firm size (*SIZE*), and the book-to-market ratio (*BTM*) as a proxy for growth opportunities. Regressions also include year and industry fixed effects, defined as two-digit SIC codes. Variables are defined in the Appendix.

The indicator variable *DF* captures the main effect of the cross-listed firm sample and is the variable of interest for tests of *H1* and *H2*. We expect the tone of cross-listed firms' earnings announcements to be more negative than that of U.S. firms and therefore expect α_1 to be negative

⁷ Following Lundholm et al. (2014), we subtract the grand mean of the cultural and the institutional distance measures of the foreign sample from all the non-U.S. observations. As such, the mean of the distance variables is zero both in the U.S. sample and in the sample of cross-listed firms. This ensures that the dummy variable *DF* isolates the main effect of 'being cross-listed,' whereas the distance measures control for the incremental impact of cultural and institutional distance.

when the dependent variable is *TONE*. Compared to U.S. firms, we expect cross-listed firms to use more forward-looking statements in earnings press releases; therefore, we expect α_1 to be positive when *FLS* is the dependent variable. The measures of cultural and institutional distances *DIST* are the variables of interest for tests of *H3* and *H4*. We hypothesize that the tone of cross-listed firms' earnings announcements is negatively associated with the distances of the firms' home country; therefore, we expect α_2 to be negative when *TONE* is the dependent variable. For *H4*, we hypothesize that FLS are more frequent as the distance of the cross-listed firm country increases. Therefore, we expect β_2 to be positive when *FLS* is the dependent variable.

Our next hypotheses address the information value of the tone and FLS of earnings press releases in light of the cultural and institutional distances of the cross-listed firm's home country from the U.S. We examine the predictive power of the disclosure attributes in terms of future firm performance and explanatory power in terms of market reaction. An examination of predictive power extends the baseline model to predict the next year's operational performance:

$$\begin{aligned}
FUTROA_{it} = & \theta + \theta_1 DISCLOSURE_{it} \times DIST_j + \theta_2 DIST_i + \theta_3 DISCLOSURE_{it} \quad (3) \\
& + \theta_4 DF_i + \theta_5 ROA_{it} + \theta_6 RETURN_{it} + \theta_7 RISK_{it} + \theta_8 BTM_{it} + \theta_9 LOSS_{it} + \theta_{10} SIZE_{it} \\
& + Year + Industry + \varepsilon_{it},
\end{aligned}$$

where *FUTROA* is the one year ahead return on assets and other variables are as previously defined. The coefficient θ_3 captures the average informativeness of *DISCLOSURE* (which refers alternately to *TONE* and *FLS*) in predicting future operational performance. The interaction variable between *DISCLOSURE* and *DIST* captures the moderating effects of the cross-listed firm's cultural and institutional distance from the U.S. on the predictive power of the *TONE* and *FLS* of earnings press releases.

To examine the explanatory power of disclosure attributes for investor reaction, we use a short-window event-study analysis as follows:

$$CAR_{it}^{\#} = \rho + \rho_1 DISCLOSURE_{it} \times DIST_i + \rho_2 DIST_j + \rho_3 DISCLOSURE_{it} + \rho_4 DF_i \quad (4) \\ + \rho_5 ROA_{it} + \rho_6 LOSS_{it} + \rho_7 SIZE_{it} + \rho_8 \Delta EARN_{it} + Year + Industry + \varepsilon_{it},$$

where $CAR_{it}^{\#}$ is defined as the cumulative abnormal stock return in a ten-trading day window around the earnings announcement date – five trading days before to five trading days after earnings announcements when the *DISCLOSURE* variable is *TONE*.⁸ When the *DISCLOSURE* variable is *FLS*, we follow Bozanic et al. (2018) and define $CAR_{it}^{\#}$ as the absolute value of the dependent variable ($|CAR|$). The earnings information in the announcement is captured as the difference between the current earnings and the prior year’s earnings, standardized by this quarter’s stock price ($\Delta EARN$). Again, the interaction variable between *DISCLOSURE* and *DIST* captures the moderating effects of the cross-listed firm’s cultural and institutional distances from the U.S. on the explanatory power of *TONE* and *FLS* for market reaction.

Sample selection

Our selection of cross-listed firms begins with all non-U.S. firm observations available in the Compustat database between 2003 and 2016 that are listed on either NASDAQ or NYSE and for which reporting dates (rdq) are available. We remove firms for which there are missing firm fundamentals and control variables in Compustat and CRSP. We further remove observations from countries for which we do not have cultural dimensions available, as defined by Hofstede et al. (2010) and institutional dimensions defined by World Bank (2017). Because countries’ interim reporting requirements vary, we focus in this paper on the annual earnings announcement. We elect

⁸ Event studies often use a three-day window around the earnings announcement (e.g., Huang et al. 2014; Henry 2008); however, we extend the trading window in our context because the SEC’s filing deadline for foreign private issuers’ current reports is more relaxed. Cross-listed firms are not subject to the four-day deadline applicable to U.S. issuers’ current reports on Form 8-K (SEC 2004) and instead are required to file Form 6-K ‘promptly after the material contained in the report is made public. Interim reporting for foreign private issuers parallels the requirements of the issuer’s home country regulatory and stock exchange practices’ (SEC 2013).

to hand collect earnings announcements of cross-listed firms.⁹ To facilitate hand collection, we further reduce the number of cross-listed firms to the greater of 100 firms or 30% of the total number of firms from each country, selecting the largest firms based on their total assets.¹⁰ This yields a potential sample of 6,277 observations of 924 distinct firms located in 44 countries. After hand collection of available earnings announcements, our sample includes 4,761 observations of 768 separate cross-listed firms located in 41 countries. We then add U.S. S&P 1500 firms, downloading all available 8-K (Item 2.02) files from the SEC website for these firms' fourth-quarter earnings press releases between 2003 and 2016. We obtain 7,187 observations of 1,330 unique U.S. firms. In total, the sample includes 11,948 observations of 2,103 unique firms, of which approximately 40% are cross listed.

< Insert Table 1 about here. >

Table 1 provides summary statistics for *TONE*, *FLS*, and distances by country. The average value of *TONE* ranges from -0.176 to 0.549.¹¹ The proportion of forward-looking statements *FLS* ranges from 5.6% to 10.4%. The cultural distance measures indicate that the locations that are culturally most similar to the U.S. are its fellow Anglo-Saxon countries: Australia, Canada, Great Britain, Ireland, and New Zealand. The countries with the greatest cultural distances from the U.S. are located in Asia, including China, Japan, Korea, Russia, Singapore, and Taiwan. The institutional distance measures based on the World Bank institutional dimensions indicate that the

⁹ We elect to hand collect earnings announcements because SEC Form 6-K is used for cross-listed firms' interim reports as well as many other types of disclosures, and unlike the domestic equivalent (Form 8-K), Form 6-K currently has no topical indexing system. The structure of the actual filings thus hinders automated data collection. See, e.g., Lundholm et al. (2014).

¹⁰ For example, if there are 120 firms available for a certain country, we keep the largest 100 firms since 100 is greater than 30% of 120. However, if there are 400 available firms, we keep the largest 120 since 120 (i.e., 30% of 400) is greater than 100.

¹¹ This negative value is due to two earnings press releases that report poor earnings numbers. To ensure that our results are not driven by outliers, we repeat our main analysis on cultural and institutional distance using (i) a robust linear regression and (ii) a subsample of firms located in countries for which we have at least 25 observations. The results (untabulated) are qualitatively similar.

most similar countries are Belgium, Chile, France, Germany, and Great Britain, while the most institutionally distant countries include Argentina, China, India, Russia, and Venezuela.

Collectively, the *TONE* of cross-listed firms' earnings announcements (0.401) is significantly less optimistic than for U.S. firms (0.415), although differences exist across regions. As shown in Table 2 Panel A, the average tone of European firms' and South American firms' earnings announcements is significantly less optimistic than for U.S. firms, while the average tone for Australia, New Zealand, and Israel (combined as 'Other') is more optimistic than for U.S. firms (driven mainly by the higher optimism of Israeli earnings announcements). With an average tone of 0.411, the average tone of earnings announcements by Asian cross-listed firms is not significantly different from the U.S. average. In terms of *FLS*, nearly all regions dedicate a larger proportion of their press releases to forward-looking statements.

< Insert Table 2 about here. >

Panel B reports the summary statistics for the full sample. The distance measures are reported in their untransformed original values as well as their transformed mean-corrected values. The median values of both untransformed and transformed distance measures are zero given the large number of observations from the U.S. As shown, the sample firms are profitable on average but with a large standard deviation, pointing towards heterogeneity in firm performance (*ROA* and *RETURN*). Only approximately 23% of the observations in our sample report losses (*LOSS*). In addition, the large standard deviation of *BTM* indicates that there are firms present in different growth stages. Finally, we find that there is a large variation in terms of *SIZE* as well as financial performance ($\Delta EARN$). Panel C provides comparisons between U.S. and cross-listed firms, showing, for example, that the cross-listed firms in the sample are larger on average, which is consistent with Doidge, Karolyi, and Stulz's (2004) observation that only the largest foreign firms

tend to be cross-listed due to the costs associated with cross-listing practices. Correlation matrices are provided in the online appendix (Table A1).

IV. Results

Earnings press releases and cultural and institutional distance

The results of estimating Equation (2) with *TONE* as the dependent variable are presented in Table 3 Panel A.¹² Across the full sample in Columns 1 through 6, the coefficient on the cross-listing indicator variable *DF* is significantly negative. This result supports *H1*, namely, that cross-listed firms have a significantly more conservative tone in their earnings press releases, controlling for firm characteristics, performance, and uncertainty.

< Insert Table 3 about here. >

Columns 3 through 10 add the cultural and institutional distance measures alternately to the regression. As noted, distance is zero by construction for the U.S. sample, and it is mean-adjusted to zero for the non-U.S. sample. Therefore, the coefficient on *DF* in these regressions captures the effect of being a cross-listed versus a U.S. firm. The coefficients on the distance variables capture the incremental impact of the cross-listed firm's distance from the U.S. For the full sample, Columns 3 and 4 include cultural distance measured using the cultural dimensions of Hofstede et al. (2011) and GLOBE, respectively. The results show that as cross-listed firms' cultural distance from the U.S. increases, the tone of earnings press releases becomes incrementally more negative. This effect is economically significant. For instance, in comparison to U.S. firms, the results in Column 3 imply that the tone of non-U.S. firms' earnings announcements on average is approximately 9.5% lower relative to the mean (calculated as $-0.039 / 0.409 = -9.5\%$), and a one-

¹² For all regressions, we control for correlated errors, and we compute our standard errors within each country and year following Lundholm et al. (2014). This approach to compute standard errors is considerably more conservative than clustering by firm and year. In addition, if we cluster by industry and year, then our significance levels are at least as high as those reported in the tables. Finally, although we have directional hypotheses, we report *p*-values for two-tailed *t*-tests.

standard deviation increase in Hofstede cultural distance further reduces the tone by approximately 2% relative to the mean (calculated as $-0.010 * 0.815 / 0.409 = -2\%$). A negative association also exists between *TONE* and the institutional distance of the cross-listed firm's home country from the U.S., where institutional distance is measured alternately on the dimensions from the World Bank (2017) and La Porta et al. (1998) in Columns 5 and 6, respectively. To ensure that the results are not driven by the U.S. firms in the sample, Columns 7 through 10 include only the subsample of cross-listed firms. As shown, although the number of observations significantly decreases, coefficients on each of the alternative measures of cultural and institutional distance remain significantly negative. Collectively, these findings support *H3*, namely, that tone is increasingly more negative when the cross-listed firm's home country is culturally and institutionally more distant.

Panel B of Table 3 reports the results of estimating Equation (2) with *FLS* as the dependent variable. Across the full sample in Columns 1 through 6, the coefficient on the cross-listing indicator variable *DF* is significantly positive. These results support *H2*, namely, that cross-listed firms include a significantly higher proportion of FLS in their earnings press releases, controlling for firm characteristics, performance, and uncertainty. The remaining columns of Panel B add the cultural and institutional distance measures alternately to the regression. The results indicate that as cross-listed firms' cultural distance from the U.S. increases, earnings press release contain a greater proportion of FLS. In comparison to U.S. firms, the results in Column 3 indicate that the proportion of FLS in non-U.S. firms' earnings announcements on average is approximately 7.8% higher relative to the mean, and a one-standard deviation increase in the Hofstede cultural distance further increases the proportion of FLS by approximately 2.1% relative to the mean. Columns 7 through 10 further confirm that the results are not driven by the U.S. firms in the sample. Overall,

these results provide support for *H4* that the proportion of FLS increases with the cultural and institutional distance of the firms' home country from the U.S.

We next explore which aspect of home-country distance – cultural distance or institutional distance – better explains the differences in *TONE* and *FLS*. The results are presented in Table 4. Each model includes both one institutional distance measure and one cultural distance measure. Across all specifications, the coefficients on cultural distance remain statistically significant even when institutional distance is included as an explanatory variable. In contrast, the significance of the institutional distance coefficients strongly diminishes when cultural distance is included as an explanatory variable. In 7 of the 8 specifications – and all of the specifications for which *TONE* is the dependent variable – the coefficients on institutional distance are no longer significant when cultural distance is included as an explanatory variable, which indicates that institutional distance generally does not contain incremental explanatory power relative to cultural distance.¹³ Thus, *TONE* in particular appears to be more a function of the home country's culture than the home country's institutional environment. To the extent that a more conservative tone and a greater proportion of FLS can be interpreted as responding to potential credibility concerns, this result suggests that credibility concerns are a function of cross-listed firms' home countries' cultural distance more than home countries' institutional distance.

< Insert Table 4 about here. >

The informativeness of the tone and FLS of cross-listed firms' disclosures

¹³ Due to the significant differences between the characteristics of U.S. and non-U.S. firms in our sample, we performed additional tests to ensure that our results are not driven by non-linearities in the relationship between the primary test variables and the control variables. Specifically, we assessed interactions of our test variables with each of the control variables displayed and repeated the key analysis. The results (untabulated) confirm our main findings.

In this section, we investigate the informativeness of *TONE* and *FLS* and whether cultural and institutional distance affect this informativeness. We examine the information value in predicting future firm performance and explaining market reaction at earnings announcements.

Future performance

As shown in Table 5 Panel A, a significant and positive relationship exists between future firm performance (*FUTROA*) and both disclosure attributes, *TONE* (Columns 1 through 4) and the proportion of *FLS* (Columns 5 through 8). This result is consistent with that of prior research showing that the tone of earnings press releases and forward-looking information are value-relevant in explaining future firm performance (e.g., Lundholm and Myers 2002). For tests of the moderating effects of cultural and institutional distances, respectively, on the relationship between future performance and disclosure attributes, our variables of interest are the interactions between the disclosure attributes and distance. The positive coefficients on the interaction variable in Columns 1 and 2 imply that the predictive value of *TONE* for future performance increases as the firm's cultural distance from the U.S. increases, which supports *H5A*. In contrast, the coefficient on the interaction between *TONE* and institutional distance is positive and significant for only one of the institutional distance measures (Column 4), offering weaker support for *H5B*.

The results with *FLS* as the explanatory *DISCLOSURE* variable differ somewhat. The interaction variables with both institutional distance measures are statistically significant and positive (Columns 7 and 8), but the interaction variable is significant for only one of the cultural distance measures (Column 5). In summary, although both *H5A* and *H5B* are generally supported, the moderating effects of *cultural* distance on the relationship between future performance and *TONE* (but not *FLS*) are robust to measurement choice. The moderating effects of institutional

distance on the relationship between future performance and FLS (but not *TONE*) are more robust to measurement choice.

< Insert Table 5 about here. >

If counteracting home bias results in a more informative earnings announcement tone and proportion of FLS, then the explanatory power of our models should be higher as the distance from the U.S. increases. To quantify the incremental effect of tone and *FLS* in predicting performance depending on distance from the U.S., we split the sample of cross-listed firms into high and low distance based on the median, and join each sub-sample with the U.S. firms. We regress future ROA on all of the variables, alternately excluding and then including *TONE* or *FLS*.¹⁴ A comparison of the incremental increase in R^2 for the high-distance versus low-distance subsamples is shown in Panel B of Table 5, with Columns 1 through 6 reporting results for low versus high cultural distance and Columns 7 through 12 reporting results for low versus high institutional distance. The incremental increase in the adjusted R^2 of adding *TONE* or *FLS* is greater for the more culturally distant subsample. For instance, including *TONE* as an explanatory variable increases the adjusted R^2 by only 0.3% for the sample with a lower cultural distance from the U.S. (Column 2 versus column 1), while the inclusion of *TONE* increases R^2 by 0.7% for the more culturally distant subsample (Column 5 versus Column 4). For *FLS*, the increase in adjusted R^2 is only 0.1% for the lower cultural distance subsample (Column 3 versus Column 1) compared to an increase of 0.4% for the more culturally distant subsample (Column 6 versus Column 4). Collectively, these results imply that the informativeness of *TONE* and *FLS* increases as the cultural distance from the U.S. increases, offering additional support for *H5A*.

¹⁴ We thank an anonymous reviewer for this suggestion.

Related to *H5B*, we split the sample of cross-listed firms into high and low institutional distance based on the median, and for each subsample, we regress future ROA on all of the variables, alternately excluding and then including *TONE* or *FLS*. Comparisons show that the incremental increase in the adjusted R^2 of adding *TONE* or *FLS* is greater for the more institutionally distant subsample (Columns 10 through 12) than for the less institutionally distant subsample (Columns 7 through 9), which offers additional support for *H5B*.

Market reaction

Table 6 (Columns 1 through 4) present the results of regressing *CAR* on *TONE* and the interactions of *TONE* and distance. Across all specifications, the market reaction is positively associated with the tone of earnings press releases, in line with previous research (e.g., Henry 2008). The negative association between *CAR* and *DF*, which points towards a lower average market reaction to the cross-listed firms' earnings announcements relative to U.S. firms, could reflect differences in the timing of the release of information into the market or, alternatively, the home bias disadvantage of cross-listed firms.¹⁵ The positive and significant coefficients on the test variables of interest, namely, the interaction between *TONE* and cultural distance (Columns 1 and 2), indicate that greater cultural distance from the U.S. strengthens the positive relation between the tone of earnings press releases and market reaction.¹⁶ This result supports *H6A*. In contrast, neither of the coefficients on the interaction between tone and institutional distance is statistically significant (Columns 3 and 4), which fails to support *6B*. Together, these findings suggest that greater cultural distance increases the informativeness of disclosure *TONE*.

< Insert Table 6 about here. >

¹⁵ An examination of these alternative explanations is beyond the scope of this paper, and we leave this question for future research.

¹⁶ Our main analysis uses ΔEARNit as the measure for earnings news. Alternatively, we compute the forecast error as the difference between the achieved earnings per share (EPS) and the mean analysts' EPS consensus prior to the issuance of the results, which substantially reduces the sample size, particularly for cross-listed firms. The results (untabulated) are similar to the main results.

Columns 5 through 8 present the results of estimating Equation (4) but with *FLS* instead of *TONE* as an explanatory variable. As noted, the dependent variable is the absolute value of the cumulative abnormal returns as the dependent variable ($|CAR|$) given that FLS could contain either positive or negative news. Across all models, the magnitude of the absolute market reaction is positively associated with the use of FLS in earnings press releases, in line with previous research on the information value of FLS in corporate disclosures (Lundholm and Myers 2002). The interaction coefficients, our test variables of interest, are statistically significant only in Columns 5 and 8, indicating that the moderating impact of distance on the relation between FLS and current returns is sensitive to measurement choice and thus provides weaker evidence for *H6A* and *H6B*.

Based on a goodness-of-fit comparison (shown in Table 6, Panel B), the disclosure attributes increase the goodness of fit more in the subsamples where distance is high. Overall, evidence of the moderating impact of distance on the informativeness of *TONE* and *FLS* in explaining the stock market reaction is mixed but tends to show that the information value of both disclosure attributes increases with distance.

V. Additional analyses

Additional analyses include examinations of the following: an alternative proxy for informativeness, alternative measures of distance and tone, and the relation between tone and individual cultural dimensions.

Alternative proxy for informativeness

To corroborate findings related to informativeness of the tone and FLS of cross-listed firms' disclosures (H5 and H6), we perform tests using bid-ask spread as an alternative proxy for informativeness. We re-estimate Equation (3) with spread (measured as the three-month average bid-ask spread following the release of the earnings announcement) as the dependent variable and

the tone/distance and FLS/distance interaction terms as independent variables of interest. Untabulated results indicate a negative relation between bid-ask spread and tone (but not FLS). The relation between bid-ask spread and tone becomes more negative as the firm's cultural and institutional distance from the U.S. increases. To the extent that a reduction in spreads following announcements signals an overall increase in information (Rogers 2008), these results are suggestive of tone becoming more informative as distance from the U.S. increases.

Alternative measures of distance

Our main results focus on cultural and institutional distance from the U.S. as a proxy for the disparities between the home and foreign markets. We repeat our main analysis using five alternative measures of distance. First, we define relative accounting distance (*GAAPDIST1*) as dissimilarities across 52 accounting rules between the home country and the U.S. (Bae, Tan and Welker 2008). Second, we define the difference in the quality of accounting rules (*GAAPDIST2*) following the Center for International Financial Analysis (see La Porta et al. 1998; Bae et al. 2008). Third, we measure geographic distance between the home country and the U.S. (*GEODIST*), following Mayer and Zignago (2011). Fourth, we examine linguistic differences between the U.S. and home country using a dummy variable (*NONENG*), which takes the value of one (1) if English is not one of the official languages spoken in the cross-listed firm's home country. Fifth, we examine language-time dissociation using a dummy variable (*LTA*), which takes the value of one (1) if the firm is located in a country with lower future time disassociation in the language, as presented by Chen (2013) and Kim, Kim, and Zhou (2017).¹⁷

¹⁷ People located in countries with weak future time references tend to perceive the future as something near that they would not be willing to jeopardize, whereas under strong language-time disassociation, the future would be perceived as something more distant. Firms located in countries with weaker future time references in language have been shown to engage less in myopic behaviour, such as accruals earnings management (Kim, Kim, and Zhou 2017). By analogy, we conjecture that cross-listed firms from such countries communicate differently with regard to *TONE* and *FLS* in financial disclosure.

The results provided in Table 7 show a negative relation between *TONE* and each of the five alternative distance measures, similar to our main analysis. The positive relation between *FLS* and distance found in our main results exists only for *GAAPDIST2* and the two linguistic distance measures *NONENG* and *LTA*.

Further, additional (untabulated) results show that when our main cultural or institutional distance measures are included in the determinants models, coefficients on the alternative distance measures – other than geographical distance – are no longer statistically significant. This finding suggests that geographical distance, but neither accounting distance nor language distance, has incremental power to explain the *TONE* and *FLS* of cross-listed firms' disclosures beyond cultural and institutional distance.

In addition to tests using alternative measures of distance, we assess whether a shock in financial reporting 'distance' between U.S. and cross-listed firms led to shifts in the tone and *FLS* of cross-listed firms' earnings press releases. In November 2007, the SEC lifted the requirement for cross-listed firms to reconcile IFRS disclosures to U.S. GAAP, effectively increasing the accounting distance from the U.S. for those firms. Given that many countries had adopted IFRS prior to 2007, we exploit the introduction of the SEC directive as a natural shock. The results presented in the online appendix (Table A2) provide some evidence that the increase in accounting distance between the U.S. and non-U.S. firms led to a more cautious tone in cross-listed firms' earnings announcements.

Alternative measures of tone

Our main analysis uses the Henry (2006, 2008) wordlist because Henry and Leone (2016) present evidence that word-frequency tone measures based on domain-specific wordlists (compared to general wordlists, e.g., *DICTION*) better predict the market reaction to earnings

announcements, have greater statistical power in short-window event studies, and exhibit more economically consistent post-announcement drift. Robustness test repeats the determinants analysis using an alternative measure of tone, $TONE^{LM}$, measured based on the wordlists developed by Loughran and McDonald (2011). As shown in the online appendix (Table A3), the conclusions are similar to the main results, with a negative relation between $TONE^{LM}$ and the non-U.S. indicator variable, both cultural distance measures, and one of the institutional distance measures.

We also examine unexpected tone, proxied alternately by abnormal tone ($ABTONE$) as in Huang et al. (2014) and $\Delta TONE$ as the current-year earnings announcement's tone minus the prior-year's announcement's tone. The results, included in the online appendix, do not show evidence of an overall significant difference between cross-listed and U.S. firms, but both measures are lower as home-country distance increases.¹⁸ One caveat is that the model for abnormal tone was developed in the U.S. market and, thus, may not be applicable to the international setting.

Individual cultural dimensions

The cultural distance measures used in our main analysis aggregate cultural dissimilarities between countries. In an additional analysis, we explore the extent to which the individual underlying dimensions relate to disclosure attributes by estimating Equation (2) separately for the individual Hofstede dimensions. The results, presented in Table A4 in the online appendix, show a negative relation between $TONE$ and the cultural dimension of Uncertainty Avoidance and a positive relation between $TONE$ and the dimensions of Individualism and Masculinity. These cultural factors associated with a more (versus less) cautious approach to disclosure tone are also the cultural values linked theoretically in Gray (1988) with more (versus less) accounting

¹⁸ A potentially interesting avenue for future research could be to compare the disclosures of cross-listed firms targeted specifically to a home-country audience with disclosures targeted to the country of listing. This could allow tests of whether and how cross-listed firms adjust their communication.

conservatism.¹⁹ We also find that the Hofstede cultural dimension long term is associated negatively with *TONE* and positively with the proportion of FLS.

Non-Linearities

To ensure that our results are driven by the overall distance rather than by the direct effect of any specific dimension of either culture or institutional aspects, we repeat our analyses when each of the individual dimensions remains relatively fixed. That is, for each individual dimension considered in our overall distance measures, we re-run our analysis by sequentially considering only a subsample of firms located in countries within the same decile as the U.S. for the specific dimension. The results from estimating the models of determinants (Equation 2) and informativeness (Equations 3 and 4) on 22 different decile subsamples for the Hofstede cultural dimensions and the World Bank institutional dimensions are reported in the online appendix (Table A5). The findings are generally consistent with the main results, even with the more restricted subsamples isolating countries at the dimension level. Overall, our results are not driven by the heightened value of a particular U.S. dimension vis-à-vis other countries.

VI. Conclusion

We present evidence that cross-listed firms have a less positive tone and more FLS in their earnings press releases relative to U.S. firms. Further, we find that the tone becomes more negative and that the frequency of FLS increases as the firm's home-country institutional and cultural distance from the U.S. increases. Despite the less positive disclosure tone and the greater use of FLS for more distant cross-listed firms, the signalling power in terms of future performance

¹⁹ Prior empirical research on reporting choices also shows that the Hofstede cultural dimension of Uncertainty Avoidance is negatively associated with earnings management, while Individualism is positively associated with earnings management (Han et al., 2010).

increases as distance increases. While the market reaction to earnings announcements, on average, is lower for cross-listed firms, the positive relation between market reaction and disclosure *TONE* and FLS increases with distance. Overall, our findings indicate that the disclosures of cross-listed firms are more cautious yet more informative. We interpret these findings as suggestive of disclosure tone and FLS as a means to overcome home-bias related credibility concerns arising from cultural and institutional distances.

Appendix: Variable Definitions

Disclosure Variables	
FLS_{it}	The number of sentences containing forward-looking words divided by the total number of sentences in the earnings press release.
$TONE_{it}$	The frequency count of positive (PW_{it}) minus negative (NW_{it}) words in press release i of year t , scaled by the sum of the positive and negative word counts in the press release.
Other Variables	
CAR_{it}	The cumulative abnormal stock return for firm i in year t in a ten-trading day window around the earnings announcement date; starting five days before the issuance of the press release and ending five days after.
$CULTDIST_{Hj}$	Kogut-Singh distance measure of cultural distance to the U.S., computed as $CULTDIST_{Hj} = \frac{\sum_{k=1}^5 \frac{(H_j^k - H_{U.S.}^k)^2}{VAR(H^k)}}{5},$ where H_j^k represents the k th dimension of Hofstede (1980) for country j , whereas $H_{U.S.}^k$ is the U.S. value for the k th dimension. $VAR(H^k)$ represents the variance of the k th dimension. The dimensions included are (i) power distance, (ii) individualism, (iii) masculinity, (iv) uncertainty avoidance, and (v) long-term orientation.
$CULTDIST_{GLj}$	Kogut-Singh distance measure of cultural distance to the U.S., computed as $CULTDIST_{GLj} = \frac{\sum_{k=1}^9 \frac{(GL_j^k - GL_{U.S.}^k)^2}{VAR(GL^k)}}{9},$ where GL_j^k represents the k th dimension of Globe (2017) for country j , whereas $GL_{U.S.}^k$ is the U.S. value for the k th dimension. $VAR(GL^k)$ represents the variance of the k th dimension. The dimensions included are (i) uncertainty avoidance, (ii) future orientation, (iii) power distance, (iv) institutional collectivism, (v) in-group collectivism, and (vi) gender egalitarianism. The extended dimensions found in GLOBE are: (vii) humane orientation, (viii) performance orientation, and (ix) assertiveness.
DF_i	Indicator variable that takes the value '1' if firm i is located outside of the U.S., '0' if firm i is a U.S. firm.
$FUTROA_{it}$	The one year ahead return on assets for firm i in year t , computed as the ratio between the firm's net income and the total assets
$INSTDIST_{WBj}$	Kogut-Singh distance measure of institutional distance to the U.S., computed as $INSTDIST_{WBj} = \frac{\sum_{k=1}^6 \frac{(WB_j^k - WB_{U.S.}^k)^2}{VAR(WB^k)}}{6},$ where WB_j^k represents the k th dimension of World Bank (2017) for country j , whereas $WB_{U.S.}^k$ is the U.S. value for the k th dimension. $VAR(WB^k)$ represents the variance of the k th dimension. The dimensions included are (i) voice and accountability, (ii) political stability, (iii) government effectiveness, (iv) regulatory quality, (v) rule of law, and (vi) control of corruption.
$INSTDIST_{LPj}$	Kogut-Singh distance measure of institutional distance to the U.S., computed as $INSTDIST_{LPj} = \frac{\sum_{k=1}^7 \frac{(LP_j^k - LP_{U.S.}^k)^2}{VAR(LP^k)}}{7},$ where LP_j^k represents the k th dimension of La Porta et al. (1998) for country j , whereas $LP_{U.S.}^k$ is the U.S. value for the k th dimension. $VAR(LP^k)$ represents the variance of the k th dimension. The dimensions included are (i) legal origin, (ii) legal tradition, (iii) an anti-director rights index, (iv) importance of equity markets, (v) an index for the rule of law, (vi) an index for the level of corruption, and (vii) an index of the legal system's efficiency.
ROA_{it}	The return on assets for firm i in year t , computed as net income divided by total assets.
$RETURN_{it}$	The 12-month buy-and-hold monthly returns, ending at the fiscal year-end, for firm i in year t .
$RISK_{it}$	Standard deviation for firm i of the buy-and-hold monthly returns over the last 12 months ending three months after the fiscal year-end, t .
BTM_{it}	Book-to-market ratio for firm i in year t measured at the fiscal year-end.
$LOSS_{it}$	Indicator variable equal to 1 if net income is negative for firm i in quarter q of year t , 0 otherwise.
$SIZE_{it}$	Logarithm of the market capitalization of firm i on the last day of the quarter q of year t (in \$ mil).

All continuous variables are winsorized at the 1% and 99% levels of their distribution.

REFERENCES

- Arslan-Ayaydin, Ö., Boudt, K., & Thewissen, J. (2014). Managers set the tone: Equity incentives and the tone of earnings press releases. *Journal of Banking & Finance* 72, 132-147.
- Bae, K., Tan, H., & Welker, M. (2008). International GAAP differences: The impact on foreign analysts. *The Accounting Review* 83(3), 593–628.
- Barberis, N. & Thaler, R. (2003). Chapter 18: A survey of behavioral finance. In *Handbook of the Economics of Finance* (pp. 1053-1128). Elsevier, Volume 1, Part B.
- Beugelsdijk, S., Kostova, T., Kunst, V., Spadafora, E., & van Essen, M. (2018). Cultural distance and firm internationalization: A meta-analytical review and theoretical implications. *Journal of Management* 44(1), 89-130.
- Bik, O., & Hooghiemstra, R. (2018). Cultural differences in auditors' compliance with audit firm policy on fraud risk assessment procedures. *Auditing: A Journal of Theory and Practice* 37, 25-48.
- Boudt, K., Thewissen, J., & Torsin, W. (2018). When does the tone of earnings press releases matter? *International Review of Financial Analysis* 57, 231-245.
- Boyacigiller, N. & Adler, N. (1991). The parochial dinosaur: Organizational science in a global context. *The Academy of Management Review* 16, 262-290.
- Bozzolan, S., Trombetta, M., & Beretta, S. (2009). Forward-Looking Disclosures, Financial Verifiability and Analysts' Forecasts: A Study of Cross-Listed European Firms, *European Accounting Review* 18, 435-473.
- Bozanic, Z., Roulstone D. & Van Buskirk A. (2018). Management earnings forecasts and other forward-looking statements, *Journal of Accounting and Economics* 65, 1-20.
- Chand, P., Cummings, L., & Patel, C. (2012). The effect of accounting education and national culture on accounting judgments: A comparative study of Anglo-Celtic and Chinese culture. *European Accounting Review* 21(1), 153-182.
- Chen, M. (2013). The effect of language on economic behavior: evidence from savings rates, health behaviors, and retirement assets. *American Economic Review* 103(2), 690-731.
- Chen, J. & Zhang, H. (2010). The impact of regulatory enforcement and audit upon IFRS compliance: Evidence from China. *European Accounting Review* 19(4), 665-692.
- Davis, A., Piger, J., & Sedor, L. (2012). Beyond the numbers: Measuring the information content of earnings press release language. *Contemporary Accounting Research* 29(3), 845-868.
- Ding, Y., Jeanjean, T., & Stolowy, H. (2005). Why do national GAAP differ from IAS? The role of culture. *The International Journal of Accounting* 40, 325-350.
- Doidge, C., Karolyi, A., & Stulz, R. (2004). Why are foreign firms listed in the U.S. worth more? *Journal of Financial Economics* 71, 205-238.
- Doidge C., Karolyi, A. & Stulz, R. (2010). Why do foreign firms leave U.S. equity markets? *The Journal of Finance* 65, 1507-1553.
- Dye, R. (1986). Proprietary and Nonproprietary Disclosures. *Journal of Business* 59 331-366.

- Dyer, T., Lang, M., & Stice-Lawrence, L. (2017). The evolution of 10-K textual disclosure: Evidence from Latent Dirichlet Allocation. *Journal of Accounting and Economics* 64, 221-245.
- Elliott, W., Rennekamp, K. & White, B. (2015). Does concrete language in disclosures increase willingness to invest? *Review of Accounting Studies* 20, 839-865.
- French, K. & Poterba, J. (1991). Investor diversification and international equity markets. *American Economic Review* 81(2), 222-226.
- Grauer, R. & Hakansson, N. (1987). Gains from international diversification: 1968-85 returns on portfolios of stocks and bonds. *The Journal of Finance* 42(3), 721-739.
- Gray, S. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus* 24(1), 1-15.
- Grinblatt, M. & Keloharju, M. (2001). How distance, language, and culture influence stockholdings and trades. *The Journal of Finance* 56(3), 1053-1073.
- Grubel, H. (1968). Internationally Diversified portfolios: welfare gains and capital flows. *The American Economic Review* 58(5), 1299-1314.
- Guiso, L., Sapienza, P., & Zingales, L. (2009). Cultural Biases in Economic Exchange? *The Quarterly Journal of Economics* 124(3), 1095-1131.
- GLOBE (2017) Global Leadership & Organizational Behavior Effectiveness. www.globeproject.com.
- Håkanson, L., & Ambos, B. (2010). The antecedents of psychic distance. *Journal of International Management* 16(3), 195-210.
- Han, S., Kang, T., Salter, S., & Yoo, Y. (2010). A cross-country study on the effects of national culture on earnings management. *Journal of International Business Studies* 41(1), 123-141.
- Henry, E. (2006). Market reaction to verbal components of earnings press releases: Event study using a predictive algorithm. *Journal of Emerging Technologies in Accounting* 3, 1-19.
- Henry, E. (2008). Are investors influenced by how earnings press releases are written? *Journal of Business Communication* 45(4), 363-407.
- Henry, E. & Leone, A. (2016). Measuring qualitative information in capital markets research: Comparison of alternative methodologies to measure disclosure tone. *The Accounting Review* 91(1), 153-178.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. London: Sage Publications.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*. Sage Publications.
- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture* 2(1), 3-26
- Hofstede, G., Hofstede, G., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind*. McGraw-Hill. New York.
- Hope, O. (2003). Firm-level disclosures and the relative roles of culture and legal origin. *Journal*

- of International Financial and Managerial Accounting* 14(3), 214-248.
- Hooghiemstra, R., Hermes, N., & Emanuels, J. (2015). National culture and internal control disclosures: A cross-country analysis. *Corporate Governance: An International Review* 23(4), 357-377.
- Huang, X., Teoh, S., & Zhang, Y. (2014). Tone management. *The Accounting Review* 89(3), 1083-1113.
- Hutton, A., Miller, G., & Skinner, D. (2003). The Role of Supplementary Statements with Management Earnings Forecasts. *Journal of Accounting Research* 41, 867-890.
- Jaggi, B. & Low, P. (2000). Impact of culture, market forces, and legal system on financial disclosures. *International Journal of Accounting* 35(4), 495-519.
- J. P. Morgan. (2017). *IR Best Practices Guide, DR Advisor Series*. Depository Receipts | Corporate Clients. https://www.adr.com/Content/Documents/2017_IR_Best_Practices.pdf
- Jennings, R. (1987). Unsystematic Security Price Movements, Management Earnings Forecasts, and Revisions in Consensus Analyst Earnings Forecasts. *Journal of Accounting Research* 25, 90-110.
- Jiang, J., Petroni, K., & Wang, I. (2010). Did Eliminating the 20-F Reconciliation Between IFRS and US GAAP Matter? Working paper, Michigan State University.
- Karolyi, A. (2016). The gravity of culture for finance. *Journal of Corporate Finance* 41, 610-625.
- Karolyi, A. & Stulz, R., (2003). Chapter 16: Are financial assets priced locally or globally? in *Handbook of the Economics of Finance* (pp. 975-1020). Elsevier, Volume 1, Part B.
- Kandogan, Y. (2012). An improvement to Kogut and Singh measure of cultural distance considering the relationship among different dimensions of culture. *Research in International Business and Finance* 26, 196-203.
- Kasznik, R. (1999). On the Association between Voluntary Disclosure and Earnings Management. *Journal of Accounting Research* 37, 57-81.
- Kim, J., Kim, Y., & Zhou, J. (2017). Languages and earnings management. *Journal of Accounting and Economics* 63, 288-306.
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies* 19(3), 411-432.
- Kothari, S. (2001). Capital markets research in accounting. *Journal of Accounting and Economics* 31(1), 105-231.
- Lang, M., Smith-Raedy, J. S. & Wilson, W. (2006). Earnings management and cross listing: Are reconciled earnings comparable to U.S. earnings? *Journal of Accounting and Economics* 42(1-2), 255-283.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R. (1998). Law and finance. *Journal of Political Economy* 106(6), 1113-1155.
- Li, E. & Ramesh, K. (2009). Market reaction surrounding the filing of periodic SEC reports. *The Accounting Review* 84(4), 1171-1208

- Loughran, T. & McDonald, B. (2011). When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks. *The Journal of Finance* 66, 35-65.
- Lundholm, R. & Myers, L.A. (2002). Bringing the future forward: The effect of disclosure on the returns-earnings relation. *Journal of Accounting Research* 40, 809-839.
- Lundholm, R., Rogo, R., & Zhang, J. (2014). Restoring the tower of babel: How foreign firms communicate with U.S. investors. *The Accounting Review* 89(4), 1453-1485.
- Mayer, T., & Zignago, S. (2011). Notes on CEPII's distance measures: The GeoDist database. Working paper, The French Centre for Research and Studies on the World Economy.
- Mercer, M. (2004). How Do Investors Assess the Credibility of Management Disclosures? *Accounting Horizons* 18, 185-196.
- Muslu V., Radhakrishnan, S., Subramanyam, K., & Lim, D. (2015). Forward-Looking MD&A Disclosures and the Information Environment. *Management Science* 61, 931-948.
- Rogers, J., Van Buskirk, A., & Zechman, S. (2011). Disclosure tone and shareholder litigation. *The Accounting Review* 86(6), 2155-2183.
- Shao, L., Kwok, C., & Guedhami, O. (2010). National culture and dividend policy. *Journal of International Business Studies* 41, 1391-1414.
- Stocken, P. (2000). Credibility of voluntary disclosure. *The RAND Journal of Economics* 31(2), 359-374.
- Tetlock, P. (2007). Giving Content to Investor Sentiment: The Role of Media in the Stock Market. *The Journal of Finance* 62, 1139-1168.
- Trueman, B. (1986). Why do managers voluntarily release earnings forecasts? *Journal of Accounting and Economics* 8, 53-71.
- U.S. Securities and Exchange Commission. (2003). Final rule: Conditions for use of non-GAAP financial measures. Releases 33-8176 and 34-47226; File No. S7-43-02. <http://www.sec.gov/rules/final/33-8176.htm>
- U.S. Securities and Exchange Commission. (2004). Final rule: Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date. Releases 33-8400; 34-49424; File No. S7-22-02. <http://www.sec.gov/rules/final/33-8400.htm>
- U.S. Securities and Exchange Commission. (2013). Accessing the U.S. capital markets - A brief overview for foreign private issuers. <https://www.sec.gov/divisions/corpfin/internatl/foreign-private-issuers-overview.shtml>
- U.S. Securities and Exchange Commission. (2017). SEC division of corporate finance, Financial Reporting Manual. <https://www.sec.gov/corpfin/cf-manual>
- Westbrook, I. (2014). *Strategic financial and investor communication: The stock price story*. Routledge NY.

Table 1: Tone, forward-looking statements and cultural/institutional distance, by country

	Country	Obs.	Firms	PosWords	NegWords	TotalWords	TONE	FLS	CULTDIST _H ⁺	CULTDIST _{GL} ⁺	INSTDIST _{WB} ⁺	INSTDIST _{LP} ⁺
1	ARG	124	14	54.435	18.073	1310.613	0.499	0.076	1.234	1.988	3.362	4.572
2	AUS	7	2	15.714	8.857	1072.857	0.087	0.056	0.020	0.124	0.157	0.172
3	AUT	4	1	78.750	34.500	1189.500	0.434	0.074	1.539	0.696	0.179	3.815
4	BEL	29	6	81.276	26.724	1447.517	0.549	0.076	2.271	NA	0.060	4.056
5	BRA	136	16	78.706	32.074	1910.926	0.428	0.085	1.768	0.849	2.102	4.455
6	CAN	904	148	71.236	34.883	1621.533	0.362	0.075	0.127	0.800	0.174	0.337
7	CHE	137	16	100.241	39.905	2144.715	0.450	0.084	1.101	1.297	0.334	2.584
8	CHL	134	19	140.769	61.970	2515.433	0.376	0.083	2.828	NA	0.044	2.471
9	CHN	477	112	58.803	22.132	1509.830	0.455	0.091	3.772	1.649	4.433	NA
10	COL	11	2	37.000	10.000	3640.455	0.503	0.088	2.717	1.971	3.308	6.139
11	DEU	122	24	75.164	28.861	1579.869	0.464	0.076	1.501	1.233	0.078	3.836
12	DNK	15	2	130.867	41.933	3209.867	0.521	0.094	1.569	3.014	0.403	3.528
13	ESP	55	10	222.273	68.200	4135.673	0.492	0.086	1.535	1.696	0.167	2.876
14	FIN	22	3	239.455	104.318	3200.591	0.402	0.083	1.032	1.021	0.500	2.898
15	FRA	81	17	65.099	25.222	1726.309	0.412	0.083	1.669	1.219	0.022	1.771
16	GBR	311	63	119.199	61.830	2265.826	0.397	0.077	0.286	0.830	0.051	0.095
17	GRC	128	21	39.094	26.477	1587.898	0.128	0.086	2.733	2.563	0.783	4.819
18	HKG	112	25	62.607	22.321	1449.527	0.433	0.064	2.299	0.385	0.271	1.011
19	HUN	7	1	216.000	171.571	2815.857	0.129	0.075	1.184	4.258	0.498	NA
20	IDN	19	2	23.789	8.895	992.842	0.288	0.094	3.148	1.085	3.734	NA
21	IND	72	9	48.944	16.194	1176.208	0.533	0.087	1.457	2.088	2.837	1.971
22	IRL	228	36	70.452	26.908	1525.513	0.452	0.078	0.264	1.029	0.126	NA
23	ISR	650	89	31.880	12.623	1078.506	0.489	0.060	1.323	0.386	0.776	1.737
24	ITA	58	9	75.914	42.052	2096.948	0.347	0.061	0.864	1.666	0.785	4.288
25	JPN	147	18	128.531	59.619	3109.993	0.408	0.098	3.363	1.429	0.099	1.566
26	KOR	55	12	18.473	10.455	847.782	0.329	0.102	4.637	3.725	0.369	4.037
27	LUX	67	16	88.567	45.030	1880.090	0.359	0.079	1.092	NA	0.319	NA
28	MEX	165	21	75.564	36.836	2104.188	0.319	0.074	2.384	0.921	2.323	5.948
29	NLD	162	31	89.142	36.623	1731.086	0.417	0.075	1.824	0.883	0.227	1.949
30	NOR	22	4	211.500	112.409	3377.136	0.195	0.082	1.691	NA	0.319	2.526
31	NZL	8	2	307.375	209.875	4856.875	-0.176	0.084	0.218	1.682	0.389	0.707
32	PER	26	4	47.615	34.577	2037.385	0.036	0.084	2.809	NA	2.935	5.995
33	PHL	18	2	132.556	79.556	2710.333	0.330	0.073	2.412	2.158	3.334	6.296
34	PRT	15	2	165.667	78.667	2735.600	0.078	0.085	3.120	2.136	0.215	4.061
35	RUS	41	5	67.659	25.073	1924.683	0.324	0.101	4.323	4.922	4.713	NA
36	SGP	56	10	43.304	22.089	1319.571	0.316	0.095	3.466	2.199	0.783	0.858
37	SWE	38	5	129.342	60.474	2447.842	0.401	0.088	2.154	3.233	0.337	2.764
38	TUR	10	1	226.600	163.900	5695.400	0.244	0.085	2.018	1.924	2.131	6.273
39	TWN	80	10	45.462	23.438	1276.700	0.267	0.075	3.852	0.901	0.233	2.373
40	URY	5	1	114.200	34.200	1891.200	0.549	0.104	2.397	NA	0.722	NA
41	USA	7,187	1,335	64.022	26.876	937.503	0.415	0.079	0.000	0.000	0.000	0.000
42	VEN	3	1	134.333	40.667	2002.667	0.282	0.100	3.139	1.992	7.528	5.532
Summary including U.S. firms												
Total		11,948	2,103									
Mean				68.45	29.642	1262	0.409	0.079	0.648	0.448	0.422	0.729
Median				48	18	1008	0.444	0.080	0.000	0.000	0.000	0.000
Std. Dev.				74.01	42.209	947.511	0.297	0.016	1.139	1.933	2.562	2.541
Summary excluding U.S. firms												
Total		4,761	768									
Mean				75.26	33.74	1745	0.401	0.082	1.627	1.169	1.061	2.066
Median				48	17	1387	0.432	0.084	1.322	0.883	0.270	1.737
Std. Dev.				88.63	52.297	1295,399	0.311	0.021	1.291	0.755	1.454	1.725

This table presents the number of observations and firms, the average *TONE* and *FLS* per country in the sample, and the separate cultural and institutional distances. The full sample consists of 11,948 firm-year observations of 2,103 firms for the fiscal years 2003 to 2016 across 42 separate countries. The distance measures (*CULTDIST_H*, *CULTDIST_{GL}*, *INSTDIST_{WB}*, and *INSTDIST_{LP}*) are transformed for use in regressions (the grand mean of the cross-listed sample is subtracted from the cross-listed observations to alleviate the main effect of firms being cross-listed). This table reports the untransformed distances (as indicated by “”) for interpretation purposes. See the Appendix for variable definitions.

Table 2: Summary statistics ($n=11,948$)
Panel A – Tone and forward-looking statements, by region

<i>TONE</i>	Mean _{Non-U.S.}	Mean _{U.S.}	<i>t</i> -test	<i>p</i> -Val
All Cross-Listed Firms	0.401	0.415	-2.547	0.014
Per Region				
Asia	0.411	0.415	-0.382	0.702
Europe	0.390	0.415	-2.801	0.051
North America (excluding U.S.)	0.355	0.415	-5.756	0.000
Other	0.477	0.415	4.967	0.000
South America	0.409	0.415	-1.721	0.083
<i>FLS</i>	Mean _{Non-U.S.}	Mean _{U.S.}	<i>t</i> -test	<i>p</i> -Val
All Cross-Listed Firms	0.082	0.079	3.798	0.000
Per Region				
Asia	0.091	0.079	5.782	0.000
Europe	0.080	0.079	2.492	0.013
North America (excluding U.S.)	0.071	0.079	-4.236	0.000
Other	0.085	0.079	3.782	0.000
South America	0.088	0.079	6.281	0.000

Panel B – Summary statistics for the full sample

	Mean	Std. Dev.	Q25	Median	Q75
<i>TONE</i>	0.409	0.297	0.246	0.444	0.619
<i>FLS</i>	0.079	0.016	0.048	0.080	0.089
<i>CAR</i>	0.002	0.080	-0.042	0.007	0.050
<i>FUTROA</i>	0.006	0.024	0.001	0.008	0.054
<i>DF</i>	0.398	0.490	0.000	0.000	1.000
<i>CULTDIST_H⁺</i>	0.648	1.139	0.000	0.000	1.234
<i>CULTDIST_{GL}⁺</i>	0.448	1.933	0.000	0.000	0.799
<i>INSTDIST_{WB}⁺</i>	0.422	2.562	0.000	0.000	0.174
<i>INSTDIST_{LP}⁺</i>	0.729	2.541	0.000	0.000	0.337
<i>CULTDIST_H</i>	0.000	0.815	0.000	0.000	0.000
<i>CULTDIST_{GL}</i>	0.000	0.468	0.000	0.000	0.000
<i>INSTDIST_{WB}</i>	0.000	0.918	-0.285	0.000	0.000
<i>INSTDIST_{LP}</i>	0.000	1.024	0.000	0.000	0.000
<i>ROA</i>	0.006	0.026	0.001	0.008	0.021
<i>RETURN</i>	0.114	0.596	-0.157	0.046	0.057
<i>RISK</i>	0.108	0.071	0.061	0.091	0.134
<i>BTM</i>	0.674	0.911	0.284	0.514	0.848
<i>LOSS</i>	0.233	0.423	0.000	0.000	0.000
<i>SIZE (in \$ mil.)</i>	13,680	83,992	483	1,867	7,796
<i>Δ EARN</i>	0.091	0.916	-0.603	0.073	0.883

Panel C – *t*-tests comparing the variables in U.S and non-U.S. samples

	Mean _{Non-U.S.}	Mean _{U.S.}	<i>t</i> -test	<i>p</i> -Val
<i>CAR</i>	-0.001	0.005	-2.497	0.013
<i>FUTROA</i>	0.007	0.007	0.532	0.578
<i>ROA</i>	0.006	0.006	0.703	0.382
<i>RISK</i>	0.128	0.105	2.141	0.032
<i>RETURN</i>	0.126	0.096	20.921	0.000
<i>BTM</i>	0.794	0.601	10.573	0.000
<i>LOSS</i>	0.327	0.171	17.981	0.000
<i>SIZE (in \$ mil.)</i>	16,096	12,189	2.459	0.014
<i>Δ EARN</i>	0.047	0.117	-0.373	0.411

Panel A reports the comparison of the *TONE* of earnings press releases across separate geographical regions relative to the U.S. based on a Welch two-sample *t*-test. 'Other' includes the countries of Israel, Australia and New Zealand. Panel B reports the summary statistics of the dependent, independent, and control variables for our sample. The distance measures (*CULTDIST_H*, *CULTDIST_{GL}*, *INSTDIST_{WB}*, and *INSTDIST_{LP}*) are transformed for use in regressions (the grand mean of the cross-listed sample is subtracted from the cross-listed observations to alleviate the main effect of firms being cross-listed). Panel B reports the untransformed distances (as indicated by ⁺) for interpretation purposes. See the Appendix for variable definitions.

Table 3: Cultural and institutional distance and the tone and proportion of forward-looking statements in earnings press releases

Panel A	$TONE_{it} = \alpha + \alpha_1 DF_{it} + \alpha_2 DIST_j + \alpha_3 ROA_{it} + \alpha_4 RETURN_{it} + \alpha_5 RISK_{it} + \alpha_6 BTM_{it} + \alpha_7 LOSS_{it} + \alpha_8 SIZE_{it} + Year + Industry + \varepsilon_{it}$									
	Full Sample					Non-U.S Sample				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(Intercept)	0.416*** (0.022)	0.464*** (0.025)	0.446*** (0.026)	0.474*** (0.026)	0.461*** (0.025)	0.455*** (0.026)	0.427*** (0.029)	0.430*** (0.030)	0.467*** (0.030)	0.469*** (0.031)
<i>DF</i>	-0.057*** (0.006)	-0.039*** (0.005)	-0.039*** (0.005)	-0.040*** (0.006)	-0.039*** (0.005)	-0.044*** (0.006)				
<i>CULTDIST_H</i>			-0.010*** (0.003)				-0.012*** (0.003)			
<i>CULTDIST_{GL}</i>				-0.016** (0.006)				-0.016*** (0.006)		
<i>INSTDIST_{WB}</i>					-0.012** (0.005)				-0.008** (0.004)	
<i>INSTDIST_P</i>						-0.011** (0.003)				-0.008*** (0.003)
<i>ROA</i>		0.441*** (0.062)	0.450*** (0.062)	0.450*** (0.062)	0.445*** (0.062)	0.453*** (0.063)	0.272*** (0.086)	0.268*** (0.087)	0.273*** (0.087)	0.274*** (0.091)
<i>RETURN</i>		0.043*** (0.005)	0.043*** (0.005)	0.041*** (0.005)	0.043*** (0.005)	0.047*** (0.006)	0.034*** (0.007)	0.031*** (0.007)	0.034*** (0.007)	0.037*** (0.009)
<i>RISK</i>		-0.256*** (0.043)	-0.245*** (0.043)	-0.248*** (0.043)	-0.252*** (0.044)	-0.246*** (0.046)	-0.139*** (0.056)	-0.139*** (0.056)	-0.151*** (0.061)	-0.103* (0.061)
<i>BTM</i>		-0.017*** (0.003)	-0.016*** (0.003)	-0.018*** (0.003)	-0.017*** (0.003)	-0.015*** (0.003)	-0.013*** (0.004)	-0.016*** (0.004)	-0.014*** (0.004)	-0.010** (0.004)
<i>LOSS</i>		-0.053*** (0.007)	-0.054*** (0.007)	-0.054*** (0.007)	-0.053*** (0.007)	-0.053*** (0.007)	-0.055*** (0.007)	-0.055*** (0.010)	-0.054*** (0.010)	-0.055*** (0.011)
<i>SIZE</i>		0.002*** (0.000)	0.001*** (0.001)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.003* (0.002)	0.004*** (0.001)	0.003** (0.001)	0.002** (0.001)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.139	0.171	0.174	0.175	0.173	0.174	0.151	0.151	0.148	0.161
Adj. R ²	0.133	0.164	0.168	0.169	0.167	0.168	0.136	0.136	0.133	0.143
VIF	1.201	1.356	1.570	1.574	1.343	1.452	1.213	1.220	1.213	1.327
Num. obs.	11,948	11,948	11,948	11,665	11,948	11,104	4,761	4,478	4,761	3,917

Table 3 (continued): Cultural and institutional distance and the proportion of forward-looking statements of earnings press releases

Panel B

$$FLS_{it} = \alpha + \alpha_1 DF_i + \alpha_2 DIST_j + \alpha_3 ROA_{it} + \alpha_4 RETURN_{it} + \alpha_5 RISK_{it} + \alpha_6 BTM_{it} + \alpha_7 LOSS_{it} + \alpha_8 SIZE_{it} + Year + Industry + \varepsilon_{it}$$

	Full Sample						Non-U.S Sample			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(Intercept)	0.041*** (0.002)	0.043*** (0.003)	0.047*** (0.003)	0.046*** (0.003)	0.046*** (0.003)	0.047** (0.003)	0.066*** (0.004)	0.065*** (0.004)	0.064*** (0.004)	0.066*** (0.004)
<i>DF</i>	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)				
<i>CULTDIST_H</i>			0.002*** (0.000)				0.002*** (0.000)			
<i>CULTDIST_{GL}</i>				0.003*** (0.001)				0.002*** (0.000)		
<i>INSTDIST_{WB}</i>					0.002*** (0.000)				0.002*** (0.000)	
<i>INSTDIST_P</i>						0.001*** (0.000)				0.002*** (0.000)
<i>ROA</i>		0.008 (0.008)	0.006 (0.008)	0.006 (0.008)	0.005 (0.008)	0.002 (0.008)	0.024** (0.011)	0.021* (0.011)	0.020* (0.011)	0.015 (0.013)
<i>RETURN</i>		0.002 (0.005)	-0.001 (0.005)	0.000 (0.005)	-0.001 (0.005)	0.000 (0.005)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
<i>RISK</i>		0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.003 (0.007)	0.004 (0.007)	0.003 (0.007)	0.004 (0.007)
<i>BTM</i>		-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.003*** (0.000)	-0.002*** (0.000)
<i>LOSS</i>		-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.003** (0.001)
<i>SIZE</i>		-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.086	0.090	0.093	0.090	0.093	0.085	0.034	0.035	0.034	0.035
Adj. R ²	0.080	0.084	0.087	0.004	0.087	0.078	0.019	0.018	0.019	0.018
VIF	1.197	1.356	1.358	1.358	1.358	1.358	1.383	1.381	1.389	1.391
Num. obs.	11,948	11,948	11,948	11,665	11,948	11,104	4,761	4,478	4,761	3,917

*, **, and *** indicate significance at the 0.1, 0.05 and 0.01 levels, respectively, for two-tailed tests. The *t*-stats, shown in parentheses, are based upon standard errors clustered by both firm and year. VIF is the largest variance inflation factor for all covariates (excluding the dummy variables). See the Appendix for variable definitions.

Table 4: Combination of cultural and institutional distance and the tone and forward-looking statements of earnings press releases

$$DISCLOSURE_{it} = \alpha + \alpha_1 DF_{it} + \alpha_2 DIST_j + \alpha_3 ROA_{it} + \alpha_4 RETURN_{it} + \alpha_5 RISK_{it} + \alpha_6 BTM_{it} + \alpha_7 LOSS_{it} + \alpha_8 SIZE_{it} + Year + Industry + \varepsilon_{it}$$

	DISCLOSURE = TONE			DISCLOSURE = FLS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Intercept)	0.427*** (0.029)	0.430*** (0.030)	0.467*** (0.030)	0.469*** (0.031)	0.047*** (0.003)	0.048*** (0.003)	0.047*** (0.003)	0.047*** (0.003)
DF	-0.039*** (0.005)	-0.045*** (0.006)	-0.047*** (0.008)	-0.044*** (0.006)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)
CULTDIST _H	-0.014*** (0.004)	-0.009** (0.004)			0.002*** (0.001)	0.001*** (0.000)		
CULTDIST _{CL}			-0.011*** (0.005)	-0.012*** (0.005)			0.002*** (0.000)	0.002*** (0.000)
INSTDIST _{WB}	-0.006 (0.004)		-0.007 (0.005)		0.001 (0.002)		0.002* (0.001)	
INSTDIST _{LP}		-0.002 (0.004)		-0.004 (0.004)		-0.000 (0.001)		-0.000 (0.000)
ROA	0.416*** (0.072)	0.437*** (0.075)	0.411*** (0.073)	0.439*** (0.075)	0.005 (0.008)	0.002 (0.008)	0.003 (0.008)	0.001 (0.008)
RETURN	0.051*** (0.006)	0.053*** (0.007)	0.050*** (0.006)	0.051*** (0.007)	0.002 (0.005)	-0.001 (0.005)	0.000 (0.005)	-0.001 (0.005)
RISK	-0.303*** (0.049)	-0.290*** (0.053)	-0.315*** (0.050)	-0.292*** (0.053)	0.000 (0.000)	-0.000 (0.001)	0.000 (0.000)	-0.000 (0.000)
BTM	-0.012** (0.005)	-0.011* (0.006)	-0.014** (0.006)	-0.012* (0.006)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
LOSS	-0.058*** (0.008)	-0.059*** (0.008)	-0.057*** (0.008)	-0.060*** (0.008)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)
SIZE	0.001** (0.000)	0.001** (0.000)	0.001*** (0.000)	0.001*** (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.174	0.174	0.175	0.177	0.094	0.092	0.084	0.082
Adj. R ²	0.168	0.169	0.169	0.171	0.088	0.086	0.079	0.076
VIF	1.628	1.570	1.583	1.643	1.358	1.359	1.359	1.359
Num. obs.	11,948	11,104	11,665	10,893	11,948	11,104	11,665	10,893

* **, and *** indicate significance at the 0.1, 0.05 and 0.01 levels, respectively, for two-tailed tests. The t-stats are based upon standard errors clustered by both firm and year. VIF is the largest variance inflation factor for all covariates (excluding the dummy variables). See the Appendix for variable definitions.

Table 5: Disclosure informativeness and firm distance

$$FUTROA_{it} = \theta + \theta_1 DISCLOSURE_{it} \times DIST_j + \theta_2 DIST_i + \theta_3 DISCLOSURE_{it} + \theta_4 DF_i + \theta_5 ROA_{it} + \theta_6 RETURN_{it} + \theta_7 RISK_{it} + \theta_8 BTM_{it} + \theta_9 LOSS_{it} + \theta_{10} SIZE_{it} + Year + Industry + \varepsilon_{it}$$

Panel A Combined Full Sample

	DISCLOSURE = TONE			DISCLOSURE = FLS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Intercept)	0.009*** (0.002)	0.009*** (0.002)	0.008*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)	0.007*** (0.003)
DISCLOSURE × CULTDIST _H	0.001** (0.001)				0.018** (0.009)			
DISCLOSURE × CULTDIST _{GL}		0.004*** (0.001)				0.018 (0.014)		
DISCLOSURE × INSTDIST _{HB}			0.001 (0.001)				0.010* (0.006)	
DISCLOSURE × INSTDIST _{LP}				0.001* (0.000)	-0.000 (0.000)			0.015*** (0.007)
CULTDIST _H	0.000 (0.000)							
CULTDIST _{GL}		0.000 (0.001)				0.001 (0.001)		
INSTDIST _{HB}			0.001 (0.000)				0.000 (0.000)	
INSTDIST _{LP}				0.000 (0.000)				-0.001 (0.000)
DISCLOSURE	0.003*** (0.001)	0.003*** (0.000)	0.003*** (0.001)	0.003*** (0.001)	0.001* (0.000)	0.000* (0.001)	0.001* (0.001)	0.001 (0.001)
DF	0.001* (0.000)	0.001* (0.000)	0.001 (0.000)	0.001* (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001* (0.000)
ROA	0.143*** (0.007)	0.131*** (0.007)	0.123*** (0.010)	0.124*** (0.010)	0.122*** (0.010)	0.123*** (0.010)	0.122*** (0.010)	0.125*** (0.010)
RETURN	0.002*** (0.000)	0.002*** (0.000)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.000)	0.002*** (0.000)	0.002*** (0.001)	0.003*** (0.001)
RISK	-0.021*** (0.003)	-0.021*** (0.003)	-0.036*** (0.004)	-0.024*** (0.005)	-0.043*** (0.004)	-0.043*** (0.004)	-0.045*** (0.004)	-0.043*** (0.003)
BTM	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
LOSS	-0.006*** (0.000)	-0.006*** (0.000)	-0.009*** (0.001)	-0.009*** (0.001)	-0.010*** (0.001)	-0.010*** (0.001)	-0.010*** (0.001)	-0.010*** (0.001)
SIZE	0.001*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.457	0.458	0.456	0.458	0.457	0.459	0.458	0.461
Adj. R ²	0.452	0.453	0.452	0.452	0.454	0.455	0.454	0.457
VIF	1.810	1.601	1.741	1.593	1.727	1.359	1.831	1.822
Num. obs.	11,948	11,665	11,948	11,104	11,948	11,665	11,948	11,104

Table 5 (continued): Disclosure informativeness and firm distance
Panel B Sample split on low versus high cultural distance and low versus high institutional distance

<i>DISCLOSURE</i> =	CULTDIST			CULTDIST			INSTDIST			INSTDIST		
	Low-distance < median(CULTDIST)			High-distance ≥ median(CULTDIST)			Low-distance < median(INSTDIST)			High-distance ≥ median(INSTDIST)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	<i>TOPE</i>	<i>TOPE</i>	<i>FLS</i>	<i>TOPE</i>	<i>TOPE</i>	<i>FLS</i>	<i>TOPE</i>	<i>TOPE</i>	<i>FLS</i>	<i>TOPE</i>	<i>TOPE</i>	<i>FLS</i>
(Intercept)	0.006*** (0.002)	0.005*** (0.002)	0.005 (0.003)	0.020*** (0.002)	0.019*** (0.003)	0.022*** (0.005)	0.007*** (0.002)	0.006*** (0.002)	-0.006*** (0.002)	0.016*** (0.002)	0.016*** (0.002)	0.006*** (0.002)
<i>DISCLOSURE</i>	0.143*** (0.004)	0.003*** (0.000)	0.000 (0.001)	0.003*** (0.000)	0.003*** (0.000)	0.001*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.000 (0.001)	0.003*** (0.000)	0.003*** (0.000)	0.001** (0.000)
<i>DF</i>	0.001*** (0.000)	0.001*** (0.000)	0.002*** (0.001)	0.000 (0.000)	0.000 (0.000)	0.001 (0.001)	0.008** (0.004)	0.007* (0.004)	0.001* (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
<i>ROA</i>	0.143*** (0.004)	0.141*** (0.004)	0.133*** (0.012)	0.152*** (0.004)	0.159*** (0.004)	0.138*** (0.012)	0.141*** (0.004)	0.147*** (0.004)	0.134*** (0.004)	0.159*** (0.003)	0.167*** (0.004)	0.155*** (0.004)
<i>RETURN</i>	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.001)	0.002*** (0.000)	0.003*** (0.000)	0.002*** (0.001)	0.003*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
<i>RISK</i>	-0.038*** (0.003)	-0.037*** (0.003)	-0.049*** (0.006)	-0.029*** (0.003)	-0.029*** (0.003)	-0.041*** (0.005)	-0.038*** (0.003)	-0.036*** (0.003)	-0.036*** (0.003)	-0.033*** (0.003)	-0.027*** (0.003)	-0.029*** (0.003)
<i>BTM</i>	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.001)	-0.001*** (0.000)	-0.001*** (0.000)	-0.000 (0.001)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
<i>LOSS</i>	-0.010*** (0.000)	-0.009*** (0.000)	-0.009*** (0.001)	-0.008*** (0.000)	-0.007*** (0.000)	-0.009*** (0.001)	-0.009*** (0.000)	-0.009*** (0.000)	-0.009*** (0.000)	-0.009*** (0.000)	-0.008*** (0.000)	-0.009*** (0.000)
<i>SIZE</i>	0.001*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.451	0.454	0.472	0.443	0.449	0.451	0.453	0.460	0.455	0.445	0.456	0.452
Adj. R ²	0.446	0.449	0.467	0.437	0.444	0.446	0.448	0.455	0.450	0.441	0.451	0.447
Diff. Adj. R ²	0.3%	0.3%	0.1%	0.7%	0.7%	0.4%	0.8%	0.8%	0.2%	0.4%	1.0%	0.6%
VIF	1.378	1.392	1.401	1.330	1.333	1.373	1.363	1.338	1.391	1.361	1.364	1.441
Num. obs.	9,060	9,060	9,331	10,075	10,075	10,329	9,578	9,578	9,578	9,557	9,557	9,557

*, **, and *** indicate significance at the 0.1, 0.05 and 0.01 levels, respectively, for two-tailed tests. The t-stats are based upon standard errors clustered by both firm and year. VIF is the largest variance inflation factor for all covariates (excluding the dummy variables). See the Appendix for variable definitions.

Table 6: Investors' reaction to earnings announcement attributes and distance

$$CAR_{it}^{\#} = \rho + \rho_1 DISCLOSURE_{it} \times DIST_i + \rho_2 DIST_i + \rho_3 DISCLOSURE_{it} + \rho_4 DF_i + \rho_5 ROA_{it} + \rho_6 LOSS_{it} + \rho_7 SIZE_{it} + \rho_8 \Delta EARN_{it} + Year + Industry + \varepsilon_{it}$$

		$CAR^{\#} = CAR$				$CAR^{\#} = CAR $			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Intercept)		-0.011 (0.009)	-0.009 (0.009)	-0.010 (0.009)	-0.009 (0.009)	0.089*** (0.005)	0.088*** (0.005)	0.086*** (0.005)	0.090*** (0.005)
$TONE \times CULTDIST_H$		0.002*** (0.001)				0.055*** (0.019)			
$TONE \times CULTDIST_{GL}$			0.003*** (0.001)				0.001 (0.016)		
$TONE \times INSTDIST_{WB}$				0.000 (0.001)				0.015 (0.012)	
$TONE \times INSTDIST_{LP}$				-0.000 (0.001)					0.045*** (0.014)
$CULTDIST_H$		0.000 (0.001)				0.001 (0.001)			
$CULTDIST_{GL}$							-0.001 (0.005)		
$INSTDIST_{WB}$									
$INSTDIST_{LP}$				-0.002* (0.001)				-0.004* (0.002)	
$TONE$		0.005*** (0.001)	0.006*** (0.002)	0.005*** (0.001)	-0.000 (0.001)	0.029* (0.015)	0.027* (0.015)	0.030** (0.015)	-0.002* (0.001)
DF		-0.005* (0.003)	-0.007** (0.003)	-0.005*** (0.002)	-0.006*** (0.002)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.033*** (0.015)
ROA		0.069** (0.028)	0.064** (0.028)	0.075*** (0.028)	0.074** (0.029)	0.038** (0.015)	0.031** (0.015)	0.043*** (0.015)	0.004*** (0.001)
$LOSS$		-0.008*** (0.003)	-0.008*** (0.003)	-0.008*** (0.003)	-0.007** (0.003)	0.012*** (0.001)	0.012*** (0.001)	0.012*** (0.001)	0.034*** (0.015)
$SIZE$		0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.004*** (0.000)	0.012*** (0.015)
$\Delta EARN$		0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.012*** (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.027	0.028	0.027	0.026	0.177	0.177	0.178	0.173	
Adj. R ²	0.02	0.021	0.019	0.019	0.171	0.172	0.172	0.166	
VIF	1.631	1.628	1.553	1.612	2.266	2.314	2.313	2.281	
Num. obs.	11,948	11,665	11,948	11,104	11,948	11,665	11,948	11,104	

Table 6 (continued): Investors' reaction to earnings announcements and distance

Panel B Sample split of CAR on low versus high cultural distance and low versus high institutional distance

<i>DV = CAR</i>	CULTDIST Low-distance < median(CULTDIST)		CULTDIST High-distance ≥ median(CULTDIST)		INSTDIST Low-distance < median(INSTDIST)		INSTDIST High-distance ≥ median(INSTDIST)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Intercept)	0.004 (0.011)	0.008 (0.012)	0.000 (0.017)	0.006 (0.014)	-0.007 (0.018)	-0.013 (0.008)	-0.003 (0.018)	-0.000 (0.015)
<i>TONE</i>		0.005** (0.002)		0.007*** (0.002)		0.004** (0.002)		0.005*** (0.002)
<i>DF</i>	0.001 (0.007)	0.002 (0.007)	-0.008** (0.003)	-0.008*** (0.002)	-0.007** (0.003)	-0.007** (0.003)	-0.006** (0.003)	-0.005*** (0.002)
<i>ROA</i>	0.072** (0.028)	0.067** (0.029)	0.093** (0.029)	0.087** (0.031)	0.089*** (0.031)	0.084*** (0.031)	0.089*** (0.031)	0.084*** (0.031)
<i>LOSS</i>	-0.009*** (0.003)	-0.008** (0.003)	-0.007** (0.003)	-0.007** (0.003)	-0.009*** (0.003)	-0.009*** (0.003)	-0.010*** (0.003)	-0.009*** (0.003)
<i>SIZE</i>	0.000*** (0.000)	0.000*** (0.000)	0.000** (0.000)	0.000* (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)
<i>AEARN</i>	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.000** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.026	0.028	0.025	0.030	0.023	0.024	0.024	0.026
Adj. R ²	0.013	0.015	0.012	0.017	0.016	0.017	0.017	0.019
Diff. Adj. R ²		0.2%		0.5%		0.1%		0.2%
VIF	1.131	1.211	1.112	1.344	1.125	1.386	1.123	1.356
Num. Obs.	9,060	9,060	10,075	10,075	9,578	9,578	9,557	9,557

Panel C – Sample split of |CAR| on Low versus High Cultural Distance and Low versus High Institutional Distance

<i>DV = CAR </i>	CULTDIST Low-distance < median(CULTDIST)		CULTDIST High-distance ≥ median(CULTDIST)		INSTDIST Low-distance < median(INSTDIST)		INSTDIST High-distance ≥ median(INSTDIST)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(Intercept)	0.078*** (0.007)	0.078*** (0.007)	0.102*** (0.012)	0.100*** (0.012)	0.090*** (0.006)	0.089*** (0.006)	0.093*** (0.011)	0.091*** (0.011)
<i>FLS</i>		0.033*** (0.010)		0.043*** (0.011)		0.031*** (0.010)		0.041*** (0.011)
<i>DF</i>	0.004** (0.001)	0.004** (0.002)	0.010*** (0.003)	0.010*** (0.003)	0.005** (0.002)	0.004*** (0.002)	0.011*** (0.003)	0.012*** (0.003)
<i>ROA</i>	0.048*** (0.018)	0.048*** (0.018)	0.043*** (0.017)	0.043** (0.017)	0.038** (0.017)	0.038** (0.017)	0.049*** (0.015)	0.049*** (0.015)
<i>LOSS</i>	0.015*** (0.002)	0.015** (0.003)	0.012*** (0.002)	0.012** (0.002)	0.014*** (0.002)	0.015*** (0.002)	0.013*** (0.003)	-0.013*** (0.002)
<i>SIZE</i>	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.005*** (0.000)	-0.004*** (0.000)	-0.004*** (0.000)
<i>AEARN</i>	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.163	0.163	0.170	0.173	0.160	0.160	0.174	0.176
Adj. R ²	0.156	0.156	0.163	0.166	0.153	0.154	0.167	0.169
Diff. Adj. R ²		~0.0%		0.3%		0.1%		0.2%
VIF	1.336	1.337	1.336	1.336	1.336	1.337	1.337	1.338
Num. Obs.	9,331	9,331	10,329	10,329	9,331	9,331	10,329	10,329

DV indicates Dependent Variable. *, **, and *** indicate significance at the 0.1, 0.05 and 0.01 levels, respectively, for two-tailed tests. The t-stats are based upon standard errors clustered by both firm and year. VIF is the largest variance inflation factor for all covariates (excluding the dummy variables). *AEARN* = The difference between the current earnings for firm *i* in year *t* and last year's earnings, standardized by the end-of-quarter stock price. See the Appendix for other variable definitions.

Table 7: Alternative measures of cross-listed firms' distance

$$DISCLOSURE_{it} = \alpha + \alpha_1 DF_i + \alpha_2 DIST_j + \alpha_3 ROA_{it} + \alpha_4 RETURN_{it} + \alpha_5 RISK_{it} + \alpha_6 BTM_{it} + \alpha_7 LOSS_{it} + \alpha_8 SIZE_{it} + Year + Industry + \varepsilon_{it}$$

	DV = TONE					DV = FLS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(Intercept)	0.507*** (0.067)	0.403*** (0.059)	0.442*** (0.033)	0.480*** (0.039)	0.482*** (0.037)	0.044*** (0.003)	0.044*** (0.003)	0.044*** (0.003)	0.044*** (0.003)	0.048*** (0.001)
<i>DF</i>	-0.035*** (0.006)	-0.038*** (0.006)	-0.033*** (0.005)	-0.029*** (0.010)	-0.012* (0.005)	0.005*** (0.001)	0.004*** (0.001)	0.006*** (0.001)	0.002*** (0.000)	0.004*** (0.001)
<i>GAAPDIST1</i>	-0.004** (0.001)					-0.000 (0.000)				
<i>GAAPDIST2</i>		-0.002* (0.001)					0.001*** (0.000)			
<i>GEODIST</i>			-0.010* (0.006)					0.000 (0.001)		
<i>NONENG</i>				-0.029*** (0.009)					0.002** (0.001)	
<i>LTA</i>					-0.024** (0.010)					0.003* (0.001)
<i>ROA</i>	0.464*** (0.065)	0.400*** (0.066)	0.464*** (0.064)	0.421*** (0.083)	0.568*** (0.079)	0.007 (0.008)	0.003 (0.008)	0.007 (0.008)	0.007 (0.008)	0.006 (0.008)
<i>RETURN</i>	0.045*** (0.006)	0.049*** (0.006)	0.045*** (0.006)	0.057*** (0.007)	0.047*** (0.006)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.001)
<i>RISK</i>	-0.250*** (0.045)	-0.269*** (0.048)	-0.247*** (0.044)	-0.275*** (0.043)	-0.307*** (0.057)	0.001 (0.000)	0.001 (0.000)	0.002 (0.000)	0.001 (0.000)	0.000 (0.001)
<i>BTM</i>	-0.020*** (0.003)	-0.019*** (0.004)	-0.018*** (0.003)	-0.018*** (0.003)	-0.015*** (0.003)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
<i>LOSS</i>	-0.058*** (0.007)	-0.055*** (0.008)	-0.057*** (0.007)	-0.060*** (0.009)	-0.066*** (0.009)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002*** (0.001)	-0.002* (0.001)
<i>SIZE</i>	0.001*** (0.000)	0.001** (0.000)	0.002** (0.001)	0.001*** (0.000)	0.001*** (0.000)	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.171	0.172	0.171	0.170	0.169	0.089	0.081	0.090	0.091	0.083
Adj. R ²	0.168	0.167	0.165	0.165	0.164	0.083	0.074	0.084	0.085	0.076
VIF	1.361	1.361	1.360	1.461	1.561	1.365	1.378	1.856	1.632	1.423
Num. obs.	11,482	10,909	11,948	11,948	11,948	11,524	10,909	11,948	11,948	11,948

DIST indicates one of five alternative distances. (1) *GAAPDIST1_j* is defined as the difference between the cross-listed firm's home country's (*j*) accounting standards and U.S. GAAP, based on Bae et al. (2008). (2) *GAAPDIST2_j* is defined as the difference between the cross-listed firm's home country's (*j*) accounting standard index and that of the U.S., following the Center for International Financial Analysis (see La Porta et al. 1998). (3) *GEODIST_j* is defined as the logarithm of the distance in kilometres between the most important city of country *j* and the U.S., following Mayer and Zignago (2011). (4) *NONENG_j* is defined as a dummy variable taking the value '1' if country *j* does not have English listed as one of the official languages and '0' if it does. (5) *LTA* is a dummy variable taking the value of one '1' if the firm is located in a country with lower future time disassociation in the language, as presented in Chen (2013) and Kim, Kim, and Zhou (2017). The first three alternative distance measures are transformed for use in regressions (the grand mean of the cross-listed sample is subtracted from the cross-listed observations to alleviate the main effect of firms being cross-listed). *, **, and *** indicate significance at the 0.1, 0.05 and 0.01 levels, respectively, for two-tailed tests. The t-stats are based on standard errors clustered by both firm and year. VIF is the largest variance inflation factor for all covariates (excluding the dummy variables). See the Appendix for variable definitions.