



June 6, 2020

Via Electronic Mail

Hon. W. Jay Clayton, Chairman  
Securities and Exchange Commission  
100 F Street, NE  
Washington, DC 20549-1090

RE: Roundtable on Emerging Markets Risks July 9, 2020

Dear Chairman Clayton,

We appreciate the opportunity to comment on how investors can be alerted of the risks of investing in emerging markets. As the Commission notes in its “Spotlight on Risks for Investors in Emerging Markets,” these issuers expose U.S. investors to significant disclosure and financial reporting risks.<sup>1</sup> We would like to make you aware of our recent research on this topic and its implications for the Roundtable on Emerging Markets Risks.

### **Research Summary**

In our paper, “Ongoing SEC Disclosures by Foreign Firms,” which was recently accepted for publication at *The Accounting Review*, we study how home-market reporting requirements and U.S. listing choices associate with ongoing SEC disclosures by Foreign Private Issuers (FPIs) and the investor response.<sup>2</sup> The Commission defers material event and interim financial disclosure obligations on SEC Form 6-K to FPIs’ home market regulator or exchange.<sup>3</sup> This reporting regime was established when most FPIs were large, well-known companies that had a primary trading venue on a major foreign exchange.<sup>4</sup> Because the U.S. listing was typically secondary, and to prevent duplicative disclosure burdens, the Commission exempted FPIs from the periodic and ongoing reporting requirements for domestic issuers on Forms 10-Q and 8-K.<sup>5</sup> Instead, the 6-K reporting regime reflects the mandates of an FPI’s home market.

In our study, we find that the composition of FPIs reporting to the Commission has changed in recent years, with a growing number of issuers stemming from home markets with weaker ongoing disclosure

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<sup>1</sup> Emerging Markets Roundtable, Spotlight on Risks for Investors in Emerging Markets, U.S. Securities and Exchange Commission, Modified May 20, 2020. Available at <https://www.sec.gov/page/emerging-markets-roundtable>.

<sup>2</sup> See attached manuscript by Audra Boone, Kathryn Schumann-Foster, and Joshua T. White, “Ongoing SEC Disclosures by Foreign Firms,” *The Accounting Review*, forthcoming. This letter reflects the views of Audra Boone and Joshua T. White.

<sup>3</sup> FPIs must promptly furnish a report on a 6-K with information if the issuer (i) makes or is required to make public pursuant to the law of the jurisdiction of its domicile or in which it is incorporated or organized, or (ii) files or is required to file with a stock exchange on which its securities are traded and which was made public by that exchange, or (iii) distributes or is required to distribute to its security holders. Depending on the type of information, this form must include either a full version or summary in English. We also note that FPIs “furnish” rather than “file” 6-Ks to the Commission, which likely reduces their disclosure liability. See <https://www.sec.gov/files/form6-k.pdf> and <https://www.sec.gov/divisions/corpfm/internatl/foreign-private-issuers-overview.shtml>.

<sup>4</sup> See Meredith Cross, Director, Division of Corporation Finance, U.S. Securities and Exchange Commission, “Keynote address at PLI – Eleventh Annual Institute on Securities Regulation in Europe.” London, England. March 8, 2012. Available at <https://www.sec.gov/news/speech/2012-spch030812mchtm>.

<sup>5</sup> See Steven M. Davidoff. “Rhetoric and reality: A historical perspective on the regulation of foreign private issuers.” *University of Cincinnati Law Review* 79 (Winter 2010):619–649. Available at <https://ssrn.com/abstract=1573879>.

requirements. Importantly, we find a growing number of FPIs that list only in the U.S. and not in their home country or any other foreign exchange. These U.S.-only listed issuers frequently headquarter in emerging markets such as China but incorporate in countries such as the Cayman Islands or Marshall Islands, where there is little or no regulatory oversight, which we term “disclosure havens.” We find that the proportion of SEC-reporting FPIs that list only in the U.S. more than doubles during our sample period from 15% in 2003 to 35% in 2013. This distinction is important because, without a home-market exchange, these issuers have little or no event-driven disclosure obligations due to their designation as FPIs. Thus, managers of U.S.-only listed FPIs, and especially those incorporating in disclosure havens, have considerable discretion over the information they supply to the Commission and U.S. investors.<sup>6</sup>

Our study shows that U.S.-only listed FPIs furnish substantially fewer ongoing 6-K disclosures to the Commission than a matched sample of similar cross-listed FPIs domiciled in their same headquarter country. Yet, the market response to each 6-K disclosure in terms of stock price and trading volume are significantly larger for U.S.-only listed issuers, even when controlling for differences in the frequency of 6-K disclosures and disclosure content. Moreover, in comparison to cross-listed FPIs, investors access the average 6-K by U.S.-only listed issuers more frequently on the Commission’s EDGAR website. Thus, while managers of U.S.-only listed issuers utilize their discretion to provide fewer 6-Ks, there is substantially greater investor interest in these disclosures.

We also investigate monitoring of disclosure activity by the Commission’s Division of Corporation Finance. We find little evidence that the Commission substitutes for disparate 6-K information flow by U.S.-only listed issuers with additional monitoring via comment letters. Consistent with this notion, one U.S. law firm notes that the Commission has never brought an enforcement action based on 6-K timeliness or the failure to provide a 6-K after a material event.<sup>7</sup>

### **Research Implications**

Our results indicate that the changing composition of FPIs and the Commission’s one-size-fits-all approach to FPI disclosure has resulted in increasingly disparate information flow to U.S. investors, despite the strong demand for and market reaction to 6-Ks furnished by issuers from emerging markets, and especially those that list only in the U.S. We acknowledge that a key benefit of permitting reduced disclosure obligations for FPIs is to encourage issuers to list in the U.S., thereby providing domestic investors with opportunities to diversify their holdings at potentially lower trading costs than transacting on foreign exchanges. Moreover, listing on a U.S. exchange can offer greater investor protection due to additional legal and regulatory oversight. Yet, for U.S.-only listed issuers, investors are subjected to transparency risk as these FPIs provide fewer ongoing disclosures and have no home market for price discovery, which could affect investors’ perceived valuations.

The current ongoing disclosure regime for FPIs also introduces information acquisition costs due to the nature of the Form 6-K as a simple cover letter to the attached disclosure. While domestic issuers must identify the content of their ongoing disclosures on Form 8-K using item numbers, there is no similar

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<sup>6</sup> In addition to fewer ongoing disclosure mandates, the requirements for periodic financial statements also differ for U.S.-only listed FPIs. Since 2006, FPIs with a class of securities listed on Nasdaq are required under Rule 5250(c)(2) to furnish a 6-K with half-yearly unaudited financial information in English no later than six months after the close of the issuer’s second fiscal quarter. The New York Stock Exchange established similar requirements in 2016. See <https://www.sec.gov/rules/sro/nyse/2016/34-77198.pdf>. These deadlines are substantially longer than those for domestic issuers listed on these exchanges, who file unaudited financial information each quarter on Form 10-Q.

<sup>7</sup> See Alexander F. Cohen, Paul M. Dudek, and Joel H. Trotter, “The secrets of Form 6-K: Getting behind the curtain with the FPI wizard.” Latham & Watkins Client Alert Commentary. October 22, 2018. Available at <https://www.lw.com/thoughtLeadership/lw-secrets-form-6-k-FPI-wizard>.

requirement for FPIs utilizing Form 6-K. Our analyses required extensive coding and hand collection of disclosure information as the 6-K information was frequently presented in a non-machine-readable format. Requiring FPIs to add machine-readable item numbers to help identify 6-K content could provide incremental benefits to investors and improve the speed with which information is impounded into stock prices, thereby enhancing investor protection at a low cost.

Finally, our analysis of the ongoing disclosure requirements across 56 countries, and their corresponding domestic exchanges, reveal substantial variation in the both the named material events and related disclosure deadlines. We note in our study that the Commission requires 6-K information be furnished to U.S. investors in a “prompt” manner. Unlike domestic issuers, who have strict filing deadlines for ongoing 8-K disclosures, the Commission does not define or provide public staff guidance, to our knowledge, on what constitutes a “prompt” disclosure. One U.S. law firm interprets the term prompt to be as soon as practicable and no later than 30 days.<sup>8</sup> In our analysis, we found just over 10% of 6-Ks furnish information that is more than five business days old. Some FPIs bundle several press releases with varying event dates on a single 6-K, suggesting that not all information is furnished quickly to investors. We believe that explicit guidance on 6-K deadlines could reduce disclosure risk and help ensure the timely provision of information to U.S. investors.

### **Closing Remarks**

We thank the Chairman, Commission, and Roundtable participants for considering the ongoing disclosure risks for U.S. investors in emerging markets. Should you have any questions, we would welcome the opportunity to further discuss the details or implications of our research.

Sincerely,



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Attachment: Manuscript titled “Ongoing SEC Disclosure by Foreign Firms.”

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<sup>8</sup> See Shearman & Sterling LLP, “U.S. securities and NSYE regulation: A compliance manual for non-US companies.” September 2014. Available at <http://www.shearman.com/~media/files/newsinsights/publications/2014/09/us-securities-and-nyse-regulation-a-compliance-manual-for-nonus-companies-092214.pdf>.

# Ongoing SEC Disclosures by Foreign Firms

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## ABSTRACT

We study how home-market reporting requirements and listing choices associate with ongoing SEC disclosures by foreign firms and the investor response. The SEC defers material event and interim financial disclosure obligations to foreign firms' home market regulator or exchange. We find a growing number of foreign firms incorporate in disclosure havens and have little or no event-driven disclosure obligations. These firms furnish fewer 6-K disclosures but experience greater investor interest and market response to each filing. There is little evidence that the SEC substitutes for lower information flow with additional monitoring. Our results indicate that the SEC's one-size-fits-all approach to foreign firm disclosure has led to increasing disparity in information flow, despite the strong demand for and reaction to disclosures by firms from weaker regimes.

Keywords: Information environment, disclosure, foreign firms, cross-listing, SEC Form 6-K

JEL Classification: G15, G34, G38

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## I. INTRODUCTION

By listing on a U.S. exchange, foreign firms commit to following local securities laws and regulations. Access to timely and credible disclosures can lower investors' information acquisition costs (Diamond and Verrecchia 1991), mitigate information asymmetries (Beyer, Cohen, Lys, and Walther 2010), facilitate monitoring (Doidge, Karolyi, and Stulz 2004), and heighten investor awareness (Merton 1987). Foreign firms, however, do not face the same disclosure obligations as domestic firms. Instead, the U.S. Securities and Exchange Commission (SEC) defers to the foreign firm's home-market rules for the content, timing, and materiality threshold of periodic and ongoing disclosures on Form 6-K.

The SEC's reporting exemptions were intended to help U.S. exchanges compete for cross-listings by limiting duplicative disclosures at time when most foreign firms dual listed in Europe (Davidoff 2010). In turn, U.S. listings could lower the cost of achieving diversification, while also procuring the protection of the U.S. legal system. More recently, the SEC and U.S. stock exchanges have remarked that a growing number of foreign firms list only in the U.S., resulting in sparse ongoing disclosure obligations (Davidoff 2010; SEC 2011; Cross 2012; Gelfond 2016). These trends raise concerns about the efficacy of the 6-K reporting model in providing adequate and timely ongoing disclosures to investors, for which there is scarce academic research.

Our paper speaks directly to these issues by providing evidence of how home-market reporting requirements, listing and disclosure choices, and SEC monitoring interact with the investor and market response to 6-Ks. Our analyses use a broad panel of 1,135 U.S.-listed foreign firms from 56 countries over 2004 to 2013 and consists of 6,432 firm years and 167,004 6-Ks.

For each country, we hand collect data on the presence and depth of home-market ongoing disclosure obligations and whether investors can access a database containing firm disclosures. We also develop a novel home-market reporting composite measure from a principal component

analysis using country-level index values that capture variation in transparency and reporting requirements. This process reveals substantial heterogeneity in the latitude managers have in furnishing ongoing information to U.S. investors.

We first confirm that the SEC's deferral policy leads to disparate information flow based on home country reporting and disclosure requirements. Importantly, we document a divergence in information flow where firms from countries with stronger reporting requirements expand their yearly supply of 6-Ks over time, while firms from markets with weaker requirements exhibit only modest increases in 6-K disclosure frequency.

Next, we report a sharp increase in the proportion of U.S.-only listed firms, whose managers have the greatest discretion under the SEC's deferral policy since they lack home-market disclosure requirements (Cross 2012). Indeed, we show that the proportion of U.S.-only listed firms grows by 160 percent during our sample period. These firms provide 35 percent fewer ongoing and interim disclosures than cross-listed foreign firms, and fewer disclosures than matched samples of similar domestic and foreign firms. Consequently, U.S.-only listed managers use the discretion afforded by SEC rules to furnish fewer material updates. Such evidence is consistent with the notion that, even when firms are subject to a new regulatory framework, home-market characteristics continue to influence reporting properties (Lang, Raedy, and Wilson 2006; Leuz 2006; Doidge, Karolyi, and Stulz 2007).

To gauge the informativeness of 6-Ks, we examine the investor demand and market response. We proxy for investor demand using search volume around each 6-K filing based on the SEC's Electronic Data Gathering and Retrieval (EDGAR) web logs. If 6-Ks provide value-relevant information, they should elicit increased information acquisition via EDGAR, especially when home-market disclosures are not publicly accessible. The SEC does not impose strict 6-K filing

deadlines and rarely brings enforcement actions for delinquent 6-K filings (Cohen, Dudek, and Trotter 2018). Thus, to the extent that 6-Ks are not timely or that firms previously disclosed the information in their home market, then it is possible that 6-Ks could yield little investor interest.

Upon a new 6-K filing, we document a surge in EDGAR search volume relative to baseline levels, indicating that investors are interested in their content. 6-Ks generate significantly greater search volume when the firm stems from a country with weaker reporting requirements, even when controlling for the frequency and timing of disclosures. These findings suggest that investors exhibit more interest in 6-Ks by firms with fewer ongoing disclosure requirements, higher search costs, and where material updates could potentially reduce more information asymmetry.

Next, we study the market response around the 6-K filing date. Our analysis shows that the average new 6-K is associated with economically significant abnormal trading volume of 39.0 percent and absolute cumulative abnormal returns of 4.0 percent during the three-day window centered on the 6-K filing date. To the extent that variation in home-market reporting requirements creates differing incentives to supply certain content, alter the timing of disclosures, or affects the credibility of information, there could be implications for the value-relevance of 6-Ks.<sup>1</sup>

We find that the market response is greater for firms with weaker home-market reporting requirements, suggesting that 6-Ks by these firms contain more value-relevant updates. The results are robust to controlling for EDGAR search volume, 6-K frequency, and the timeliness of reporting. 6-Ks by firms listing exclusively in the U.S. also elicit a large and significant market response, even when controlling for the high instance of incorporating in tax haven countries.

We next examine 6-K content. Unlike ongoing disclosures by domestic firms on SEC Form

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<sup>1</sup> When the SEC proposed shorter deadlines for foreign firms' annual reports, some noted that, "Outdated financial information may make it more likely that investors will misjudge both the viability of the issuer and the value of its securities." *Foreign Issuer Reporting Enhancements*, Sep. 2008, <http://www.sec.gov/rules/final/2008/33-8959.pdf>.

8-K, Form 6-K disclosures lack item numbers, which obfuscates the type of information they contain. To shed light on 6-K content, we conduct textual analysis based on identification of keywords grouped into broad content categories. Financial results, such as earnings reports, have the largest content representation in 6-Ks. Disclosures related to mergers and acquisitions and governance are also relatively common. Less frequent are filings on payout policy, financing, and legal issues. Regardless of content, we find that investors respond more to 6-Ks by firms from countries with weaker disclosure requirements. Firms from weaker home markets also tend to report fewer items that could constrain managers, such as governance or payout policy.

One possibility is that the SEC substitutes for low information flow by actively monitoring firms from weaker markets (Naughton, Rogo, Sunder, and Zhang 2018). We find little evidence to support this notion. Indeed, the SEC rarely issues comment letters on 6-Ks and does not comment more often to firms providing relatively fewer 6-Ks within a country. However, firms that receive an SEC comment letter do produce more ongoing disclosures in the subsequent year.

Collectively, our paper provides new evidence on foreign firm information flow. While prior work examines information provided in annual reports (Lang, Raedy, and Wilson 2006; Lundholm, Rogo, and Zhang 2014), these filings constitute only five percent of SEC disclosures by foreign firms. In contrast, 6-Ks represent more than 90 percent of their disclosures to the SEC. We show that 6-Ks are an important and timely source of information that assists investors in updating their assessment of firm value. Our results support the notion that furnishing disclosures in the U.S. can reduce search costs and facilitate investor access to information, especially for firms from countries with weaker reporting requirements and limited online access to disclosures.

Our study also contributes to the literature examining the information environment of foreign firms. Prior work indicates that firms cross-listing in the U.S. experience an enriched



information environment, as measured by changes in analyst forecasts and newspapers (Baker, Nofsinger, and Weaver 2002; Lang, Lins, and Miller 2003; Fernandes and Ferreira 2008), the market response to earnings (Bailey, Karolyi, and Salva 2006), and overall price discovery (Foucault and Gehrig 2008). These studies, while indicative of enhanced firm disclosure, offer indirect evidence on the actual mechanism that managers use to convey timely updates. Our paper provides direct evidence on the type and frequency of ongoing information that investors receive, which illustrates plausible channels for the improvement in the information environment of firms cross-listing in the U.S.

Some critics raise questions about the continued efficacy of the SEC's one-size-fits-all approach to 6-K disclosures given the current landscape of foreign firms (Davidoff 2010; Cross 2012). We show that an increasing proportion of U.S.-listed foreign firms incorporate in countries with less extensive reporting requirements or exclusively list their securities in the U.S, leading to a divergency in ongoing information flow. We caution that our analyses do not conclude whether this divergence harms investors. It does, however, yield important insights for regulators on how the SEC's deferral policy influences disclosure and the ensuing investor and market response.

## **II. FOREIGN FIRM REPORTING REQUIREMENTS AND HYPOTHESES**

### **SEC Reporting Requirements**

SEC reporting requirements for foreign firms depend on how the firm's equity is traded in the U.S. Firms with Level 1 or unsponsored American Depository Receipts (ADRs) are quoted over-the-counter and are not required to report to the SEC. Exchange-listed firms—Level 2 and 3 ADRs and Direct Listings—must follow SEC Rule 4-01(a), which requires annual financial disclosures on Forms 20-F or 40-F using U.S. Generally Accepted Accounting Principles (GAAP), International Financial Reporting Standards (IFRS), or local GAAP reconciled to U.S. GAAP.

Rather than prescribing specific events or timing of ongoing disclosures like those on Forms 8-K and 10-Q for domestic firms, the SEC permits foreign firms to follow home-market requirements. Specifically, SEC rules stipulate that U.S.-listed foreign firms must promptly furnish in English any information that the firm: (i) is required to make public under the laws of its home country; (ii) files or is required to file with a foreign stock exchange on which its securities trade; or (iii) distributes or is required to distribute to its security holders.<sup>2</sup> Consequently, the SEC only requires foreign firms to furnish a 6-K when a disclosure occurs in its home market.

We summarize SEC disclosure rules and home-market reporting requirements in the Internet Appendix. Many home markets do not require interim reports or material-event disclosures. Importantly, U.S.-only listed foreign firms often have no home-market requirements (Cross 2012), affording their managers substantial leeway in the substance and timing of 6-Ks.<sup>3</sup>

## **Hypotheses**

Due to heterogeneity in reporting requirements across home markets, and the SEC's deference to home-market rules, firms from weaker regimes have greater discretion in supplying 6-Ks. Although foreign firms are subject to SEC regulations, monitoring, and enforcement, home-market factors can continue to shape their reporting (Lang, Raedy, and Wilson 2006; Gong, Ke, and Yu 2013). Foreign firms with fewer home-market reporting requirements might use their discretion to furnish fewer overall 6-Ks. Thus, we propose the following:

**H1:** Firms with fewer home-market reporting requirements supply fewer 6-Ks.

Alternatively, firms from weaker regimes could supply more 6-Ks than those from stronger

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<sup>2</sup> Shearman and Sterling LLP (2014) interpret a 'prompt' 6-K as: "The same day of publication for financial information and other material information that would be likely to have an immediate market impact, and 'as soon as practicable' but in no event more than 30 days after initial publication for other information."

<sup>3</sup> Firms are subject to other home-market factors that might influence disclosure, such as enforcement or litigation. Foreign firms are exempt from Regulation Fair Disclosure and XBRL requirements (Cohen, Dudek, and Trotter 2018).

home markets. For example, Fishman and Hagerty (1989) suggest that firms might provide more disclosure to compete for investors' attention. Firms from weaker regimes could also supply additional information to assuage investor concerns about agency issues and firm performance (Stulz 1999; Coffee 2002; Doidge, Karolyi, and Stulz 2004), attract greater institutional ownership (Bradshaw, Bushee, and Miller 2004), or enhance reputational capital for supplying relevant and timely disclosures (Leuz and Wysocki 2016). Thus, we may not find support for H1.

We next investigate how investors respond to 6-Ks. Because the SEC only requires foreign firms to furnish 6-Ks when a disclosure occurs in its home market, it is possible that 6-Ks impart little incremental information to U.S. investors. In this case, there would be no significant investor interest or market reaction to 6-Ks, particularly if managers utilize the SEC's lenient 6-K filing deadlines and enforcement to delay reporting after an event. For example, Li, Ramesh, and Shen (2011) finds investors only react to an initial, and not subsequent, Dow Jones news alerts.

Even if a firm previously disclosed information in its home market, 6-Ks can facilitate investors' access to information. Some countries require disclosures in a language other than English. Thus, 6-Ks could reduce processing costs for U.S. investors. Furnishing a 6-K also makes the information immediately available on the SEC's EDGAR website. This resource is freely accessible to all investor, whereas a similar resource might be absent or obscure for home-market disclosures.<sup>4</sup> Moreover, U.S.-listed foreign firms are subject to SEC rules and could face legal actions for providing misleading or false information. As such, 6-Ks could be a credible disclosure source for investors (Karolyi 2012). Thus, we propose the following hypotheses:

**H2A:** Investors use 6-Ks as a source of foreign firm information.

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<sup>4</sup> The European Union issued a Transparency Directive requiring member states to establish a website for publishing company disclosures, which generally occurred in 2007. Mazars (2009) finds these databases are not well known and sparsely used. In contrast, the information in EDGAR filings are often widely disseminated by news outlets.

**H2B:** 6-Ks contain value-relevant information that generates a market response.

We next examine how the investor response to 6-K filings relates to home-market reporting and listing characteristics. 6-Ks furnished by firms with less extensive home-market reporting requirements could be more informative and generate a greater response by resolving incrementally greater information asymmetry. Moreover, foreign firms listing only in the U.S. lack any home-exchange required disclosures, so their 6-Ks could have a greater propensity to include previously undisclosed information. Prior work finds that firms providing fewer updates receive more attention when issuing periodic reports because the market did not previously have access to the information (Li, Ramesh, and Shen 2011). Under this scenario, our hypothesis is as follows:

**H3:** The investor and market response to 6-Ks is greater for firms with weaker home-market reporting requirements and listing characteristics.

Alternatively, if investors do not view disclosures by firms with weaker home-market reporting requirements as containing credible information, we might not find support for H3. Lang, Raedy, and Wilson (2006) document that U.S.-listed foreign firms engage more in earnings management when they stem from countries with weaker investor protection. Weaker reporting standards often correspond to less enforcement of disclosure rules in the home market (Siegel 2005; Licht, Li, and Siegel 2018), which reduces the consequences of not releasing updates in a timely manner. 6-Ks are also “furnished” rather than “filed” with the SEC like domestic firms’ 8-Ks. This designation indicates lower liability under SEC rules. Consequently, the investor demand and market response could be diminished for 6-Ks by firms with more discretion. Consistent with this notion, studies by Bailey, Karolyi, and Salva (2006) and Fernandes and Ferreira (2008) suggest that price informativeness following a U.S. cross-listing increases more for firms from developed markets (i.e., stronger information environments) versus emerging markets.

We next analyze the type of information disclosed via 6-Ks. The limited studies of 6-Ks

(Frost and Pownall 1994) do not investigate its content, likely because the SEC does not require event-related item numbers as it does for domestic firms filing 8-Ks (Lerman and Livnat 2010). Specifically, we expect the type of information disclosed in a 6-K to be related to the rules of the home market. Firms from stronger (weaker) reporting environments have greater (lower) mandates to supply a wide array of information. When weaker home markets do require disclosure, it is more likely to correspond to interim earnings reports, rather than event-driven disclosures. Moreover, foreign firms are permitted to opt-out of governance standards established by the SEC and U.S. exchanges for domestic firms (Foley, Goldsmith-Pinkham, Greenstein, and Zwick 2018). If weaker home market rules correlate with lower governance and oversight, we could observe fewer 6-Ks relating to items that constrain managerial behavior, such as governance or payout policy. Such analysis helps address how the SEC's deference to home-market reporting influences foreign firms' information production choices. Thus, our next hypothesis is stated as follows:

**H4:** Firms with weaker home-market reporting requirements supply relatively more 6-Ks related to earnings, and fewer 6-Ks related to governance or payout policy.

We also explore how the nature of 6-K information could impact the market response. Disclosures with verifiable quantitative information could elicit a stronger response. Li, Ramesh, and Shen (2011) show that certain disclosures by U.S. firms, such as legal and bankruptcy events, generate greater investor attention. Moreover, the authors find a lower market response when content is not clearly labeled, which they attribute to investor costs associated with viewing and interpreting information. The market response to 6-Ks could be lower when content is not easily identifiable. Thus, we state the following hypothesis:

**H5:** 6-Ks with quantitative and identifiable information elicit a stronger market response.

The investor and market response to 6-K content could also vary by home-market factors.

For firms from weaker reporting environments, the response could be larger for 6-Ks containing information on factors that constrain managerial discretion or enhance monitoring (Stulz 1999). In contrast, more extensive reporting requirements could boost the credibility of 6-Ks leading to a larger response for firms from stronger home markets.

We next explore the interaction of foreign firms' disclosure practices, home-market requirements, and SEC oversight. Monitoring the disclosure practices of SEC reporting firms via comment letters is an important role of the SEC for investor protection (Johnston and Petacchi 2017; Naughton, Rogo, Sunder, and Zhang 2018; Duro, Heese, and Ormazabal 2019). Given the home-market deferral policy for 6-K disclosures, the SEC could substitute for reduced information flow through enhanced monitoring, resulting in more comment letters. For example, Naughton, Rogo, Sunder, and Zhang (2018) find a negative relation between SEC comment letter frequency and the strength of foreign firms' home-market enforcement regime. Thus, we state the hypothesis on monitoring intensity based on firm-specific disclosure levels:

**H6A:** The SEC provides more comment letters when firm-level information flow is lower.

We might not find support for H6A because firms supplying more 6-Ks afford the SEC more opportunities to comment. The SEC might also primarily monitor annual filings because they are "filed," whereas 6-Ks are "furnished" and subject to lower liability. Consistent with this notion, one U.S. law firm notes that the SEC has never brought an enforcement action based on 6-K timeliness or the failure to provide a 6-K after a material event (Cohen, Dudek, and Trotter 2018).

We also examine the ex-post consequences of SEC monitoring on foreign firms' ongoing information flow. Johnston and Petacchi (2017) and Duro, Heese, and Ormazabal (2019) find that SEC comment letters are associated with reductions in information asymmetry. To the extent that the information environment improves following SEC monitoring, we would expect foreign firms

to provide more ongoing disclosures via 6-Ks. Thus, we also state the following hypothesis:

**H6B:** Following an SEC comment letter, firms provide more ongoing disclosures.

### **III. SAMPLE CONSTRUCTION AND INFORMATION MEASURES**

#### **Sample Generation**

We begin by extracting a list of foreign firms from the SEC's website over 2004 to 2013. This period corresponds to the availability of EDGAR search volume. We obtain a file from the SEC's Office of International Corporate Finance that contains auditor and accounting information (i.e., IFRS, U.S. GAAP, or local GAAP) for foreign firms. We then extract all SEC Form 6-K, 20-F, and 40-F filings from WRDS SEC Analytics Suite and merge the datasets.

We collect ADR data from Bank of New York Mellon, Citigroup, J.P. Morgan, NYSE, and NASDAQ websites. We verify exchange-listing information, listing dates, and ADR levels via annual report information, the Center for Research in Security Prices (CRSP), and foreign firms' websites. Because Level 1 and unsponsored ADRs do not report to the SEC, we eliminate these firms from our sample. We also require firms to have stock price and accounting data in CRSP and Compustat. This process creates a final sample of 1,135 foreign firms and 167,004 6-Ks.

#### **Home-Market Reporting Measures**

Panel A of Table 1 displays the number of firms, firm years, and 6-Ks in our sample by the firms' home country. We assign firms to a country using incorporation, rather than headquarter, location because incorporation country and exchanges dictate a firm's disclosure, legal, and enforcement regime.<sup>5</sup> Furthermore, the legal environment can shape the disclosure incentives of firms even when they list in another country (Leuz and Wysocki 2016). We obtain incorporation

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<sup>5</sup> Over 90% of cross-listed firms list on an exchange in their home country of incorporation. Our results are robust to excluding cross-listed firms that list outside of their incorporation country. For U.S.-only listed firms, we redo our tests using the enforcement index for the headquarter, rather than incorporation, country and the results hold.

country from annual reports. For our sample, the countries with the highest representation of firm-years are Canada, Cayman Islands, and Israel, but firms emanate from 56 different countries, indicating the potential for disparity in home-market reporting requirements.

<Insert Table 1 about here>

In Panel B, we capture characteristics associated with a foreign firm's home-market reporting requirements. We hand-collect the annual, periodic, and event-driven disclosure requirements for each country and exchange in our sample and identify whether there is a home-market database of company filings or announcements similar to the EDGAR website. An online database can facilitate access to disclosures and reduce investors' search costs.

While just over 70 percent of sample countries or exchanges require, at a minimum, that companies disclose price-sensitive information, most home-market regulators or exchanges place the burden of determining materiality thresholds on companies. The lack of detailed rules across countries and exchanges creates an impediment to systematically classifying which events require disclosure versus those that are voluntary. We, therefore, capture the variation in event-driven disclosure requirements and databases through categorical variables.

First, we create a disclosure variable (*EVENT*) that takes the value of zero if event-driven disclosures are not required by the home-market regulator or exchange; one if the home market requires event-driven disclosures but does not prescribe specific events requiring disclosure; and two if the home market requires event-driven disclosures and provides an event list or materiality threshold that triggers disclosure. Next, we generate a database variable (*DATABASE*) that captures whether the home-market regulator or exchange has a website containing company announcements and regulatory filings. It takes the value of zero if we cannot locate a database; one if a home-market website contains some company announcements but they are only available



for a limited period or not provided in English; and two if the country has a fully searchable database similar to EDGAR. No database source exists for 42 percent of sample firm-years.

Next, we use two country-level index measures. First, we obtain the extent of corporate transparency index (*TINDEX*) from the World Bank's website, which ranges from zero to nine, where higher values indicate stronger country-level transparency across five components: (i) ownership stakes; (ii) board members' other directorships and employment; (iii) manager compensation; (iv) external audits of annual financial statements; and (v) whether audit reports must be disclosed.<sup>6</sup> Second, we obtain the reporting index (*RINDEX*), which represents the strength of audit and reporting standards and ranges from one (extremely weak) to seven (extremely strong) based on annual executive surveys. The World Economic Forum publishes these values annually in their Global Competitiveness Report.<sup>7</sup>

Panel B presents the average home-market reporting characteristics for each country at the firm-year level. We also report the average values for the U.S. as a reference point. Countries with a higher *TINDEX* and *RINDEX* values tend to have more specific rules for event-driven disclosure obligations. For example, Norway and Brazil prescribe several events that elicit disclosures. Many low-ranking countries (e.g., Bermuda and Bahamas) have no ongoing disclosure requirements. Thus, the index values reflect similar attributes as our directly measured *EVENT* variable.

Next, we identify whether firms list exclusively on a U.S. exchange (*USONLY*). In these instances, the firm has opted not to list in its home market or on any other foreign exchange. U.S.-only listed firms have maximum discretion in supplying 6-K disclosures as countries generally

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<sup>6</sup> See <http://www.doingbusiness.org/Methodology/Protecting-Minority-Investors>. Values are based on Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008). For missing country-year data, we use the value from the next year.

<sup>7</sup> See <http://reports.weforum.org/global-competitiveness-report-2015-2016/competitiveness-library/> for the survey construction. Missing *RINDEX* values for 2004-2005 are replaced with 2006 values. Country-level values are missing for Antigua and Barbuda, Bahamas, Bermuda, British Virgin Islands, Curaçao, Cayman Islands, Guernsey, Jersey, Marshall Islands, and Papua New Guinea. For these countries, we use the sample minimum value.

limit disclosure rules to firms that are both incorporated in that country and list on a domestic exchange. Indeed, other than requirements for half-yearly financial reporting for NASDAQ-listed companies beginning in 2006, foreign firms that list only in the U.S. are not required by the SEC to furnish any other ongoing disclosures during our sample period (Cross 2012; Cohen, Dudek, and Trotter 2018). We posit that a U.S.-only listing is a strong proxy for weak reporting requirements. Further, many sample firms that incorporate in countries with low event-driven disclosure standards, such as the Cayman Islands, list their equity exclusively in the U.S.<sup>8</sup>

There is a high correlation between our five measures of home-market reporting.<sup>9</sup> While each of these measures has distinct features, they all gauge the quality of home-market transparency, accounting standards, and access to timely and material information. We, therefore, construct a novel composite measure using a principal component analysis (PCA) to capture the relative importance of each variable. The PCA approach allows us to include information from all five measures of home-market reporting. We follow standard PCA procedures of dimension reduction and generate a singular value (*HOMEMKT*). By design, *HOMEMKT* has a mean value of 0. Panel B reports the firm-year average for each country.

<Insert Fig. 1 about here>

Fig. 1 shows the time series trend for two measures of the information environment: *EVENT* and *USONLY*. In this figure, *EVENT* is an indicator variable for countries that require at least some event-driven disclosure, which is depicted as a percentage per year on the left y-axis. The right y-axis corresponds to the annual percentage of U.S.-only listed foreign firms. The plot of *EVENT* shows a marked decline over time, while the *USONLY* plot displays a large increase.

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<sup>8</sup> We verify that our results are not driven by firms headquartered in China or Chinese shell companies.

<sup>9</sup> These measures are also highly correlated with the following information asymmetry proxies: annual bid-ask spread, absolute cumulative abnormal returns, and abnormal trading volume around the annual earnings announcement.

These trends confirm concerns that a growing number of foreign firms have few disclosure requirements, affording their managers greater discretion over the timing and content of 6-Ks.

### **Annual Distribution of 6-K Firms and Filings**

Fig. 2 shows the number of foreign firms and 6-Ks over the sample period. The left y-axis is the number of firms. The drop in 2007 corresponds to a rule change easing the ability of foreign firms to deregister from the SEC (Fernandes, Lel, and Miller 2010). The number of firms increases in 2010 but does not rebound to the pre-2007 levels. The right y-axis depicts the total number of 6-Ks per year in thousands, which increases from 2004 to 2007, declines in 2008 to 2010, and then rises again towards the end of the sample period. These fluctuations likely reflect changes in both the number and composition of sample firms and home-market reporting requirements over time.

<Insert Fig. 2 about here>

Fig. 3 plots the average number of 6-Ks partitioned by listing status: U.S.-only or cross-listed. It reveals a disparity in information flow between these groups. As of 2013, U.S.-only listed firms provide an average of 13.0 6-Ks per year, while cross-listed firms provide 36.2. This evidence suggests that U.S.-only listed firms use their discretion to supply fewer 6-Ks.

<Insert Fig. 3 about here>

### **Firm and Listing Characteristics**

Panel C of Table 1 presents firm and listing characteristics at the firm-year level. Appendix A provides variable definitions. Total assets (*SIZE*), debt financing (*LEV*), return-on-assets (*ROA*), and growth opportunities (*MTB*) might reflect benefits of disclosure. We winsorize these variables at the one percent level and set 14 observations with negative *MTB* values to the maximum sample value. In our regressions, we log transform *SIZE*. Across other characteristics, the average firm has 20.1 percent leverage, -1.2 percent return on assets, and a market-to-book of 2.9.

Over 90 percent of firms use a big four affiliated auditor (*BIG4*). About 24 percent prepare financials in accordance with IFRS, 32 percent use local GAAP (*LOC GAAP*), and 44 percent use U.S. GAAP (*US GAAP*). Almost 30 percent incorporate in countries not requiring disclosures to be reported or translated into English (*NONENG*). We measure home-market reporting enforcement (*ENFORCE*) based on the Brown, Preiato, and Tarca (2014) enforcement index, which ranges from 0 to 24 based on surveys and studies of the activities and resources of securities market regulators and exchange monitoring of financial reporting. The average firm-year has an *ENFORCE* value of 15.3.

We find that 55 percent of foreign firms list on the NYSE and 36 percent list on NASDAQ. About 20 (33) percent are Level 2 (Level 3) ADRs. The median firm lists on two exchanges including the U.S. listing, and approximately 15 percent of firms list on three or more exchanges.

#### IV. EMPIRICAL DESIGN

##### Supply of 6-K Disclosures

We examine how home-market reporting requirements and listing characteristics interact with the supply of 6-K disclosures. We specify the following equation:

$$6KFREQ = \alpha + \beta_1 REPORT + \theta Controls + Year FE + Industry FE + \varepsilon, \quad (1)$$

where *6KFREQ* is the annual number of 6-Ks a firm provides. Because *6KFREQ* is overdispersed and right-skewed, we estimate eq. (1) using negative binomial rather than Poisson regressions to avoid biasing the standard errors. The results are robust to using OLS or Poisson regressions.

The variable of interest, *REPORT*, represents the home-market reporting and listing measures, *HOMEMKT*, *EVENT*, *DATABASE*, *TINDEX*, *RINDEX*, and *USONLY*, described in Section III. A positive  $\beta_1$  coefficient on all home-market measures, except the *USONLY* indicator, implies that stronger home-market disclosure requirements are associated with more 6-Ks. Due to

collinearity among home-market proxies, we run separate regressions for each measure. We control for the following contemporaneous characteristics ( $\theta$ ): *NUMEXCH*, *IFRS*, *LOCGAAP*, *BIG4*, *NONENG*, *L3ADR*, *DIRECT*, *SIZE*, *MTB*, *LEV*, *ROA*, *ENFORCE*, and *NASDAQ*.<sup>10</sup> We also control for year and industry fixed effects using the Fama-French 48 industries and present *t*-statistics based on robust standard errors clustered at the firm and country level. We utilize two-tailed tests throughout the manuscript.

For U.S.-only listed firms, we examine whether 6-K reporting differences are driven by variation in firm fundamentals by comparing ongoing information flow for U.S.-only listed firms to four matched samples using a propensity score methodology. All matches are based on year, industry (Fama-French 48 industries), *SIZE* (total assets), and *RISK* (annual standard deviation of returns). We compare *6KFREQ* of U.S.-only listed firms to (1) U.S. domestic firms disclosing on Forms 8-K and 10-Q; and *6KFREQ* of cross-listed foreign firms; (2) firms within the same headquarter country; (3) firms that incorporate in countries with similar values of *HOMEMKT*; and (4) firms with similar values of *TINDEX*. These tests speak directly to the SEC and NYSE's concerns of disparity in information flow for U.S.-only listed firms (Cross 2012; Gelfond 2016).

### **Information Acquisition**

To determine whether investors seek information in 6-Ks, we investigate information acquisition patterns. We use Internet search volume on the SEC's website. The EDGAR search volume dataset contains the anonymized Internet Protocol (IP) address, time and date of access, SEC file and accession numbers, and the firm's Central Index Key. We link the accession number to each 6-K using data from WRDS SEC Analytics Suite. As noted by Loughran and McDonald (2017), EDGAR search volume data are missing from September 24, 2005, through May 10, 2006,

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<sup>10</sup> We do not control for *NUMEXCH* in tests where *USONLY* is the variable of interest.

so we exclude these periods from our information acquisition analyses. We have EDGAR search volume data for a large subset of 156,526 6-K filings, representing 94 percent of our total sample.<sup>11</sup>

We construct an information acquisition measure, EDGAR search volume (*ESV-6K*), by aggregating the number of 6-K requests for a specific filing over several event windows, where day 0 is the filing date of a new 6-K: [0,+1], [0,+7], [0,+30], [0,+60], and [0,+90]. Drake, Roulstone, and Thornock (2015), Lee, Ma, and Wang (2015), and Loughran and McDonald (2017) partition *ESV* into robot and individual users. Loughran and McDonald (2017) find that individuals are more likely to make targeted requests related to an event versus robots. Following their process, we classify *ESV-6K* into individual and robot requests based on the traffic pattern of each unique IP address. We designate an IP address as a *robot* if it requests at least 50 unique filings of any form during a single calendar day. All others are considered *individual* requests.<sup>12</sup>

To examine cross-sectional variation in information acquisition, we transform the dependent variable, *ESV-6K*, by taking the log of one plus *ESV* for each filing to normalize the distribution. We winsorize *ESV-6K* at the one percent level. We use an OLS regression to test the following equation separately for robots and individuals over the period [0,+7]:

$$\text{LN}(1 + \text{ESV-6K}) = \alpha + \beta_1 \text{REPORT} + \theta \text{Controls} + \text{Year FE} + \text{Industry FE} + \varepsilon . \quad (2)$$

The coefficient of interest is  $\beta_1$  for our *REPORT* variables. A negative coefficient on  $\beta_1$  for *HOMEMKT*, *EVENT*, *DATABASE*, *TINDEX*, *RINDEX*, and a positive coefficient for *USONLY* would indicate greater investor interest in 6-Ks by firms from less transparent home markets. The control variables ( $\theta$ ), fixed effects, and standard error clustering are identical to eq. (1).

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<sup>11</sup> While other sources exist for general interest in the firm (e.g., Google searches), *ESV* captures 6-K specific interest.

<sup>12</sup> Lee, Ma, and Wang (2015) note individuals tend to click Hyper-Text Markup Language (HTM) files more than text (TXT). We partition individual searches into HTM and TXT files and find similar results.

## Return and Trading Volume

We next gauge whether 6-K information is substantive and credible enough to yield a significant market response. Our approach entails estimating abnormal trading volume and returns around a new 6-K filing (Bailey, Karolyi, and Salva 2006). For abnormal trading volume (*TRADVOL*), we conduct an event study on log-transformed volume (Campbell and Wasley 1996). We estimate baseline volume by regressing the daily trading volume relative to the CRSP equal-weighted index using a window of [-200,-11] prior to the 6-K filing date (Tkac 1999). *TRADVOL* is estimated using prediction errors cumulated over [-1,+1] centered on the 6-K filing date.

We compute absolute cumulative abnormal returns (*ABSCAR*) based on a single-factor market model using the same estimation and event window as *TRADVOL* tests. We cumulate abnormal returns over [-1,+1] centered on the 6-K filing date and take the absolute value. If a firm files multiple 6-Ks per day, we use a single observation. We estimate this equation:

$$Y = \alpha + \beta_1 REPORT + \theta Controls + Year FE + Industry FE + \varepsilon, \quad (3)$$

where  $Y$  is *ABSCAR* and *TRADVOL*. We use OLS and the same controls ( $\theta$ ), fixed effects, and standard error clustering as eqs. (1) and (2). The coefficient of interest is  $\beta_1$  for *REPORT*.

One concern with this approach is that 6-K information could be simultaneously released in a firm's home market, making it potentially difficult to disentangle the market response due to the home-market disclosure versus the 6-K filing. Although we cannot completely rule out that the information was released elsewhere and that this separate disclosure generated the market response, we conduct three tests to alleviate such concerns. First, we re-estimate eq. (3) using the level of individual *ESV-6K* as an additional explanatory variable. If the 6-K itself is an important disclosure mechanism, we expect a portion of *ABSCAR* and *TRADVOL* to be explained by the amount of EDGAR search volume by individuals.

Second, we examine 6-K disclosure timing relative to the reported event. If 6-Ks generate a significant market response after controlling for “stale” news, then it further suggests that the 6-K filing is an important disclosure medium. Unfortunately, 6-Ks do not systematically identify the event date in the header. Thus, we generate a random sample of 15,000 6-Ks across countries in proportion to our full sample. We hand collect the difference between the earliest event date in the 6-K, such as a press release, and the 6-K filing date and label this value as *DELAY*. We re-estimate eqs. (2) and (3) with the natural log of  $(1+DELAY)$  as an additional control. Third, we use the same random sample and limit our analysis to 6-Ks where the event date and filing date are within one day or less, which reduces the likelihood that the information is stale.

### **Gauging 6-K Content**

We next examine 6-K information content. Unlike 8-Ks, 6-Ks do not contain item numbers designating its content. Thus, we extract and classify 6-K content through textual analysis. We ascertain the title, header, centered text, and first paragraph from each filing. For a random sample of 1,000 6-Ks, we identify 46 content related keywords. As shown in Appendix B and described further in the Internet Appendix, we group keywords into seven broad categories: Asset restructuring (*ASSET\_RES*) includes items such as acquisitions; Financing (*FINANCING*) includes news related to capital structure such as issuing securities; Governance (*GOVERN*) reports information related to management or boards; Legal and default risk (*LEGAL*) includes keywords related to litigation or credit ratings; Miscellaneous (*MISC*) are keywords that do not fit into one of the other categories; payout policy (*PAYOUT*) provides information on dividends and share repurchases; and results (*RESULTS*) are financial updates, such as quarterly or half-yearly reports. Those 6-Ks without discernable keywords are labeled unclassified (*UNCLASS*) content.

This methodology assigns 77 percent of the 6-Ks with identifiable content to a single



category, 21 percent to two categories, and three percent are assigned to three or more categories. Thus, approximately 23 percent of 6-Ks in the sample have potentially bundled content.

Next, we examine the relation between 6-K content and home-market characteristics. For the univariate tests, we bifurcate the sample based on whether a firm is cross-listed (*CROSSLIST*) or lists only in the U.S. (*USONLY*). We also partition the sample based on home-market reporting requirements. For these tests only, *HI\_HOME* (*LO\_HOME*) equals one if the *HOMEMKT* variable is above (below) the median in a given year. We then compare the average proportion of each content category across these partitions using a standard two-tailed *t*-test of the mean value.

We also examine variation in the investor and market response based on 6-K content using OLS. For these tests, we estimate eqs. (2) and (3) separately for each content category using the same firm-level controls, year and industry fixed effects, and clustering of standard errors.

### **Measuring SEC Monitoring**

To determine if the SEC varies monitoring of foreign firms based on disclosure properties, we take two approaches. First, we estimate an equation using country fixed effects that enables us to examine monitoring based on 6-K levels conditional on country reporting requirements:

$$SEC_{CL} = \alpha + \beta_1 6KFREQ + \theta Controls + Year FE + Industry FE + Country FE + \varepsilon, \quad (4)$$

where *SEC\_CL*, equals one if the firm receives a comment letter on its annual report (20-F/40-F) or 6-K from the SEC. Comment letter data are from the Audit Analytics database over the period 2005 to 2013. The coefficient of interest in this equation is  $\beta_1$  for the variable *6KFREQ*. We also estimate eq. (4) after replacing *6KFREQ* with *HI\_6KFREQ*, which equals one if the firm provides the median or higher number of annual 6-K filings at the country, year, and industry level (Fama-French 17 industries). We use OLS to estimate eq. (4) due to high dimensional year, industry, and country fixed effects. We cluster standard errors at the country-industry level and use similar firm

controls ( $\theta$ ) as eq. (1).

Second, we test whether the probability of receiving an SEC comment differs for U.S.-only listed firms versus those that cross-list in the U.S. by estimating this equation using OLS:

$$Y = \alpha + \beta_1 USONLY + \theta Controls + Year FE + Industry FE + \varepsilon, \quad (5)$$

where  $Y$  is  $SEC\_CL$  or  $SEC\_CL\_6K$ , the latter of which equals one if the firm receives an SEC comment on a 6-K. We use OLS to estimate eq. (4) and include year and industry fixed effects. We cluster standard errors at the country-industry level and use similar controls ( $\theta$ ) as eq. (1).

We also exploit an SEC comment letter policy change for U.S.-only listed firms as a “shock” to monitoring. In response to growth in U.S.-only listed firms, the SEC eliminated confidential submission and commenting on the initial registration for U.S.-only listed firms in 2011 (SEC 2011). The policy did not change for cross-listed firms. We create an indicator variable,  $POST$ , for the years 2011 to 2013 and interact  $USONLY \times POST$ , which reflects the propensity for the SEC to monitor U.S.-only listed firms after the policy change. For these tests, we re-estimate eq. (5) but do not include year fixed effects as the variable  $POST$  captures time trends. We include industry fixed effects and similar controls and standard error clustering as eq. (5).

To examine the effect of SEC monitoring on firm-level 6-K frequency, we re-estimate eq. (1) and add the variable  $SEC\_CL$  lagged by one year. We include year, industry, and firm fixed effects, the latter of which subsumes country fixed effects. If firms increase 6-K frequency following SEC monitoring, we expect a positive relation between lagged  $SEC\_CL$  and  $6KFREQ$ .

## V. RESULTS

### Supply of 6-K Disclosures

To test the interaction of home-market reporting requirements with the supply of 6-K disclosures, Table 2 presents negative binomial regressions of eq. (1) at the firm-year level. In

Columns (1) to (5) of Panel A, the coefficients for the home-market reporting are positive and significantly related to *6KFREQ* at the five percent level or better. These results indicate that firms from countries with more extensive disclosure requirements, an accessible disclosure database, and with higher transparency and auditing index values produce significantly more 6-Ks per year. Column (6) shows that foreign firms listing exclusively in the U.S. produce 35 percent fewer 6-Ks than those also listing in another country.<sup>13</sup> This result illustrates that managers use the discretion afforded by the SEC's deferral policy to provide fewer 6-Ks, which is consistent with H1.

<Insert Table 2 about here>

Panel B verifies that reporting differences for U.S.-only listed firms are not driven by variation in observable firm characteristics. The average U.S.-only listed firm provides significantly fewer ongoing disclosures than firms across four matched samples.

### **EDGAR Search Volume around 6-Ks**

We next examine the use of 6-Ks as a source of information. Panel A of Table 3 displays information acquisition statistics for both a new 6-K and previous SEC filings. We report average *ESV-6K* over five windows starting on the 6-K filing date (day 0). On average, a new 6-K receives 13 (147) individual (robot) searches during the first two days and 26 (173) individual (robot) searches during the [0,+7] period. Individuals and robots exhibit different search patterns over time. Almost 70 percent of robot *ESV-6K* occurs in the first week of a three-month period, while individuals continue searches over time with only 37 percent of total *ESV-6K* during the first week.

<Insert Table 3 about here>

Panel A also presents EDGAR search volume for all SEC filings (*ESV-TOTAL*) at the unique 6-K filing-day level. During the first week, *ESV-6K* represents nine percent of aggregate

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<sup>13</sup> Computed by exponentiating the coefficient from the negative binomial regression as follows:  $(e^{-0.424} - 1) = -0.346$ .

individual and 16 percent of aggregate robot search volume. Over the 3-month period, this rate drops to two percent of both individual and robot *ESV-TOTAL*. The concentration of information acquisition around the filing date provides initial evidence that 6-Ks contain timely information.

In Fig. 4, we plot *ESV-6K* around a new 6-K filing. We display this figure in event time over [-20,+20], where day 0 is the filing date. Negative days [-20,-1] represent the typical *ESV-6K* for a given firm. Day 0 and positive days represent the abnormal search volume after the 6-K is furnished. Because *ESV* declines cyclically during the weekend, we only graph weekday file requests. The average new 6-K yields a 41 percent increase in *ESV-6K* from the prior day (16.6 to 23.4). Average *ESV-6K* reverts to the baseline by the end of the second trading week (day +10). Thus, a new 6-K filing generates a significant increase in the demand for foreign firm information.

<Insert Figs. 4 and 5 about here>

In Fig. 5, we also explore whether a new 6-K is linked to search volume of annual reports by plotting *ESV* for previously filed annual reports around a new 6-K (*ESV-ANNUAL*). A new 6-K triggers a 23 percent increase in *ESV* for the firm's most recent annual report as compared to the pre-filing average, suggesting that investors use 6-Ks as important updates.

We next examine *ESV-6K* in a regression framework. Panel B (Panel C) of Table 3 reports the regression tests of individual (robot) *ESV-6K* over [0,+7]. Panel B shows the coefficients on *HOMEMKT*, *EVENT*, *DATABASE*, *TINDEX*, and *RINDEX* are negative and significant, all with  $p$ -values<0.001. Thus, 6-Ks by firms with weaker home-market requirements have greater individual *ESV-6K*. Column (6) shows that 6-Ks by U.S.-only listed firms attract considerably greater search volume versus cross-listed firms.<sup>14</sup>

Panel C examines robot EDGAR search volume. Similar to individual *ESV-6K*, the

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<sup>14</sup> We report control coefficients the Internet Appendix. The *NONENG* coefficient is insignificant in individual *ESV-6K* tests, indicating that 6-Ks do not simply remove language barriers.

coefficients for each of the first five home-market measures are negative and significant at the one percent level, suggesting that robots are more likely to access 6-Ks of foreign firms from weaker disclosure regimes. The positive coefficient on *USONLY* also indicates that robots acquire information furnished by these foreign firms more than 6-Ks by cross-listed firms.

The degree of *ESV* implies that investors expect 6-Ks to contain important and timely information. Thus, these results support H2A in that 6-Ks are an important source of information on foreign firm activities, especially for firms from weaker home-market, which supports H3.

As a shock to the supply of 6-Ks, we exploit the European Union's (EU) Transparency Directive (TPD), which strengthened disclosure and enforcement rules for EU-based firms in 2007. Using entry-into-force dates from Christensen, Hail, and Leuz (2016), we find the TPD leads to more 6-Ks by treated firms. We also find individual *ESV-6K* diminishes after the TPD for firms with stronger home-markets, which indicates that investors acquire less information via EDGAR when firms have lower information asymmetry. We report these results in the Internet Appendix.

### **Market Reaction to 6-Ks**

Table 4 displays the market response to a new 6-K during the [-1,+1] window. Panel A indicates that the average 6-K triggers a 4.0 percent *ABSCAR* and 39.0 percent increase in *TRADVOL*. Panel B reports regressions showing the home-market measures are significantly related to the *ABSCAR* around 6-Ks. Disclosures by firms from weaker regimes are associated with greater informativeness. For example, Column (1) shows the coefficient for *HOMEMKT* is  $-0.230$  ( $p$ -value $<0.001$ ). Column (6) shows that 6-Ks by foreign firms listing only in the U.S. produce approximately 1.1 percent greater *ABSCAR* than 6-Ks by cross-listed firms ( $p$ -value $<0.001$ ).

<Insert Table 4 about here>

Panel C shows that weaker home-market reporting characteristics are generally associated

with larger *TRADVOL* around 6-K filings. For example, the estimated coefficients on *HOMEMKT*, *EVENT*, *TINDEX*, and *RINDEX* are all negative and significant at the one percent level. In Column (3), the coefficient on *DATABASE* is not statistically significant. Column (6) shows that *USONLY* firms experience greater *TRADVOL*, which is significant at the one percent level.<sup>15</sup>

The results in Table 4 suggest that foreign firms provide value-relevant disclosures through 6-Ks, which supports H2B. The variation in the informativeness corresponds to heterogeneities in home-market disclosure requirements. These findings are consistent with H3.

### 6-K Filing Delays

We explore how the disclosure timing affects the investor and market response. The average (median) 6-K is filed 3.4 (0.0) days after the event. Table 5 shows that *ESV-6K* is not related to *DELAY*, which suggests that individuals and robots cannot initially distinguish if the 6-K information is stale. This finding could reflect the lack of an event date in the 6-K header. We do find, however, that *ABSCAR* and *TRADVOL* are both negatively related to *DELAY*. Thus, once investors ascertain that news is stale, they are less likely to trade upon it. *HOMEMKT* remains negatively and significantly related to the investor and market response in all columns. The results in Table 5 suggest that even when controlling for the timeliness of 6-Ks, the investor and market response remain larger for firms from weaker home-market reporting environments.<sup>16</sup>

<Insert Table 5 about here>

### 6-K Content

In Table 6, we study 6-K content. Panel A presents the number and percent of 6-Ks by

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<sup>15</sup> To ensure the investor and market response results are not driven by differences in the supply of 6-Ks, we redo the regressions of the investor and market response controlling for number of 6-Ks filed during the previous 180 days to rule out a potential mechanical relationship between 6-K frequency and these outcomes. As reported in the Internet Appendix, the coefficients on *HOMEMKT* and *USONLY* are similar to those in the main specifications.

<sup>16</sup> In the Internet Appendix, we find that *ESV-6K* is positively related to the market response, suggesting that 6-Ks are an important mechanism for reducing information acquisition costs. To limit stale disclosures, we study also 6-Ks where the event and filing date are within one day. The investor and market response are similar for this subsample.

content categories. *RESULTS* are the most common disclosure type at 24 percent of the sample, likely because foreign firms file interim financials via 6-Ks rather than on a separate SEC form. Other common topics include *ASSET\_RES* and *GOVERN*, each comprising 13 percent of the sample. Fewer 6-Ks cover the following: *PAYOUT* (six percent), *FINANCING* (four percent), *LEGAL* (three percent), and *MISC* (four percent). Across all 6-Ks, 48 percent have unclassifiable (*UNCLASS*) content based on information in the title, header, centered text, or first paragraph.

<Insert Table 6 about here>

In Panel A, we bifurcate the sample based on the *HOMEMKT* value and whether a firm lists only in the U.S. While *USONLY* firms furnish more 6-Ks related to *RESULTS*, firms in the *LO\_HOME* category do not. Thus, evidence is mixed as to whether firms with weaker home-market requirements supply more earnings-related 6-Ks. Consistent with H4, *LO\_HOME* and *USONLY* firms provide fewer 6-Ks related to *PAYOUT* and to *GOVERN*, which suggests that firms with weaker disclosure mandates are less likely to report on items that constrain managers.

Panel B displays the average investor and market response to 6-Ks across content categories. Disclosures with *PAYOUT* and *GOVERN* information have a lower market response, while *RESULTS* have the highest, followed by *MISC* and *FINANCING*. 6-Ks with information on *PAYOUT* and *GOVERN* yield lower individual *ESV-6K*, while *LEGAL* information has a higher investor response. 6-Ks with *UNCLASS* content generally have a lower investor and response. These results support H5 in that less identifiable content generates a smaller investor response.<sup>17</sup>

Panel C (D) tests whether the investor (market) response differs based on disclosure content and home market requirements. Each column represents a different content category and the coefficients are for separate regressions with the *HOMEMKT* and *USONLY* variables of interest.

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<sup>17</sup> For subset of mappable content keywords, we compare the market response of 6-Ks to 8-Ks in the Internet Appendix. Most 6-K content has a similar response to 8-Ks, but some (e.g., *LEGAL*) have a smaller response.

All regressions use similar controls and fixed effects as those reported in Tables 3 and 4. The results indicate that differential content does not drive these findings as the direction and magnitude of the coefficients on *HOMEMKT* and *USONLY* remain largely unchanged from the main results in Column (1). Overall, these tests reinforce the notion that investors pay more attention to 6-Ks by firms from countries with weaker disclosure requirements, independent of the type of information in the disclosure.<sup>18</sup>

### **SEC Monitoring**

In Table 7, we examine the SEC monitoring. Panel A reports that 38 percent of sample firm years include at least one SEC comment letter. Virtually all of these comments reference an annual filing (99 percent), while only 13 percent reference a 6-K. Panel B reports regression results of eq. (4). We find a higher probability of receiving a comment letter when the firm supplies more 6-Ks relative to other firms in their country and industry. These results, which fail to support H6A, imply that the SEC does not increase monitoring for low disclosers within a country. Instead, the SEC appears to comment more when a firm provides more information to comment upon.

<Insert Table 7 about here>

We also examine SEC monitoring for U.S.-only versus cross-listed firms. Panel A shows that U.S.-only listed firms receive 13 percent fewer comments overall but are 6.6 percent more likely to receive a comment letter referencing a 6-K. In Panel C, we confirm these relations in a regression setting. Controlling for other factors, Column (1) shows that U.S.-only listed firms have a 4.0 percent lower probability of receiving a comment letter, while Column (4) reveals a 1.7 percent higher probability of receiving a comment referencing a 6-K, but the results are only

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<sup>18</sup> In the Internet Appendix, we report the interaction of *HOMEMKT* and *USONLY* with 6-K content. We also show that the market response to *RESULTS* content is stronger when it contains voluntary information such as guidance. Voluntary 6-Ks elicit a larger response for firm from a stronger home-market, indicating that investors view them as more credible. Further, regression results are robust to using 6-Ks classified into a single content category.



significant at the 10 percent level. Thus, there continues to be no strong evidence that the SEC substitutes for reduced 6-K information flow with greater monitoring intensity.

As noted in Section IV, the SEC altered a part of its comment policy for U.S.-only listed firms in 2011. The coefficient on  $USONLY \times POST$  in Column (3) shows an increase in monitoring ( $SEC\_CL$ ) for U.S.-only listed firms after this period. Panel D shows that an SEC comment in the prior year corresponds to greater firm-level 6-K frequency in the following year. Thus, in support of H6B, greater SEC monitoring is associated with additional subsequent information flow.

### **Disclosure Haven or Tax Haven?**

A large portion of U.S.-only listed firms incorporate in countries with favorable tax requirements. We conduct tests to ensure our results are not driven by tax-friendly jurisdictions. Following Hines and Rice (1994) and Hines (2010), we create a variable,  $TAX\_HAVEN$ , that equals one if a firm incorporates in: Antigua and Barbuda, Bahamas, Belize, Bermuda, British Virgin Islands, Cayman Islands, Cyprus, Guernsey, Hong Kong, Ireland, Jersey, Liberia, Luxembourg, Marshall Islands, Mauritius, Panama, Singapore, and Switzerland. We also include Curaçao because the U.S. State Department identifies it as a likely tax haven. The correlation between  $USONLY$  and  $TAX\_HAVEN$  is 56 percent (65 percent) at the firm-year (firm) level.

We repeat our main regressions after adding the  $TAX\_HAVEN$  dummy in Table 8. The coefficients on  $HOMEMKT$  ( $USONLY$ ) in Panel A (Panel B) are significant and directionally identical to the primary specification. Thus, the results are not driven solely by tax havens.

<Insert Table 8 about here>

## **VI. CONCLUSION**

Our study provides direct evidence on foreign firm information flow in the U.S. via SEC Form 6-K. The SEC stipulates that U.S.-listed foreign firms must furnish interim financial reports

or event-driven disclosures on 6-Ka only when such disclosures are mandated by their home country or exchange. This policy creates significant heterogeneity in the discretion that managers of foreign firms possess in supplying information to the U.S. market.

We reveal that an increasing proportion of foreign firms stem from countries with less extensive reporting requirements or list their securities exclusively in the U.S. Moreover, these firms supply significantly fewer disclosures in the U.S., but experience greater investor demand and market response around a 6-K disclosure.

We do not find that the SEC actively comments on 6-Ks or increases monitoring intensity when a foreign firm supplies fewer 6-Ks within a country. Those receiving an SEC comment letter provide greater ongoing disclosure in the U.S. in subsequent periods. Collectively, our results offer timely and salient evidence as the SEC and U.S. stock exchanges consider foreign firms' disclosure requirements.

## APPENDIX A

### Variable Definitions

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#### Dependent Variables

<i>6KFREQ</i>	One plus the natural log of the number of 6-Ks furnished to the SEC over the specified period
<i>ESV</i>	EDGAR search volume is the number of requests on the SEC's EDGAR website for the specific filings (6-K, TOTAL, and ANNUAL)
<i>ABSCAR</i>	Absolute value of cumulative abnormal return over [-1,+1] based on a one factor model using the CRSP equal-weighted index over [-200,-11]
<i>TRADVOL</i>	Abnormal trading volume over [-1,+1] based on prediction errors from trading volume regressed on the U.S. market index over [-200,-11]
<i>SEC_CL</i>	Equals 1 if the SEC provides at least one comment letter on a foreign firm's annual report or 6-K during the year; otherwise 0
<i>SEC_CL_6K</i>	Equals 1 if the SEC provides at least one comment letter on a foreign firm's 6-K during the year; otherwise 0

#### Control Variables

<i>SIZE</i>	Natural log of the book value of total assets from Compustat
<i>MTB</i>	Market-to-book is the U.S. market capitalization from CRSP divided by book value of equity from Compustat
<i>LEV</i>	Leverage is the total debt divided by total assets from Compustat
<i>ROA</i>	Return on assets is operating income divided by total assets from Compustat
<i>BIG4</i>	Equals 1 if the firm's auditor is affiliated with PricewaterhouseCoopers, Deloitte, Ernst & Young, or KPMG during the filing year; otherwise 0
<i>IFRS</i>	Equals 1 if the firm provides financial statements conforming to International Financial Reporting Standards during the filing year; otherwise 0
<i>LOCGAAP</i>	Equals 1 if the firm provides financial statements in accordance with local GAAP during the filing year; otherwise 0
<i>USGAAP</i>	Equals 1 if the firm provides financial statements in accordance with U.S. GAAP during the filing year; otherwise 0
<i>ENFORCE</i>	Enforcement index from Brown, Preiato, and Tarca (2014) ranging from 0 to 24 based on home-market enforcement related to financial reporting
<i>NYSE</i>	Equals 1 if the foreign firm lists on the New York Stock Exchange; otherwise 0
<i>NASDAQ</i>	Equals 1 if the foreign firm lists on the NASDAQ; otherwise 0
<i>NYAMEX</i>	Equals 1 if the foreign firm lists on the NYSE American (formerly known as the American Stock Exchange); otherwise 0
<i>L2ADR</i>	Equals 1 if the foreign firm lists on a U.S. stock exchange through an ADR and has not conducted an equity offering in the U.S.; otherwise 0
<i>L3ADR</i>	Equals 1 if the foreign firm lists on a U.S. stock exchange through an ADR and has conducted an equity offering in the U.S.; otherwise 0
<i>DIRECT</i>	Equals 1 if the foreign firm lists on a U.S. stock exchange without using an ADR; otherwise 0
<i>NUMEXCH</i>	Number of exchanges where a firm lists its securities, including both U.S. and foreign markets
<i>NONENG</i>	Equals 1 if the incorporation country or home exchange does not require ongoing disclosures to be filed or translated into English; otherwise 0

#### Reporting and Listing Variables

<i>HOMEMKT</i>	Home-market measure created from principal component analysis of these variables: <i>EVENT</i> , <i>DATABASE</i> , <i>TINDEX</i> , <i>RINDEX</i> , and <i>USONLY</i>
<i>EVENT</i>	Equals 0 if event-driven reports are not required by the home market or exchange; 1 if event-driven reports are required but no named triggering events are provided by the home exchange or regulatory; and 2 if event-driven reports are required for named events or materiality thresholds
<i>DATABASE</i>	Equals 0 if no database like EDGAR exists in the home market; 1 if some database of press releases and periodic regulatory filings exists or filings are not in English; and 2 if a fully searchable online database exists in the home market or exchange
<i>TINDEX</i>	World Bank's extent of corporate transparency index ranging from 0 (low) to 9 (high) based on 5 components: ownership stakes; board members' other directorships and employment; manager compensation; external audits of financial statements; and whether audit reports must be disclosed
<i>RINDEX</i>	World Economic Forum's strength of audit and reporting standards index ranging from 1 (extremely weak) to 7 (extremely strong) based on the annual Executive Opinion Survey
<i>USONLY</i>	Equals 1 if the foreign firm's common stock only trades on an exchange in the United States; otherwise 0

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**APPENDIX B**  
**Categories of 6-K Disclosure Content**

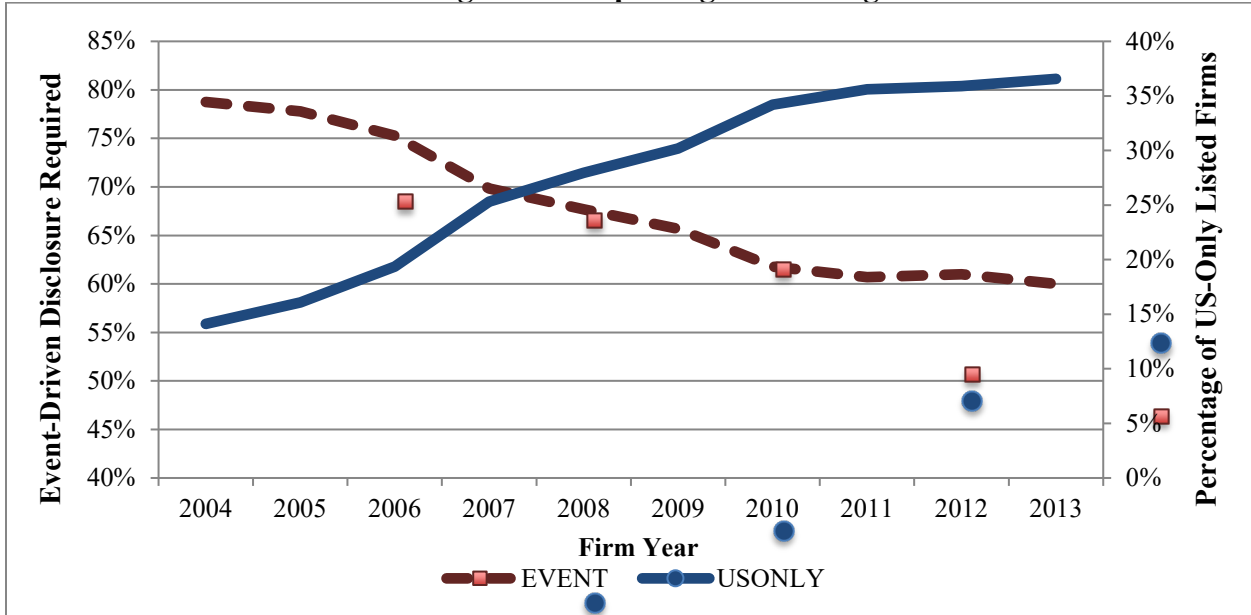
6-K Event Category	Keywords
<i>Results</i> (RESULTS)	Certification, conference call, drug trial, earnings, financial updates, mineral updates, tech report
<i>Asset Restructuring</i> (ASSET_RES)	Acquisition, asset sale, merger, spinoff, strategic alliance, subsidiary dissolution, tender offer
<i>Legal &amp; Default Risk</i> (LEGAL)	Litigation, ratings, reorganization
<i>Payout Policy</i> (PAYOUT)	Buyback, dividends, DRIPs, stock split
<i>Financing</i> (FINANCING)	Credit agreement, debt restructuring, own capital, rights offering, private placement, public offering
<i>Governance</i> (GOVERN)	Articles, auditor, board meeting, conduct code, director interests, management changes, option exercise, shareholder meeting, shareholder resolutions, shareholder rights, strike
<i>Miscellaneous</i> (MISC)	Award, blackout, calendar, conference attendance, listing, presentations, speech, sustainability
<i>Unclassified</i> (UNCLASS)	NA

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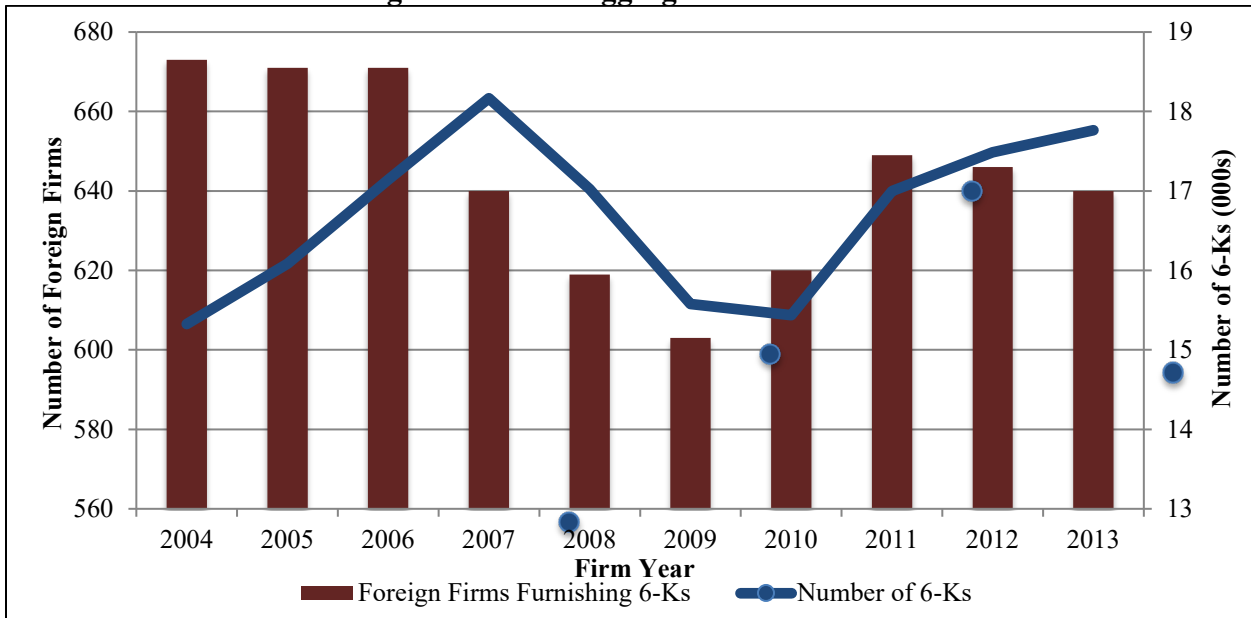
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**FIGURE 1**  
**Time Trends in Foreign Firm Reporting and Listing Characteristics**



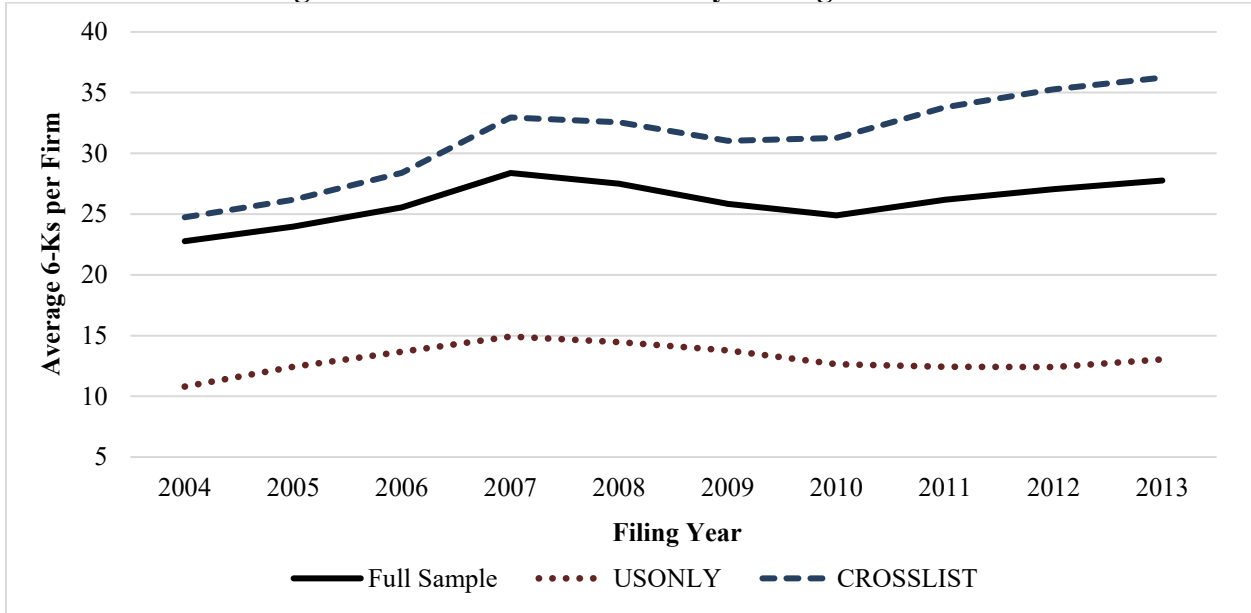
This figure plots the percentage of sample firm years with home-market at least some event-driven disclosure requirements (*EVENT*) on the left y-axis and the yearly percentage of foreign firms in our sample that list exclusively on a U.S. exchange (*USONLY*), as opposed to those that cross-list in the U.S., on the right y-axis.

**FIGURE 2**  
**Number of Foreign Firms and Aggregate Number of 6-Ks Over Time**



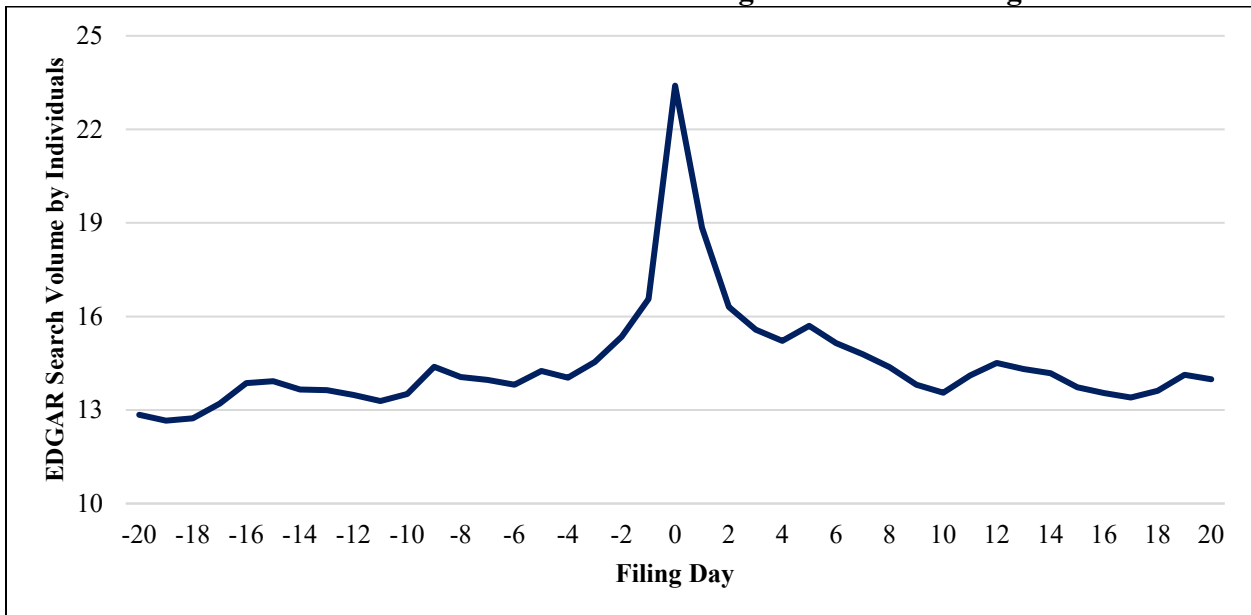
This figure plots the number of 6-Ks furnished each year (*6KFREQ*). The number of firms supplying 6-Ks is presented on the left y-axis and the aggregate number of 6-Ks on the right y-axis.

**FIGURE 3**  
**Average Number of 6-Ks Per Firm by Listing Characteristics**



These figures plot the number of 6-Ks furnished each year (*6KFREQ*). Panel A presents the number of firms supplying 6-Ks on the left y-axis and the aggregate number of 6-Ks on the right y-axis. Panel B displays the average number of 6-Ks per firm for the full sample and by foreign firms that list exclusively on a U.S. exchange (*USONLY*), versus those that cross-list (*CROSSLIST*) in the U.S. We define variables in Appendix A.

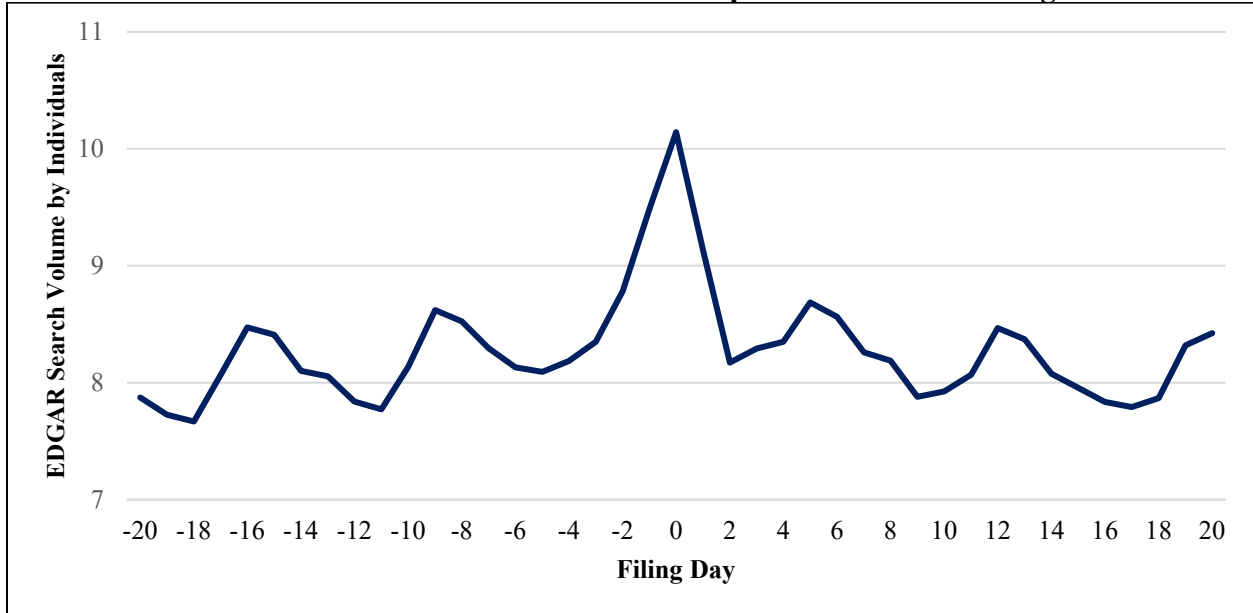
**FIGURE 4**  
**EDGAR Search Volume for 6-K Filings around 6-K Filings**



This figure plots the average daily EDGAR search volume (*ESV-6K*) by individuals for SEC Form 6-K (*ESV-6KINDIVIDUALS*) in event time around the 6-K filing date (day 0) for the sample period 2004 to 2013. We delete non-trading day (i.e., weekend) search volume to remove cyclical components in this measure.



**FIGURE 5**  
**EDGAR Search Volume for Annual Reports around 6-K Filings**



This figure plots the average daily EDGAR search volume (*ESV*) by individuals for annual filings (*ESV-ANNUAL<sub>INDIVIDUALS</sub>*) in event time around the 6-K filing date (day 0) for the sample period 2004 to 2013. We delete non-trading day (i.e., weekend) search volume to remove cyclical components in this measure.

**TABLE 1**  
**Descriptive Statistics**

<b>Panel A: Sample Distribution by Home Country of Incorporation</b>							
Country	Firms	Firm Years	6-Ks	Country	Firms	Firm Years	6-Ks
Antigua and Barbuda	1	9	158	Italy	11	65	1,388
Argentina	16	126	3,602	Japan	29	222	5,391
Australia	26	122	4,487	Jersey	4	25	698
Austria	1	3	27	Liberia	3	17	286
Bahamas	2	9	204	Luxembourg	13	55	1,314
Belgium	3	17	454	Marshall Islands	39	219	3,869
Belize	1	2	16	Mauritius	1	4	27
Bermuda	30	175	2,680	Mexico	24	165	3,483
Brazil	21	132	7,757	Netherlands	37	177	5,402
British Virgin Islands	40	196	2,126	New Zealand	1	8	251
Canada	298	1,621	41,080	Norway	5	20	736
Cayman Islands	141	665	6,843	Panama	2	18	556
Chile	19	133	2,036	Papua New Guinea	1	6	209
China	12	111	3,809	Peru	3	13	228
Colombia	1	6	205	Philippines	2	14	519
Curaçao	1	10	172	Portugal	2	13	891
Cyprus	1	1	16	Russia	5	33	1,300
Denmark	4	22	953	Singapore	6	28	437
Finland	4	21	856	South Africa	11	70	2,258
France	29	148	2,897	South Korea	13	97	3,258
Germany	22	105	1,802	Spain	11	56	2,346
Greece	4	27	729	Sweden	4	16	654
Guernsey	2	18	396	Switzerland	13	77	3,065
Hong Kong	10	65	1,440	Taiwan	7	63	1,729
Hungary	1	6	250	Turkey	1	10	407
India	14	114	1,745	United Kingdom	69	320	21,819
Indonesia	2	19	490	Venezuela	1	3	26
Ireland	12	83	3,982	Total (56 countries)	1,135	6,432	167,004
Israel	99	652	13,245				

TABLE 1 (continued)

Panel B: Home-Market Reporting Characteristics at the Firm-Year Level													
Country	HOMEMKT	EVENT (0-2)	DATABASE (0-2)	TINDEX (0-9)	RINDEX (1-7)	USONLY (%)	Country	HOMEMKT	EVENT (0-2)	DATABASE (0-2)	TINDEX (0-9)	RINDEX (1-7)	USONLY (%)
Ant-Barb.	-3.82	0.00	0.00	4.5	3.8	100.0	Italy	-0.94	1.38	0.68	7.0	4.3	30.8
Argentina	-0.74	2.00	0.00	6.0	4.0	0.0	Japan	0.57	2.00	2.00	4.5	5.4	0.0
Australia	0.92	1.98	0.99	7.0	6.1	0.8	Jersey	-3.71	0.00	0.00	0.0	3.8	32.0
Austria	0.38	2.00	0.00	6.5	6.1	0.0	Liberia	-3.48	0.00	0.00	1.5	4.4	58.8
Bahamas	-4.10	0.00	0.00	3.0	3.8	100.0	Luxembourg	-0.92	0.47	0.22	6.5	6.0	25.5
Belgium	0.33	1.88	1.29	5.0	5.7	5.9	Marshall Is.	-4.63	0.00	0.00	0.0	3.8	97.7
Belize	-2.57	0.00	0.00	2.5	4.2	0.0	Mauritius	-2.78	0.00	0.00	5.5	5.5	100.0
Bermuda	-4.15	0.00	0.00	0.0	3.8	63.4	Mexico	-0.31	2.00	1.00	4.0	4.7	0.0
Brazil	0.45	2.00	1.00	7.5	4.9	0.0	Netherlands	-0.52	1.19	0.58	5.0	6.0	22.0
Brit. V.I.	-4.64	0.00	0.00	0.0	3.8	98.5	New Zeal.	0.97	2.00	1.00	7.0	6.2	0.0
Canada	0.91	1.89	1.89	5.5	6.1	4.3	Norway	1.05	2.00	0.70	8.5	6.1	0.0
Cayman Is.	-4.58	0.02	0.02	0.0	3.8	95.2	Panama	-3.01	0.00	0.00	5.5	5.0	100.0
Chile	-0.07	2.00	1.00	3.5	5.4	0.0	Papua N.G.	-2.99	0.00	0.00	1.5	3.7	0.0
China	-0.78	1.06	0.53	7.0	4.3	0.0	Peru	-0.35	2.00	1.00	3.5	4.8	0.0
Colombia	-1.03	1.00	1.00	4.5	4.4	0.0	Philippines	-1.69	0.29	0.00	6.5	4.9	28.6
Curaçao	-2.62	1.00	0.00	0.0	3.8	0.0	Portugal	0.07	2.00	1.08	4.5	5.2	0.0
Cyprus	0.41	1.00	2.00	7.5	5.2	0.0	Russia	-0.54	2.00	1.00	5.0	3.8	0.0
Denmark	0.82	1.91	1.18	7.0	6.0	4.5	Singapore	-0.65	0.86	0.43	7.5	6.1	46.4
Finland	0.56	2.00	0.43	6.0	6.3	0.0	S. Africa	1.32	2.00	2.00	6.0	6.4	0.0
France	-0.23	0.84	0.36	8.0	5.9	16.2	S. Korea	0.11	1.69	1.69	6.5	4.8	15.5
Germany	0.03	0.95	0.91	6.5	6.1	4.8	Spain	0.24	1.82	1.18	7.0	5.0	8.9
Greece	-0.60	0.96	1.26	5.0	4.9	0.0	Sweden	0.86	2.00	1.00	6.5	6.2	0.0
Guernsey	-3.84	0.00	0.44	0.0	3.8	55.6	Switzerland	0.07	1.82	0.91	4.5	5.9	9.1
Hong Kong	0.35	1.54	1.54	6.0	6.1	23.1	Taiwan	-0.09	2.00	0.00	6.0	5.3	0.0
Hungary	-0.60	1.00	1.00	4.5	5.2	0.0	Turkey	0.01	2.00	1.00	6.0	4.6	0.0
India	0.23	1.53	0.76	8.5	5.5	18.4	U.K.	0.98	1.86	1.00	8.0	6.2	5.6
Indonesia	0.11	2.00	1.00	7.0	4.4	0.0	U.S.	NA	2.00	2.00	6.5	5.5	NA
Ireland	-0.17	0.78	0.96	8.0	5.6	15.7	Venezuela	-1.90	1.00	1.00	1.0	3.9	0.0
Israel	-0.25	1.20	1.20	7.0	5.7	39.1							

**TABLE 1 (continued)**

<b>Panel C: Firm and Listing Characteristics at the Firm-Year Level</b>					
	Mean	P25	Median	P75	SD
<b>Firm Characteristics</b>					
<i>SIZE</i>	56.2	0.2	1.5	11.5	255.4
<i>LEV (%)</i>	20.1	1.0	16.7	32.5	19.5
<i>ROA (%)</i>	-1.2	-2.2	2.7	7.2	18.5
<i>MTB</i>	2.9	1.1	1.8	3.2	3.4
<i>BIG4 (%)</i>	91.6	100.0	100.0	100.0	27.7
<i>IFRS (%)</i>	23.8	0.0	0.0	0.0	42.6
<i>LOCGAAP (%)</i>	32.0	0.0	0.0	100.0	46.7
<i>USGAAP (%)</i>	44.2	0.0	0.0	100.0	49.7
<i>NONENG (%)</i>	29.3	0.0	0.0	100.0	45.5
<i>ENFORCE</i>	15.3	10.0	16.0	22.0	6.7
<b>Listing Characteristics</b>					
<i>NYSE (%)</i>	54.9	0.0	100.0	100.0	49.8
<i>NASDAQ (%)</i>	36.0	0.0	0.0	100.0	48.0
<i>NYAMEX (%)</i>	9.4	0.0	0.0	0.0	29.2
<i>L2ADR (%)</i>	19.7	0.0	0.0	0.0	39.8
<i>L3ADR (%)</i>	33.2	0.0	0.0	100.0	47.1
<i>DIRECT (%)</i>	47.0	0.0	0.0	100.0	49.9
<i>NUMEXCH</i>	2.0	1.0	2.0	2.0	1.0

This table presents descriptive statistics for our sample from 2004-2013. Panel A displays the sample distribution by home country of incorporation. Panel B presents data on the home country information environment. Index values are averaged over the full sample period at the firm-year level. Panel C presents firm and listing characteristics at the firm-year level. We define variables in Appendix A.

**TABLE 2**  
**Tests of 6-K Frequency**

<b>Panel A: Negative Binomial Regressions</b>						
Variable	Dependent variable: <i>6KFREQ</i>					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>HOMEMKT</i>	0.101*** (7.12)					
<i>EVENT</i>		0.171*** (5.60)				
<i>DATABASE</i>			0.062** (2.57)			
<i>TINDEX</i>				0.081*** (7.15)		
<i>RINDEX</i>					0.107*** (3.83)	
<i>USONLY</i>						-0.424*** (-7.53)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N (Firm Years)	6,359	6,359	6,359	6,359	6,359	6,359
Pseudo R <sup>2</sup>	0.059	0.058	0.055	0.061	0.056	0.058

<b>Panel B: Comparison of Ongoing Disclosure Frequency by U.S.-Only Listed Foreign Firms</b>				
Comparison group	U.S.-Only Listed	Matched Sample	Difference	<i>t</i> -stat of Difference
	(1)	(2)	(3)	(4)
U.S.-only listed vs. U.S. domestic firms	13.2	15.3	-2.1***	-8.50
U.S.-only listed vs. cross-listed firms with:				
Same headquarter country	13.0	24.9	-11.9***	-3.35
Similar <i>HOMEMKT</i> values	13.3	26.2	-13.0**	-2.22
Similar <i>TINDEX</i> values	13.3	24.6	-11.3***	-4.81

This table presents tests of annual 6-K disclosure frequency (*6KFREQ*). Panel A presents negative binomial regressions at the firm-year level. All models include year and industry fixed effects with robust standard errors clustered at the firm and country level. We present the pseudo R<sup>2</sup> values from each regression. \*\*\*, \*\*, and \* denote statistical significance at the 1 percent, 5 percent and 10 percent level, respectively, based on a two-tailed test using the *t*-statistics are reported in parentheses. Panel B presents a matched sample analysis of U.S.-only listed firms. The matched sample within each comparison group is generated by a propensity-score method with radius matching (caliper of width equal to 0.05) on year, industry (Fama-French 48 industries), size (total assets), and risk (annual standard deviation of daily stock returns). For U.S. domestic firms, we compare annual *6KFREQ* of foreign firms to domestic firms' annual number of 8-K and 10-Q filings. The matched sample of U.S.-only to cross-listed firms adds the headquarter country (HQ), our home market information variable (*HOMEMKT*), and transparency index (*TINDEX*) separately to the other matching dimensions. \*\*\*, \*\*, \* indicate the values in Column 3 of Panel B are significantly different from zero at the 1 percent, 5 percent, and 10 percent levels based on a two-tailed test using the *t*-statistic reported in Column 4. We define variables in Appendix A.

**TABLE 3**  
**EDGAR Search Volume Around 6-K Filings**

<b>Panel A: Univariate Analysis</b>						
	Day [0,+1]	Day [0,+7]	Day [0,+30]	Day [0,+60]	Day [0,+90]	
<i>ESV-6K</i> (N = 156,526)						
Individual	12.8	26.4	47.5	62.1	72.3	
Robot	146.9	172.6	218.8	233.5	247.8	
<i>ESV-TOTAL</i> (N = 130,611)						
Individual	95.1	305.9	1,136.4	2,198.2	3,264.9	
Robot	398.9	1,094.4	3,824.2	7,384.5	11,006.7	

<b>Panel B: Regression Analysis of EDGAR Search Volume by Individuals</b>						
Variable	Dependent variable: LN(1+ <i>ESV-6K</i> <sub>INDIVIDUAL</sub> )					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>HOMEMKT</i>	-0.162*** (-9.98)					
<i>EVENT</i>		-0.256*** (-7.42)				
<i>DATABASE</i>			-0.155*** (-5.92)			
<i>TINDEX</i>				-0.091*** (-6.73)		
<i>RINDEX</i>					-0.215*** (-6.82)	
<i>USONLY</i>						0.690*** (10.50)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N (6-Ks)	154,861	154,861	154,861	154,861	154,861	154,861
Adjusted R <sup>2</sup>	0.354	0.343	0.335	0.343	0.338	0.350

<b>Panel C: Regression Analysis of EDGAR Search Volume by Robots</b>						
Variable	Dependent variable: LN(1+ <i>ESV-6K</i> <sub>ROBOT</sub> )					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>HOMEMKT</i>	-0.022*** (-6.10)					
<i>EVENT</i>		-0.039*** (-5.41)				
<i>DATABASE</i>			-0.015*** (-2.70)			
<i>TINDEX</i>				-0.016*** (-6.09)		
<i>RINDEX</i>					-0.031*** (-5.02)	
<i>USONLY</i>						0.074*** (5.50)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N (6-Ks)	154,861	154,861	154,861	154,861	154,861	154,861
Adjusted R <sup>2</sup>	0.872	0.872	0.872	0.872	0.872	0.872

This table presents tests of EDGAR search volume (*ESV*). Panel A presents average *ESV-6K* and *ESV-TOTAL* from the filing day of a new 6-K (day 0) through the subsequent period. OLS regressions of *ESV-6K* are presented for individuals (Panel B) and robots (Panel C), where the dependent variable is natural log of one plus the number of search requests via the EDGAR website from the 6-K filing day (day 0) through day +7. All models include year and industry fixed effects with robust standard errors clustered at the firm and country level. \*\*\*, \*\*, and \* denote statistical significance at the 1 percent, 5 percent and 10 percent level, respectively, based on a two-tailed test using the *t*-statistics are reported in parentheses. We define variables in Appendix A.

**TABLE 4**  
**Analysis of Market Response to 6-K Filings**

<b>Panel A: Univariate Analysis</b>						
Variable	N	Mean	Median	SD		
<i>ABSCAR</i>	135,327	4.01	2.39	5.78		
<i>TRADVOL</i>	135,327	38.99	20.02	248.51		
<b>Panel B: Regressions of Absolute Cumulative Abnormal Return Percentage</b>						
Variable	Dependent variable: <i>ABSCAR</i> [-1,+1]					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>HOMEMKT</i>	-0.230*** (-6.86)					
<i>EVENT</i>		-0.406*** (-5.39)				
<i>DATABASE</i>			-0.123** (-2.07)			
<i>TINDEX</i>				-0.118*** (-4.62)		
<i>RINDEX</i>					-0.369*** (-5.75)	
<i>USONLY</i>						1.114*** (6.51)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N (6-Ks)	135,327	135,327	135,327	135,327	135,327	135,327
Adjusted R <sup>2</sup>	0.108	0.108	0.106	0.107	0.107	0.108
<b>Panel C: Regressions of Abnormal Trading Volume Percentage</b>						
Variable	Dependent variable: <i>TRADVOL</i> [-1,+1]					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>HOMEMKT</i>	-4.992*** (-4.12)					
<i>EVENT</i>		-7.626*** (-2.69)				
<i>DATABASE</i>			1.358 (0.59)			
<i>TINDEX</i>				-4.043*** (-4.43)		
<i>RINDEX</i>					-10.011*** (-3.86)	
<i>USONLY</i>						25.066*** (4.29)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
N (6-Ks)	135,327	135,327	135,327	135,327	135,327	135,327
Adjusted R <sup>2</sup>	0.013	0.013	0.012	0.013	0.013	0.013

This table presents tests of the market response during the three-day period [-1,+1] centered on the 6-K filing date at the unique filing day level. Panel A presents univariate statistics. Panel B presents regressions of absolute cumulative abnormal returns (*ABSCAR*) as a percentage. Panel C presents regressions of log-transformed abnormal trading volume (*TRADVOL*) as a percentage. All regressions include controls and firm and industry fixed effects with robust standard errors clustered at the firm and country level. \*\*\*, \*\*, and \* denote statistical significance at the 1 percent, 5 percent and 10 percent level, respectively, based on a two-tailed test using the *t*-statistics are reported in parentheses. We define variables in Appendix A.

**TABLE 5**  
**Controlling for Delay of 6-K Filing**

Dependent variable:	$LN(I+ESV-6K_{INDIVIDUAL})$	$LN(I+ESV-6K_{ROBOT})$	$ABSCAR$	$TRADVOL$
Variable	(1)	(2)	(3)	(4)
$LN(I+DELAY)$	-0.005 (-0.35)	0.002 (0.34)	-0.258*** (-6.46)	-8.832*** (-3.56)
$HOMEMKT$	-0.166*** (-9.70)	-0.025*** (-5.23)	-0.234*** (-4.49)	-4.683** (-2.24)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes
N (6-Ks)	13,857	13,857	14,211	14,211
Adjusted R <sup>2</sup>	0.355	0.873	0.110	0.018

This table presents tests of EDGAR search volume ( $ESV-6K$ ), cumulative abnormal returns ( $ABSCAR$ ), and abnormal trading volume ( $TRADVOL$ ) around 6-K filings after controlling for the natural log of one plus the number of days between the filing date and the earliest reported event date ( $DELAY$ ). Regressions include controls and firm and industry fixed effects with robust standard errors clustered at the firm and country level. \*\*\*, \*\*, and \* denote significance at the 1 percent, 5 percent and 10 percent level, respectively, based on a two-tailed test using the  $t$ -statistics are reported in parentheses. We define variables in Appendix A.



**TABLE 6**  
**Tests of 6-K Content**

<b>Panel A: 6-K Content by Country and Listing Characteristics</b>					
<i>Content</i>	<i>Full Sample</i>	<i>HI_HOME</i>	<i>LO_HOME</i>	<i>CROSSLIST</i>	<i>USONLY</i>
<i>RESULTS</i>	40,630 (24.3%)	25,375 (24.7%)	15,255 (23.8%) <sup>a</sup>	32,989 (22.9%)	7,641 (33.1%) <sup>a</sup>
<i>ASSET_RES</i>	21,421 (12.8%)	12,761 (12.4%)	8,660 (13.5%) <sup>a</sup>	17,877 (12.4%)	3,544 (15.4%) <sup>a</sup>
<i>LEGAL</i>	4,907 (2.9%)	3,083 (3.0%)	1,824 (2.8%) <sup>c</sup>	4,106 (2.9%)	801 (3.5%) <sup>a</sup>
<i>PAYOUT</i>	9,110 (5.5%)	6,655 (6.5%)	2,455 (3.8%) <sup>a</sup>	8,256 (5.7%)	854 (3.7%) <sup>a</sup>
<i>FINANCING</i>	6,300 (3.8%)	3,604 (3.5%)	2,696 (4.2%) <sup>a</sup>	5,067 (3.5%)	1,233 (5.3%) <sup>a</sup>
<i>GOVERN</i>	21,988 (13.2%)	14,677 (14.3%)	7,311 (11.4%) <sup>a</sup>	19,042 (13.2%)	2,946 (12.8%) <sup>c</sup>
<i>MISC</i>	5,844 (3.5%)	3,528 (3.4%)	2,316 (3.6%)	4,485 (3.1%)	1,359 (5.9%) <sup>a</sup>
<i>UNCLASS</i>	79,943 (47.9%)	47,570 (46.2%)	32,373 (50.5%) <sup>a</sup>	70,918 (49.3%)	9,025 (39.1%) <sup>a</sup>
<b>Total 6-Ks</b>	<b>167,004</b>	<b>102,909</b>	<b>64,095</b>	<b>143,946</b>	<b>23,058</b>

<b>Panel B: Investor and Market Response by Content Category</b>						
<i>Content</i>	<i>ESV- 6K<sub>INDIVIDUAL</sub> [0,+7]</i>	<i>ESV- 6K<sub>ROBOT</sub> [0,+7]</i>	<i>N</i>	<i>ABSCAR [-1,+1]</i>	<i>TRADVOL [-1,+1]</i>	<i>N</i>
<i>Full Sample</i>	26.4	172.6	156,526	4.0	39.0	135,327
<i>RESULTS</i>	31.4	180.7	38,098	4.9	59.5	34,849
<i>ASSET_RES</i>	33.5	181.7	20,090	4.2	49.0	18,487
<i>LEGAL</i>	37.7	205.3	4,584	4.4	45.0	4,339
<i>PAYOUT</i>	18.1	183.8	8,688	2.9	33.3	7,020
<i>FINANCING</i>	35.4	195.8	5,952	4.2	56.0	5,374
<i>GOVERN</i>	28.3	186.2	20,361	3.7	19.1	17,424
<i>MISC</i>	38.3	187.9	5,511	4.6	54.4	5,099
<i>UNCLASS</i>	22.7	160.0	74,919	3.7	31.9	62,536

TABLE 6 (continued)

Panel C: Investor and Market Response by Content Category with <i>HOMEMKT</i> as Variable of Interest									
Content:	ALL	RESULTS	ASSET RES	LEGAL	PAYOUT	FINANC ING	GOVERN	MISC	UNCLASS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: $LN(1+ESV-6K_{INDIVIDUAL})$								
<i>HOMEMKT</i>	-0.162*** (-9.98)	-0.143*** (-7.79)	-0.155*** (-8.55)	-0.085** (-2.51)	-0.232*** (-8.95)	-0.182*** (-7.73)	-0.177*** (-9.93)	-0.131*** (-4.58)	-0.148*** (-8.71)
N (6-Ks)	154,861	38,098	20,090	4,584	8,688	5,952	20,361	5,511	73,254
Adjusted R <sup>2</sup>	0.354	0.407	0.374	0.428	0.456	0.390	0.389	0.382	0.324
	Dependent variable: $LN(1+ESV-6K_{ROBOT})$								
<i>HOMEMKT</i>	-0.022*** (-6.10)	-0.012** (-2.27)	-0.017*** (-3.42)	-0.021*** (-2.70)	-0.041*** (-3.55)	-0.028*** (-3.32)	-0.033*** (-5.89)	-0.026* (-1.67)	-0.016*** (-5.02)
N (6-Ks)	154,861	38,098	20,090	4,584	8,688	5,952	20,361	5,511	73,254
Adjusted R <sup>2</sup>	0.872	0.866	0.870	0.879	0.863	0.866	0.876	0.851	0.876
	Dependent variable: <i>ABSCAR</i>								
<i>HOMEMKT</i>	-0.230*** (-6.86)	-0.261*** (-5.97)	-0.257*** (-5.11)	-0.126 (-1.21)	-0.349*** (-4.98)	-0.136** (-2.00)	-0.203*** (-4.48)	-0.264*** (-3.21)	-0.166*** (-3.84)
N (6-Ks)	135,327	34,849	18,487	4,339	7,020	5,374	17,424	5,099	62,536
Adjusted R <sup>2</sup>	0.108	0.097	0.107	0.126	0.147	0.138	0.123	0.105	0.103
	Dependent variable: <i>TRADVOL</i>								
<i>HOMEMKT</i>	-4.992*** (-4.12)	-7.861*** (-4.55)	-4.534** (-2.23)	-9.171** (-2.19)	-8.927** (-2.28)	-7.645** (-2.11)	-1.512 (-0.77)	-5.007 (-1.29)	-2.233 (-1.31)
N (6-Ks)	135,327	34,849	18,487	4,339	7,020	5,374	17,424	5,099	62,536
Adjusted R <sup>2</sup>	0.013	0.024	0.017	0.055	0.046	0.029	0.006	0.030	0.015

**TABLE 6 (continued)**

<b>Panel D: Investor and Market Response by Content Category with <i>USONLY</i> as Variable of Interest</b>									
Content:	ALL	RESULTS	ASSET RES	LEGAL	PAYOUT	FINANC ING	GOVERN	MISC	UNCLASS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dependent variable: $LN(1+ESV-6K_{INDIVIDUAL})$									
<i>USONLY</i>	0.690*** (10.50)	0.594*** (8.00)	0.697*** (9.52)	0.703*** (6.87)	1.000*** (7.35)	0.780*** (8.33)	0.798*** (10.77)	0.639*** (7.75)	0.651*** (9.33)
N (6-Ks)	154,861	38,098	20,090	4,584	8,688	5,952	20,361	5,511	73,254
Adjusted R <sup>2</sup>	0.350	0.405	0.373	0.441	0.449	0.389	0.386	0.386	0.322
Dependent variable: $LN(1+ESV-6K_{ROBOT})$									
<i>USONLY</i>	0.074*** (5.50)	0.044** (2.09)	0.076*** (3.59)	0.096*** (3.01)	0.120*** (2.72)	0.125*** (3.81)	0.103*** (4.23)	0.105*** (2.60)	0.063*** (4.76)
N (6-Ks)	154,861	38,098	20,090	4,584	8,688	5,952	20,361	5,511	73,254
Adjusted R <sup>2</sup>	0.872	0.866	0.870	0.879	0.862	0.866	0.876	0.851	0.876
Dependent variable: <i>ABSCAR</i>									
<i>USONLY</i>	1.114*** (6.51)	1.311*** (5.85)	1.210*** (4.98)	0.993** (2.40)	1.545*** (3.66)	0.706** (2.14)	0.803*** (3.23)	1.167*** (3.30)	0.866*** (3.96)
N (6-Ks)	135,327	34,849	18,487	4,339	7,020	5,374	17,424	5,099	62,536
Adjusted R <sup>2</sup>	0.108	0.097	0.107	0.126	0.145	0.138	0.123	0.106	0.103
Dependent variable: <i>TRADVOL</i>									
<i>USONLY</i>	25.066*** (4.29)	39.722*** (4.97)	28.255*** (2.91)	40.856** (2.00)	43.905** (2.18)	47.511*** (2.65)	8.927 (0.93)	21.605 (1.33)	9.746 (1.27)
N (6-Ks)	135,327	34,849	18,487	4,339	7,020	5,374	17,424	5,099	62,536
Adjusted R <sup>2</sup>	0.013	0.025	0.017	0.055	0.046	0.030	0.006	0.031	0.015

This table presents tests of 6-K disclosure content. Panel A reports the number of 6-Ks with each type of content and the percentage of total 6-Ks that contain the content in parentheses. As a 6-K can contain more than one type of content, the sum of the categories exceeds the total number of 6-Ks reported. The sample is also stratified by high and low values of *HOMEMKT* based on the firm-year median value, and by cross-listed versus U.S.-only listed firms. We provide additional information on content categories in Appendix B. An expanded description of the methodology employed to identify content keywords is presented in the Internet Appendix. In Panel A, <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> indicate that the mean values are different from zero at the 1 percent, 5 percent, and 10 percent level using a standard two-tailed *t*-test. Panels B to D present results for the market response based on the type of content in the 6-K. Panel B presents mean univariate values of each measure, while Panels C and D contain OLS regressions of the investor and market response for each content category. Note that in Panels C and D, each row and column reports separate OLS regressions using only 6-Ks with the specified content. All regressions include standard firm controls, and year and industry fixed effects. In Panels C and D, \*\*\*, \*\*, and \* denote coefficients are statistically significant at the 1 percent, 5 percent, and 10 percent level, respectively, based on a two-tailed test using the *t*-statistics are reported in parentheses. We define variables in Appendix A.

**TABLE 7**  
**SEC Monitoring via Comment Letters**

<b>Panel A: Comment Letters Statistics</b>						
	All	<i>HI_6KFREQ</i>	<i>LO_6KFREQ</i>	<i>CROSSLIST</i>	<i>USONLY</i>	
Firm years with comment letter (%)	38.1	41.6	32.7	41.9	28.9	
Comments on 20-F/40-F (%)	99.0	99.0	99.2	99.2	98.5	
Comments on 6-K (%)	12.8	12.7	12.8	11.3	17.9	
Length of correspondence (days)	87.7	89.0	85.2	94.4	67.9	

<b>Panel B: Comment Letters and 6-K Frequency with Country Fixed Effects</b>		
	Dependent variable: <i>SEC_CL</i>	
Variable	(1)	(2)
<i>6KFREQ</i>	0.001*** (3.25)	
<i>HI_6KFREQ</i>		0.042*** (3.39)
Controls, Year, Industry, and Country FE	Yes	Yes
N (Firm Years)	5,695	5,695
Adjusted R <sup>2</sup>	0.085	0.084

<b>Panel C: Comment Letters by Listing Choice</b>						
Variable	Dependent variable: <i>SEC_CL</i>			<i>SEC_CL_6K</i>		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>USONLY</i>	-0.040** (-2.12)	-0.038** (-1.98)	-0.074*** (-3.56)	0.017* (1.66)	0.017 (1.62)	0.018 (1.49)
<i>POST</i>		-0.016 (-0.75)	-0.049** (-2.35)		0.005 (0.52)	0.006 (0.53)
<i>USONLY</i> × <i>POST</i>			0.095** (2.46)			-0.005 (-0.27)
Controls, Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	No	No	Yes	No	No
N (Firm Years)	5,697	5,697	5,697	5,697	5,697	5,697
Adjusted R <sup>2</sup>	0.084	0.080	0.081	0.032	0.031	0.031

<b>Panel D: Comment Letters and 6-K Frequency</b>	
Variable	Dependent variable: <i>6KFREQ</i>
	(1)
<i>SEC_CL</i>	1.045* (1.71)
Controls, Year FE, Industry FE, Firm FE	Yes
N (Firm Years)	5,570
Adjusted R <sup>2</sup>	0.698

This table reports comment letter statistics (Panels A) and tests for the probability of receiving an SEC comment letter (Panels B and C). *SEC\_CL* equals one if the firm receives a comment letter on its annual report or 6-K from the SEC. In Panels A and B, *HI\_6KFREQ* (*LO\_6KFREQ*) equals one if the annual 6-K frequency level is at or above (below) the median country value within a given year and industry (Fama-French 17 industries). In Panel C, *SEC\_CL\_6K* equals one only if the SEC comments on a 6-K. *POST* is an indicator variable that equals one for the years after 2010. Panel D tests annual 6-K frequency following SEC monitoring via comment letters using year, industry, and firm fixed effects. The variable of interest in Panel D, *SEC\_CL*, equals one if the firm received a comment letter on its annual report (Form 20-F or 40-F) or 6-K from the SEC in the *prior* year. *t*-statistics are reported in parentheses. All regressions include controls, year and industry (Fama-French 48 industries) fixed effects. Standard errors are clustered at the country-industry level. \*\*\*, \*\*, \* indicate the coefficients are significantly different from zero at the 1 percent, 5 percent, and 10 percent levels, respectively, based on a two-tailed test using the *t*-statistics are reported in parentheses.

**TABLE 8**  
**Controlling for Tax Haven**

<b>Panel A: Regressions with <i>HOMEMKT</i> as Variable of Interest</b>					
Dependent variable:	<i>6KFREQ</i>	<i>LN(1+ESV-6K<sub>INDIVIDUAL</sub>)</i>	<i>LN(1+ESV-6K<sub>ROBOT</sub>)</i>	<i>ABSCAR</i>	<i>TRADVOL</i>
Variable	(1)	(2)	(3)	(4)	(5)
<i>HOMEMKT</i>	0.096*** (5.65)	-0.169*** (-8.05)	-0.018*** (-4.68)	-0.187*** (-4.62)	-4.442*** (-2.84)
<i>TAX_HAVEN</i>	-0.038 (-0.48)	-0.047 (-0.42)	0.028 (1.64)	0.328* (1.72)	4.223 (0.67)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes
N	6,359	154,861	154,861	135,327	135,327
Adjusted (Pseudo) R <sup>2</sup>	0.060	0.354	0.872	0.108	0.013

<b>Panel B: Regressions with <i>USONLY</i> as Variable of Interest</b>					
Dependent variable:	<i>6KFREQ</i>	<i>LN(1+ESV-6K<sub>INDIVIDUAL</sub>)</i>	<i>LN(1+ESV-6K<sub>ROBOT</sub>)</i>	<i>ABSCAR</i>	<i>TRADVOL</i>
Variable	(1)	(2)	(3)	(4)	(5)
<i>USONLY</i>	-0.356*** (-5.61)	0.639*** (8.23)	0.051*** (3.73)	0.908*** (4.96)	21.667*** (3.22)
<i>TAX_HAVEN</i>	-0.173** (-2.53)	0.113 (1.15)	0.053*** (3.45)	0.472*** (2.81)	7.796 (1.39)
Controls, Year FE, Industry FE	Yes	Yes	Yes	Yes	Yes
N	6,359	154,861	154,861	135,327	135,327
Adjusted (Pseudo) R <sup>2</sup>	0.060	0.351	0.872	0.109	0.013

This table presents results from OLS regressions of 6-K disclosure frequency (*6KFREQ*), EDGAR search volume (*ESV-6K*), cumulative abnormal returns (*ABSCAR*), and abnormal trading volume (*TRADVOL*) around 6-K filings after controlling for tax haven status. The variable *TAX\_HAVEN* equals one if the firm is incorporated in any of the following countries: Antigua and Barbuda, Bahamas, Belize, Bermuda, British Virgin Islands, Cayman Islands, Curaçao, Cyprus, Guernsey, Hong Kong, Ireland, Jersey, Liberia, Luxembourg, Marshall Islands, Mauritius, Panama, Singapore, and Switzerland. Panel A (B) presents the results with *HOMEMKT* (*USONLY*) as the variable of interest. N represents firm years in Column (1) and the number of 6-Ks in Columns (2) to (5). All models include year and industry fixed effects. We report pseudo R<sup>2</sup> values for the negative binomial regressions in Column (1) and adjusted R<sup>2</sup> values for all other regressions. \*\*\*, \*\*, and \* denote statistical significance at the 1 percent, 5 percent and 10 percent level, respectively, based on a two-tailed test using the *t*-statistics are reported in parentheses. We define variables in Appendix A.