

Globalizing the Boardroom - The Effects of Foreign Directors on Corporate Governance and Firm Performance

Finance Working Paper N° 242/2009

July 12, 2011

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Abstract

We examine the benefits and costs associated with foreign independent directors (FIDs) at U.S. corporations. We find that firms with FIDs make better cross-border acquisitions when the targets are from the home regions of FIDs. However, FIDs also display poor board meeting attendance records, and firms with FIDs are more prone to commit intentional financial misreporting and overpay their CEOs and have lower CEO turnover sensitivity to performance. Finally, firms with FIDs are associated with significantly poorer performance, especially as their business presence in the FID's home region becomes less important.

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I. Introduction

The board of directors is a critical element in a firm's corporate governance system, and it has two major functions. One is to hire, fire, and compensate managers, i.e., the monitoring role, and the other is to advise managers on important strategic decisions, i.e., the advisory role. How well directors perform these two functions largely determines the effectiveness of boards in corporate decision making and shareholder value creation.¹

In this study, we focus on an interesting class of directors whose unique characteristics can either enhance board decision making or weaken it. Specifically, we examine foreign independent directors (FIDs) in U.S. corporations, defined as independent directors domiciled in foreign countries.² The geographic location of FIDs is a double-edged sword. As we elaborate below, FIDs can provide valuable international expertise and advice to firms, especially those with significant foreign operations or plans for overseas expansion. On the other hand, foreign independent directors are apt to be less effective in overseeing management than U.S.-based independent directors and thus, they could weaken a board's monitoring and disciplining role.

Foreign directors can be less effective monitors for several reasons. First, a director's geographic distance from corporate headquarters generates substantial oversight costs, since making on-site visits and attending board meetings (usually held at corporate headquarters) become more difficult and time-consuming. This undermines a director's ability and incentives to gather information and closely monitor management. Consistent with this view, Lerner (1995) finds that venture capitalists are reluctant to sit on boards of geographically distant firms, and Knyazeva, Knyazeva and Masulis (2011) document a significant local component to the matching

¹ Boards can perform their monitoring and advising functions simultaneously for certain firm decisions such as capital budgeting and payout policies (Brickley and Zimmerman (2010)), while for other decisions such as executive compensation, financial reporting, and CEO retention/dismissal, boards are likely to play a greater monitoring and disciplinary role. Adams and Ferreira (2007) and Harris and Raviv (2008) develop theories of the dual role of boards, and Boone, Field, Karpoff, and Raheja (2007), Coles, Daniel, and Naveen (2008), Linck, Netter, and Yang (2008), and Lehn, Patro, and Zhao (2009) provide supporting empirical evidence.

² In our definition, FIDs do not have to be foreign nationals and they can be U.S. citizens working or living in a foreign country, while a foreign national working or living in the U.S. will not qualify as a FID.

process of companies and outside director candidates. The obstacles created by distance are even greater for FIDs, as the time zone differences and time and energy consumed by international travel, coupled with heightened security concerns post 9/11, are likely to impose heavier burdens on foreign directors than on domestic directors, further eroding their monitoring incentives and ability.³ Second, directors who are geographically removed from the vicinity of a firm's corporate headquarters are cut off from local networks that provide valuable soft information (Coval and Moskowitz (1999, 2001)). Located in foreign countries, FIDs have even fewer channels and less access to current information about the U.S. companies on whose boards they sit, and thus may be less able to stay well informed about these firms' current operations and performance. Third, FIDs are likely to be less familiar with U.S. accounting rules, laws and regulations, governance standards, and management methods, making it more difficult for them to evaluate managerial performance or challenge managerial decisions. These considerations suggest that FIDs can often weaken a board's monitoring effectiveness, and thus lead to greater agency problems between managers and shareholders and ultimately poorer firm performance.

Concerns about the incentives and ability of FIDs to oversee management are consistent with several anecdotes. Before Sir Win Bischoff stepped down as Citigroup's chairman in February 2009, some Citigroup directors were considering replacing him as chairman, because "*Sir Win, who is based in London, hasn't been exercising adequate oversight.*"⁴ During the period of 1997-2001 when Enron committed high profile accounting fraud, its audit committee included two foreign independent directors, the Chairman of the Hang Lung Group in Hong Kong and a senior executive of Group Bozano in Brazil, which raises questions about the effectiveness of FIDs' monitoring of a firm's operations and financial reporting. Concerns with FIDs are not

³ In an interview with *The Financial Times*, Charles King, a managing director of Korn Ferry International (an executive search firm), comments on the logistical problem of hiring a foreign director—"To get someone to fly to New York for a board meeting six or seven times a year, even from London, takes at least 18 days out of their schedule." The same concern is also voiced by some companies mentioned in the aforementioned *WSJ* article.

⁴ David Enrich and Robin Sidel, "Citi Directors Mull Replacing Chairman", *The Wall Street Journal*, November 13, 2008.

unique to U.S. firms. The Korean Corporate Governance Service highlighted the poor board meeting attendance record of foreign outside directors of Korean companies over the 2004-2006 period and suggested that “*the main reason behind foreigners’ low attendance is that most of them live outside Korea and are unable to fit traveling here for the meeting on their schedule.*”⁵

Despite their monitoring deficiencies, FIDs can enhance the advisory capability of boards to the extent that living or working in foreign countries gives them first-hand knowledge of foreign markets and enables them to develop and tap a network of foreign contacts. These resources can enable FIDs to provide valuable advice and assistance to U.S. corporations, especially those with major foreign operations or aspirations to expand internationally (Adams, Hermalin, and Weisbach (2009)).⁶ With the increasing globalization of virtually all industries and marketplaces and the rising importance of emerging-market economies, an ever greater number of U.S. companies are looking beyond their national borders for opportunities to cut costs, generate growth, and create shareholder value. As companies make initial forays into particular foreign markets or try to build up their foreign operations, they face unfamiliar political landscapes, regulatory environments, cultural and social norms, industry structures, and consumer preferences. For these companies, FIDs’ knowledge of their home countries or regions and their close connections to local business, social, and political circles can be especially beneficial.⁷

Given the concomitant benefits and costs associated with FIDs, their net effect on overall board effectiveness, corporate decision making, and firm performance represents an intriguing empirical question. Our investigation focuses on the following issues: How prevalent are FIDs on the boards of U.S. public companies? Which firms are more likely to have FIDs? Are FIDs less effective monitors than their U.S. based counterparts? Under what circumstances do companies

⁵ Hyong-Yi Park, “Foreign Outside Directors’ Presence at Board Meetings Low”, *The Korea Times*, August 13, 2007.

⁶ This would be consistent with Agrawal and Knoeber’s (2001) finding that firms for which politics and regulations are more important are more likely to have outside directors with political and legal background.

⁷ See for example, Joann S. Lublin, “Globalizing the boardroom”, *The Wall Street Journal*, October 31, 2005.

benefit from having FIDs? Do FIDs strengthen or weaken board effectiveness in handling specific tasks? What is the overall impact of FIDs on shareholder value and firm performance?

Our examination of the boards of S&P 1500 companies from 1998 to 2006 reveals that FIDs are present in about 13% of firm-year observations. Conditional on a board having at least one FID, the percentage of FIDs among all independent directors averages about 18%, equivalent to one FID in every 5 to 6 independent directors. We first examine specific actions undertaken by FIDs and some major corporate policies and decisions in which they are involved. These tests aim to provide insights into the channels through which FIDs impact board effectiveness, shareholder value and firm performance, and they have the added advantage that they are less susceptible to alternative casual interpretations that often plague firm performance regressions.

We first explore how FIDs can contribute to firm performance and shareholder value through their advisory role. Specifically, we examine whether firms with FIDs make better cross-border acquisitions, as suggested by Adams, Hermalin, and Weisbach (2009). We find that acquirer announcement-period abnormal returns are significantly higher (by about 2%) in deals where the acquirer has a FID who is from the same region as the target. This evidence suggests that FIDs provide region-specific expertise that is valuable to cross-border acquirers in evaluating targets and assessing deal merits.

We next turn our attention to the monitoring effectiveness of FIDs. Given the importance of board meetings as a venue for management-director interactions and the availability of public data on director participation in board meetings (Adams and Ferreira (2009)), we compare the board meeting attendance records of FIDs with those of domestic independent directors. We find that everything else being equal, FIDs are almost three times more likely than their domestic counterparts to miss at least 25% of board meetings, and the difference is statistically significant. This evidence is consistent with geographical distance and logistical difficulty discouraging FIDs from attending board meetings, and calls into question the presumption that FIDs can effectively fulfill their monitoring responsibilities.

We then examine the impact of FIDs on the quality of a firm's accounting disclosure and CEO compensation policies, two areas that are under the direct purview of corporate boards. Our analysis shows that firms with FIDs on their boards are significantly more likely to engage in intentional financial misreporting that requires future restatements, and they are associated with significantly higher CEO compensation. The greater tendency of FID firms to commit financial misreporting is more pronounced when FIDs sit on audit committees. The excess CEO compensation at FID firms is larger when FIDs sit on compensation committees.

In further analysis, we investigate the effect of FIDs on board effectiveness in disciplining poorly performing CEOs. We find that *ceteris paribus*, FID presence significantly reduces the sensitivity of forced CEO turnovers to performance. This result suggests that the logistical difficulty and information disadvantage confronting FIDs not only reduce their ability to monitor managers, but also make them less likely to act to remove underperforming managers.

In light of our evidence that FIDs bring both benefits and costs to U.S. firms, we evaluate their net impact on firm performance and shareholder value. We begin by analyzing the relation between FID presence and firm operating performance through OLS, firm-fixed effects, and two-stage least squares (2SLS) regressions. We find that firms with FIDs exhibit significantly lower returns on assets (ROA), especially when they do not have a significant business presence in their FID's home region. This is consistent with the notion that the lax monitoring of CEOs by FIDs undermines the effectiveness of board oversight and corporate governance in general, resulting in greater agency problems and lower firm performance. Our results also indicate that FIDs make increasingly greater contributions to firm performance through their local expertise when FID home regions become more important to firms in terms of the percentage of total firm sales accounted for by those regions. We obtain largely similar findings from OLS, firm fixed-effects, and 2SLS regressions of Tobin's Q as a measure of firm value.

Finally, we conduct an event study of FID appointment announcements by our sample firms. We find the stock market reacts negatively to a firm's decision to appoint a FID; the

average 3-day announcement-period abnormal return is -0.56% (two-sided p -value: 0.054), and the median is -0.46% (two-sided p -value: 0.015). These announcement returns are significantly lower than those generated by appointments of domestic independent directors, which are significantly positive at both the mean and median levels.

Our study contributes to the literature on corporate boards and governance by identifying a new independent director characteristic that affects a board's ability to monitor and advise management. We complement earlier studies of board independence and independent director characteristics by highlighting the importance of a director's geographic location in relation to corporate headquarters.⁸ Our analysis provides evidence that the international expertise of FIDs benefits firms with substantial foreign operations or firms making cross-border acquisitions. However, for firms without major operations in the home regions of FIDs, it appears that FIDs' expected advisory benefits are not large enough to offset the value destroying effect of their weaker monitoring and disciplinary role. To the extent that FID appointment is a well-intentioned decision to obtain international expertise, our evidence points to the danger of overlooking the logistical difficulties and informational disadvantages FIDs must overcome to perform their duties effectively. Of course, it is also possible that some FIDs are brought on boards precisely *because of* their impaired monitoring capabilities, much like the appointments of other monitoring deficient independent directors, such as busy directors. As such, the evidence we uncover on the negative effects of FIDs on board effectiveness in monitoring and disciplining managers and on firm performance and value could be partly due to weaknesses in some firms' board nominating processes and possibly their overall corporate governance.

⁸ These earlier studies include, e.g., Weisbach (1988), Byrd and Hickman (1992), Brickley, Coles, and Terry (1994), Bhagat and Black (1999), Core, Holthausen, Larcker (1999), Fich and Shivdasani (2006), Adams and Ferreira (2009), Hwang and Kim (2009), Coles, Daniel, and Naveen (2010), and Nguyen and Nielsen (2010). See Hermalin and Weisbach (2003) and Adams, Hermalin, and Weisbach (2009) for surveys of this literature.

Our study also adds to a growing literature on the effect of geographic proximity on information flow and economic decision making.⁹ Our results suggest that geography plays an important role in the corporate governance arena as geographic remoteness impedes the performance of independent directors as monitors of management. In this sense, our evidence is consistent with the findings of Kang and Kim (2008) that acquirers in partial block acquisitions engage in more corporate governance activities and create more value at targets when acquirers and targets are geographically closer.

Finally, our findings have implications for boards considering appointments of foreign independent directors and shareholders who must approve them. Given the evidence on the monitoring deficiencies of FIDs, a careful cost-benefit analysis is warranted to assess whether their appointments can improve firm performance and increase shareholder value.

The remainder of the paper is organized as follows. Section II describes the procedures for sample construction and identification of FIDs and presents summary statistics of our sample. Sections III, IV, V, VI, and VII analyze firms' cross-border acquisition decisions, directors' board meeting attendance records, firms' financial reporting quality, CEO compensation policy, and CEO turnover decisions, respectively. Section VIII presents results from firm performance regressions. Section IX conducts an event study of FID appointments. Section X presents the results from several auxiliary analyses. Section XI summarizes our findings and conclusions.

II. Sample Construction and Identification of Foreign Independent Directors

We start with the universe of firms in the IRRC (now RiskMetrics) Directors Database, which covers firms in the S&P 1500 index. Our sample period is from 1998 to 2006, since prior to 1998, information on the country of a director's primary employer, which we use to identify foreign independent directors, is largely missing along with some other important director

⁹ See, e.g., Coval and Moskowitz (1999, 2001), Huberman (2001), Grinblatt and Keloharju (2001), Zhu (2002), Ivkovich and Weisbenner (2005), Malloy (2005), Bae, Stulz, and Tan (2008), and Uysal, Kedia, and Panchapagesan (2008).

information such as director shareholdings and committee memberships. IRRC classifies directors into inside, gray and independent directors. Inside directors are the company's executives and officers. Independent directors are those who have no business, financial, familial, or interlocking relationship that could compromise their ability or incentives to perform board oversight duties in the best interests of shareholders. The remaining directors are considered gray.¹⁰ We focus on independent directors since inside and gray directors cannot be relied upon to carry out the board's monitoring function given their conflicts of interest.

To identify firm-years with foreign independent directors, we first use the IRRC variable COUNTRY_OF_EMPL to tentatively classify an independent director as foreign (domestic) if her primary employer is a non-U.S. (U.S.) company. For directors who are retired, the database reports the country of their last primary employment.¹¹ We correct obvious coding errors by IRRC in 1,077 director-firm-year observations in which a director is classified as foreign in one year and domestic in another, while the director maintains the same employer and the employer has not change the location of its headquarters.¹²

Given our focus on directors' geographic location, there are two concerns about the first-step identification due to the large number of multinational corporations around the world. It is possible that independent directors initially classified as foreign may in fact be domestic if they are affiliated with the U.S. operation of their foreign employers.¹³ To address this first concern,

¹⁰ According to IRRC, gray directors include former employees, family members of current employees, owners of majority voting control, and individuals with disclosed conflicts of interest such as outside business dealings with the company, receipt of charitable contribution from the company, and interlocking director relationship with the CEO.

¹¹ We recognize that individuals may move away from the location of their last primary employment after retirement, but these relocations seem much more likely to be within national border than cross border. Given our focus on whether a director is located in or outside the U.S., this post-retirement migration is less of a concern to us.

¹² For example, David Li was on the board of Campbell Soup during 1998 and 1999. IRRC classifies him as a foreign director in 1998 and a domestic director in 1999. However, David Li was Chairman and CEO of Bank of East Asia, a bank in Hong Kong, in both years. We correct IRRC's coding and reclassify him as foreign for 1999.

¹³ For example, A.D. Frazier, Jr., president and chief executive officer of Invesco Inc., was on the board of Apache Corp in 1999. Invesco Inc. is a U.S. subsidiary of AMVESCAP PLC., a London-based independent

we obtain from proxy statements detailed biographies of directors initially classified as foreign, and reclassify them as domestic if they are employed in U.S. affiliates of foreign multinational corporations.

It is also possible that independent directors initially classified as domestic may actually be located abroad if they are primarily stationed in foreign subsidiaries of their U.S. employers.¹⁴ This concern is much more difficult to deal with due to the very large number of independent directors whose primary employers are U.S. firms according to IRRRC (over 80,000 director-firm-year observations). We randomly checked about one eighth of these observations and find a misclassification frequency of about 1%, but virtually all these cases are due to IRRRC's misclassification of a director's primary employer as U.S. company when it is in fact foreign. To address the second concern in a more systematic manner, we obtain director addresses by locating director insider trading disclosures from the Thomson Financial Insider Trading Database. This approach helps us reclassify some domestic director-year observations as foreign, though it is unlikely to correct all the misclassifications since not all independent directors in our sample reported insider trading activities during the sample period and some of the filings simply use the address of corporate headquarters as a director's address. To the extent that some foreign independent directors remain misclassified as domestic, our statistical tests will have less power to detect significant differences between firm-years with and without FIDs. However, given the low frequency of such misclassification, we consider this a minor concern. For each firm-year, we construct two measures to capture the presence of FIDs. The first is an indicator variable that equals one if a firm has at least one FID on its board, and the second is the percentage of FIDs among all independent directors.

global investment management firm. IRRRC classifies Mr. Frazier as a UK director and we reclassify him as domestic.

¹⁴ For example, Takeo Shiina, Chairman of IBM Japan Ltd., was on the board of Air Products & Chemicals in 1999. IRRRC classifies him as domestic, and we reclassify him as foreign, since he was most likely based in Japan.

We merge the IRR sample with Compustat annual files and geographic segment files.¹⁵ We exclude firms incorporated in foreign countries, firm-years in which the sum of sales from a firm's reported geographic segments is not within one percent of the firm's total reported sales for that year, and firms with a dual-class share structure.¹⁶ We end up with a sample of 9,979 firm-year observations during the period of 1998-2006, and observe FIDs in 1,271 (12.74%) firm-year observations, 250 of which have multiple FIDs. Conditional on FID presence, on average about 18% of independent directors are FIDs. Panel A of Table I displays the sample frequency distribution by year, which shows no sign of clustering in any particular year for either the overall sample or the subsample with FIDs. Panel B of Table I presents the country distribution of FIDs in our sample. We observe a large cross section of FID source countries, with U.K., Canada, Germany, Netherlands, and Mexico having the most representations. We explore potential cross-country differences among FIDs later in our analysis in Section IX and find little evidence of differential effects.

Table II presents summary statistics of some key financial and governance variables of firms in our sample. Detailed definitions of the variables are given in the Appendix. All continuous variables are winsorized at their 1st and 99th percentiles to reduce the influence of outliers. The median firm in our sample has 9 board members, 70% of which are independent directors. About 80% of our firms have a majority of independent directors. We observe CEO/Chairman duality in 66% of firm years. On average, about 17% of independent directors are

¹⁵ U.S. firms are required to report geographic segments that account for 10% of consolidated sales, profits, or assets. Compustat classifies firms' geographic segments into the following regions: Africa, Asia-Pacific, Europe, Middle East, North America, and South/Latin America. For a detailed description of Compustat's geographic segment data, please refer to Denis, Denis, and Yost (2002).

¹⁶ The reason we exclude dual-class companies from our analysis is that at these firms insiders tend to control most of the voting rights, which enable them to elect a majority of the directors and block any hostile takeover attempt (Gompers, Ishii, and Metrick (2009) and Masulis, Wang, and Xie (2009)). Therefore, boards are unlikely to be an effective internal corporate governance mechanism that limits managerial agency problems. As a robustness check, we also exclude from our sample single-class firms whose CEOs own more than 10%, 20%, ... or 50% of the equity. Our results are unchanged.

classified as busy, i.e., they hold at least three directorships.¹⁷ The equity ownership of directors as a whole averages about 8.3%, with a median of 3.3%. Only 3.5% of firms have an independent director who is also a blockholder, defined as an investor holding at least 5% of firm equity. Our sample firms have a mean (median) ROA of 12.7% (12.3%), Tobin's Q of 1.89 (1.44), market capitalization of \$7.98 (1.66) billion, R&D to sales ratio of 3.9% (0), and foreign sales percentage of 19% (7.8%). In the last two columns of Table II, we report Pearson correlations between our measures of FID presence and other firm characteristics. We observe a higher frequency of FIDs on larger, more independent, and busier boards and boards whose members own a smaller percentage of their firm's stock. FIDs are also more likely to appear at firms that are larger and have more growth opportunities (proxied by both Tobin's Q and R&D intensity) and whose foreign operations generate a larger percentage of their total sales.

III. Analysis of Cross-border Acquisition Decisions

One purported benefit of FIDs is that they provide knowledge and insights about certain foreign markets and help firms make more informed investment, operating, and distribution decisions overseas. One type of such decisions is cross-border acquisitions, as suggested by Adams, Hermalin, and Weisbach (2009). Cross-border acquirers face significant challenges since they must contend with unfamiliar political, regulatory and industry conditions, limited information about potential targets, and foreign legal, cultural and social norms. Consistent with these difficulties, both Eckbo and Thorburn (2000) and Moeller and Schlingemann (2005) find that acquirers perform significantly worse in cross-border deals than in domestic deals. FIDs could prove valuable to cross-border acquirers, since they can leverage their international expertise to provide unique perspectives on important issues such as target selection, deal structure and negotiation, and post-transaction integration, and they can do so either formally at a

¹⁷ Our results are robust to using the average number of board seats held by independent directors as an alternative measure of board busyness (Ferris, Jagannathan, and Pritchard (2003)).

board meeting or informally through conversations with senior management. Therefore, we expect firms with FIDs to make better cross-border acquisitions. To the extent that the expertise of FIDs is likely to be region specific, we expect the effect of FIDs on cross-border acquisitions to be concentrated in deals involving targets from the same region as the FIDs.¹⁸

To test our conjecture, we extract from the Securities Data Corporation's (SDC) Mergers and Acquisitions Database a sample of 520 cross-border acquisitions made by our sample companies during the 1998-2007 period. For each deal, we require that (i) the deal value disclosed by SDC is more than \$1 million and at least 1% of the acquirer's market value of assets at the fiscal year end prior to deal announcement, (ii) the acquirer has annual financial statement information available from COMPUSTAT for the year prior to deal announcement, and has stock return data available from CRSP for the period from 210 trading days prior to deal announcement to 5 trading days afterwards, and (iii) the acquirer controls less than 5% of target shares prior to deal announcement. Acquirers have FIDs prior to acquisition announcements in 105 cross-border deals, and in 47 of these transactions acquirer FIDs are from the same region as the targets.

Following Eckbo and Thorburn (2000) and Moeller and Schlingemann (2005), we measure an acquirer's performance by its cumulative abnormal returns (CAR) over the 5-day event window (-2, 2), where date 0 is the announcement date taken from SDC.¹⁹ The average CAR for our sample acquirers is 0.42% and the median is 0.41%. Neither is significantly different from zero. We estimate OLS regressions of acquirer CARs where we control for a wide array of acquirer financial and governance characteristics and deal characteristics. The regression results are presented in Table III, where figures in parentheses under coefficient estimates are robust *t*-

¹⁸ We assign the home countries of foreign targets and foreign directors to the geographic regions specified by Compustat's geographic segment files.

¹⁹ For a random sample of 500 acquisitions from 1990 to 2000, Fuller, Netter, and Stegemoller (2002) find that the announcement dates provided by SDC are correct for 92.6% of the sample and are off by no more than two trading days for the remainder. Thus, using a 5-day window over event days (-2, 2) captures most, if not all, of the announcement effect, without introducing substantial noise into our analysis. We also find that our results are robust to using the event window used by Schwert (1996) that begins 42 trading days prior to the deal announcement date and ends on the deal completion date or 126 trading days after deal announcement, whichever is earlier.

statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm-level clustering (Petersen (2009)). In column (1), the key explanatory variable is a binary variable indicating whether an acquirer has a FID on its board. It has a positive, but insignificant coefficient. In column (2), we replace the FID indicator in column (1) with two indicator variables, one for acquirer FIDs from the same region as the targets and the other for acquirer FIDs residing outside the target regions. We find that acquirers experience significantly higher CARs only when they have FIDs who are from the same region as the targets, suggesting that indeed FID expertise is local and that FIDs provide valuable advice that helps firms make better cross-border acquisitions.²⁰

With respect to the control variables, we find that acquirer returns are significantly higher in hostile transactions and lower when the target is a public company and a higher percentage of deal value is paid in stock. These relations are consistent with the extant evidence in the M&A literature (see Andrade, Mitchell, and Stafford (2001) for a comprehensive survey). There is also evidence that acquirers with busier boards experience significantly lower abnormal returns, consistent with overstretched directors failing to prevent empire-building, shareholder value-destroying acquisitions.

In a similar vein, we also examine whether FIDs can help U.S. firms consummate better cross-border joint ventures (JVs) and strategic alliances (SAs). We extract from the SDC database a sample of 34 cross-border JVs and 190 cross-border SAs that involve our sample firms. We

²⁰ An alternative explanation for our finding is that cross-border acquisitions by firms with FIDs are more likely to be anticipated by the market, since firms may appoint FIDs specifically for the purpose of making cross-border acquisitions. If cross-border acquisitions on average elicit negative stock price reactions, greater market anticipation is likely to result in more muted, i.e., less negative, market reactions to deal announcements made by FID firms. This possibility is unlikely to drive our results for the following two reasons. First, we find that in our acquisition sample, FIDs were appointed to boards an average (median) of 6.8 (5) years prior to the announcements of cross border acquisitions. The market's anticipation for a deal may be high immediately following FID appointments, but it is likely to have dissipated as time elapses without a deal. Second, we estimate a probit model to predict a firm's probability of making a cross-border acquisition. We find that firms with FIDs display an insignificantly higher tendency to make cross-border acquisitions. We then adjust the acquisition CAR for market anticipation by deflating it by (1-predicted probability of cross-border acquisition). Regressions using the adjusted acquisition CARs yield essentially the same inference as those reported in the paper, i.e., only the presence of FIDs from the target's home region has a significantly positive effect on acquirer announcement returns.

measure each participating U.S. firm's abnormal returns over a 5-day event window centering the announcement date provided by SDC, and regress it against the FID indicator along with an array of firm financial and governance variables used in our cross-border acquisition analysis. Interestingly, we find no evidence that FID presence significantly improves the market expectation of the shareholder value impact of cross-border JVs or SAs, even for deals in the home region of FIDs.²¹ This suggests that FIDs do not play an important advisory role in cross-border JV and SA deals.

IV. Analysis of Board Meeting Attendance

In this section, we conduct a direct test to assess the monitoring effectiveness of FIDs. Specifically, we examine the board meeting attendance of independent directors. Board meetings are the primary mechanism for outside directors to keep informed of a firm's operations, business conditions and managerial decision making, so that they can effectively participate in a firm's governance. Consistent with the importance of board meetings, Vafeas (1999) finds that stock price declines tend to prompt a higher frequency of board meetings, which subsequently lead to operating performance improvement. Institutional investors and governance activists have used board meeting attendance records to evaluate director performance, and directors who frequently miss board meetings are often criticized as being ineffective monitors and receive significantly fewer votes for their re-election (Cai, Garner, and Walkling (2009)).

Theoretical predictions on foreign directors' incentive to attend board meetings are inconclusive. Compared to domestic directors, FIDs face greater logistical difficulties and time and energy drains from international travel, and thus may be more likely to miss board meetings. However, given their informational disadvantage, FIDs may consider board meetings as an especially important channel that provides valuable opportunities to have direct contact with other

²¹ We obtain qualitatively similar results when we use longer event windows and adjust announcement returns for market anticipation.

directors and senior management and develop a better understanding of company businesses and strategy. Therefore, FIDs may have greater incentives to attend board meetings than domestic directors.

Publicly listed firms in the U.S. are required to disclose a director's board meeting attendance record in their annual proxy filings. However, the level of disclosure is limited to whether a director attended less than 75% of board meetings during a fiscal year. Given its conspicuous nature and the adverse consequences it carries for a director's reputation and career prospect in the market for directorships, it is perhaps not surprising that only 4.4% of independent directors in our sample exhibit this attendance problem. Nevertheless, to the extent that the same factors that make directors miss a substantial proportion of board meetings also hinder their ability to perform their duties even when they attend board meetings, frequent absence from board meetings by directors provides us with a valuable metric to infer their overall performance in critical corporate decisions and policy making, which is largely unobservable.

We obtain the board meeting attendance information from IRRC for all independent directors in our sample, and estimate a probit regression where the dependent variable is equal to one if an independent director attended less than 75% of a firm's board meetings during a fiscal year, and zero otherwise. The key explanatory variable is an indicator variable equal to one if a director is a FID. The unit of observation for the regression is a director-firm-year. We also control for firm financial and governance characteristics and other director attributes. To ensure that every director is evaluated based on a full year's attendance record, we exclude observations in which a director has been on a board for less than a year. Our final sample consists of 48,112 director-firm-year observations. About 4.7% of FIDs attend less than 75% of board meetings, while only 1.9% of domestic independent directors do so. The difference of 2.8% is statistically significant at the 1% level. This is consistent with the hypothesis that the logistical and informational challenges faced by FIDs reduce their board meeting attendance.

More formally, we estimate probit regressions where the dependent variable is equal to one if a director misses at least 25% of board meetings during a fiscal year and zero otherwise. The results in Table IV show that the probability of missing more than 25% of board meetings is significantly higher for directors domiciled in foreign countries, as evidenced by the significantly positive coefficient on the foreign director indicator. The marginal effect of the coefficient is 0.029, suggesting that the probability of FIDs missing more than 25% of board meeting is 2.9 percentage points higher than that of domestic directors. This effect is economically significant since the unconditional probability of a director missing at least 25% of board meetings is only 2%. An unreported logit regression shows that the foreign director indicator has an odds ratio of 2.77, indicating that other things being equal, foreign directors are almost three times more likely than domestic directors to miss at least 25% of board meetings.

We also find that directors holding more board seats and directors who are CEOs of other companies are significantly more likely to miss board meetings. This is consistent with the argument that CEO-directors face more time constraints due to the burdens of the day-to-day management of their own firms (Booth and Deli (1996)) and directors sitting on several boards may be overstretched in terms of their time and energy (Fich and Shivdasani (2006)).²²

Among firm characteristics, we observe that directors are less likely to miss board meetings at larger firms and firms that pay higher board meeting fees, while they are more likely to miss board meeting at companies with a higher Tobin's Q and higher market-adjusted stock returns over the fiscal year. One explanation for the firm size effect is that directors at larger firms are subject to more scrutiny from news media, security analysts and institutional investors and thus bear greater reputation costs for missing regular board meetings. Alternatively, directors of larger firms may be of higher quality and more committed to attending board meetings. The effect

²² Our board meeting attendance evidence can help explain why Fahlenbrach, Low, and Stulz (2009) find little effect of CEO-directors on firm performance, decision making, and governance. It may also serve as a possible explanation for the finding by Fich and Shivdasani (2006) that boards with more busy directors are less effective monitors of management.

of board meeting fees is consistent with the finding of Adam and Ferreira (2009) that directors respond to the incentives and signals provided by a firm's director compensation structure. The effects of Tobin's Q and abnormal stock returns are consistent with the evidence in Vafeas (1999) that boards tend to become more active following poor stock price performance, which would lower Tobin's Q.²³

Regarding the effects of governance variables, we find significantly better attendance records at firms with more antitakeover provisions (weaker shareholder rights) proxied by the GIM index. This suggests a substitute relationship between internal and external governance; when managers are subject to less pressure from the market for corporate control, monitoring by independent directors tends to make up for the slack. There is strong evidence that directors sitting on larger boards have poorer attendance records, which is consistent with the notion that larger boards suffer greater free-rider problems (Lipton and Lorsch (1992), Jensen (1993), Yermack (1996), and Eisenberg, Sundgren, and Wells (1998)). We also find that directors are less likely to miss board meetings when there is an independent blockholder on board, suggesting that independent director-blockholders serve as monitors of not only corporate managers, but also fellow board members. Finally, it appears that directors are significantly less likely to miss board meetings after the passage of the Sarbanes-Oxley Act in 2002, which could be a response to heightened public scrutiny of corporate governance and boards of directors as well as higher personal costs to directors of corporate scandals.²⁴

Overall, our examination of directors' board meeting attendance records yields results indicative of FID monitoring deficiencies. We show that frequently missing board meetings is one consequence of the difficulties confronting FIDs, and it is one potential channel through

²³ We do not include firms' foreign operations as a control variable in the regression, because there is no theory predicting how it might affect independent director's board meeting attendance. As a robustness check, we find that foreign sales percentage has an insignificant coefficient, and including it does not affect other parameter estimates.

²⁴ Former outside directors of Enron and WorldCom agreed to pay \$13 million and \$18 million, respectively, out of their own pockets to settle shareholder lawsuits stemming from the corporate governance scandals at these two companies.

which the presence of FIDs could negatively impact board effectiveness and reduce shareholder value and firm performance.²⁵ We recognize that regularly attending board meetings is not a sufficient condition for an independent director to be effective. This is especially true when CEOs largely control the flow of information before and during board meetings. As a supplement to board meetings, independent directors may choose to acquire more information by visiting corporate headquarters and plants and meeting with rank-and-file employees and senior managers (Lerner (1995)). However, these actions likely entail even greater costs than attending board meetings and thus are unlikely to be undertaken by FIDs given their poor board meeting attendance records.

V. Analysis of Earnings Restatements

As a further test of the monitoring effectiveness of FIDs, we next examine whether having a FID increases a firm's propensity to misreport earnings. Managers have incentives to overstate earnings to meet or beat analysts' forecasts, to increase their bonuses and the value of their stock and stock option holdings, and to avoid being fired for poor firm performance. One of the board's main responsibilities is to ensure the integrity of a company's financial statements and related disclosures. Certain board characteristics, such as board independence and the presence of financial experts on the board, are shown to rein in firms' earnings management behavior and reduce the probability of earnings restatements (Klein (2002) and Agrawal and Chadha (2005)). In addition, directors of restating companies experience abnormally high rates of turnover, and have a higher probability of losing board seats at other companies (Srinivasan (2005)), suggesting that directors are held at least partially accountable for restatements.

²⁵ In unreported analysis, we find that when a FID has attendance problems, domestic independent directors from the same board tend to have attendance problems as well. This positive relation is inconsistent with the notion that domestic independent directors exert more effort to offset the monitoring limitations of FIDs.

Our sample of firms misreporting accounting earnings comes from two reports issued by the U.S. General Accounting Office (GAO) in 2003 and 2007, which include a list of companies that restated their financial statements during the period from January 1997 to June 2006. According to the GAO, “a restatement occurs when a company, either voluntarily or prompted by auditors or regulators, revises public financial information that was previously reported.” The GAO sample includes both financial reporting frauds or irregularities (intentional misreporting) and accounting errors (unintentional misstatements). Hennes, Leone, and Miller (2008) partition the restatements by classifying a restatement as an irregularity if it satisfies at least one of the three criteria: (i) variants of the words “irregularity” or “fraud” were explicitly used in restatement announcements or relevant filings in the four years around the restatement; (ii) the misstatements came under SEC or DOJ investigations; and (iii) independent investigations were launched by boards of directors of restatement firms. They demonstrate the importance and effectiveness of their classification scheme by showing that compared to error restatements, restatements due to accounting irregularities are met with significantly more negative announcement returns (on average: -14% vs. -2%), are followed at a significantly higher rate by shareholder class action lawsuits, and lead to significantly more CEO/CFO turnovers.

The GAO reports provide the names of restating firms and the years during which the restatements are announced. We obtain the misreported fiscal years and quarters from Burns and Kedia (2006) for restatements announced between 1997 and 2002, and manually collect the same information for restatements announced between 2003 and 2006.²⁶ Merging the restatement data with our sample generates a sample of 8,924 firm-year observations from 1998 to 2005.²⁷ In 821 or about 9% of the firm-years, firms misreport earnings that require future restatements. In 271 or about 3% of the firm years, firms deliberately manipulate earnings that necessitate later restatements.

²⁶ We thank Natasha Burns and Simi Kedia for kindly sharing their data.

²⁷ The latest restated fiscal year is 2005.

We conduct a probit analysis of the likelihood of a firm misreporting its earnings and present the results in Table V. In column (1), the dependent variable is equal to one for restated firm years without differentiating between restatements due to errors or irregularities. The key explanatory variable is the FID indicator,²⁸ with a large number of firm financial and governance characteristics as controls. We find that the probability of misreporting is not significantly related to the presence of FIDs on a board.

However, in column (2), when we redefine the dependent variable as equal to one for firms years restated due to irregularities only, we find that the FID indicator has a significantly positive coefficient, consistent with FIDs reducing the intensity of board monitoring of management and increasing the likelihood of firms committing intentional financial misreporting. The costs to shareholders of this lapse in board oversight are substantial, since disclosures of financial misreporting and announcements of earnings restatements usually result in large stock price declines (Karpoff, Lee, and Martin (2008)).

Given the importance of the audit committee in a firm's financial reporting process, we also replace the FID indicator with two indicator variables, one for firms with FIDs on their audit committees at the time of financial misreporting, and the other for firms that have FIDs on their boards, but not on their audit committees at the time of financial misreporting.²⁹ As shown in column (3), both indicator variables have positive coefficients, but only the coefficient of the indicator for FIDs on audit committees is statistically significant. Its magnitude is more than twice as large as that of the indicator for FIDs not on audit committees. This evidence is consistent with the view that given FIDs' likely unfamiliarity with US accounting rules and regulations, their appointment to a firm's audit committee is expected to weaken board oversight

²⁸ As with the rest of our analysis, results based on the FID percentage measure are qualitatively similar and available upon request.

²⁹ About 46% of FIDs sit on audit committees.

over the firm's financial reporting process and reduce the quality and reliability of its financial disclosures.³⁰

Our results are significant not only statistically, but also economically. The marginal effects reported in columns (2) and (3) indicate that *ceteris paribus*, the presence of FIDs on boards increases the probability of a firm intentionally misreporting earnings by 1% (in absolute terms), while the presence of FIDs on audit committees increases the probability of intentional earnings manipulation by 1.4% (in absolute terms as well). Both figures are economically meaningful considering that the unconditional probability of intentional financial misreporting in our sample is only about 3%.

Among the control variables, we find that larger firms are more likely to restate earnings, probably because their accounting disclosures are under more scrutiny by institutional investors, security analysts and the business press. Better performing firms are less likely to misreport earnings, presumably because their superior performance makes it unnecessary for them to do so.³¹ Firms with larger foreign operations are associated with a higher probability of intentional financial reporting, probably because their operational and financial complexities provide managers with more opportunities for earnings manipulation.³² Consistent with the evidence in Agrawal and Chadha (2005), board size, board independence, CEO/Chairman duality and director ownership do not have significant effects on the probability of financial misreporting in general. But once we focus on intentional financial misreporting, we find that board independence and stock ownership significantly reduce the likelihood of deliberate earnings manipulation.

³⁰ We also find that firms with FIDs on their audit committees are not more likely to have major foreign operations in the region that the FID resides. This suggests that FID appointments to audit committees cannot be explained as utilizing their foreign expertise.

³¹ This evidence needs to be interpreted with caution, since not all misreporting firms have been caught and have to restate their earnings.

³² To further ensure that the effect of FIDs on the probability of financial misreporting is not an artifact of FIDs sitting on boards of firms with more overseas business operations or transactions, we include the following additional control variables in the probit regressions: a firm's number of geographic segments as reported by Compustat and indicator variables for whether a firm has engaged in a cross-border acquisition, strategic alliance, or joint venture over the previous three years. Our findings on the effect of FIDs continue to hold.

In summary, firms with foreign independent directors on their boards and especially audit committees are more likely to commit intentional financial reporting. This additional evidence supports the hypothesis that foreign directors are associated with lax monitoring of management and a failure to prevent aggressive accounting reporting practices.

VI. Analysis of CEO Compensation

In this section, we examine how the presence of FIDs affects CEO compensation policy. To the extent that lax monitoring by FIDs contributes to poor governance and leads to more agency problems, we expect firms with FIDs to pay their CEOs significantly higher compensation than firms without FIDs.

To test whether FIDs are associated with higher CEO pay unexplained by known determinants, we merge the IRRC sample with the ExecuComp database to obtain information on CEO compensation. We exclude firm-year observations with multiple CEOs and those in which CEOs have been in office for less than one year, since the compensation received by these CEOs is for only part of a fiscal year. We also require firms to have stock return data from CRSP and accounting data from Compustat for each fiscal year. The final sample consists of 7,665 firm-year observations during the period from 1998 to 2006.

The dependent variable in our regressions is the log of CEO total compensation (ExecuComp variable: TDC1), while the key explanatory variable is the indicator for FID presence on the board. We control for other determinants of CEO compensation previously found to be empirically important. In particular, we control for a firm's market-adjusted abnormal stock returns during both the current and the previous year, since some components of CEO pay such as salary and equity grants are often determined by prior year's performance. We use the standard deviation of monthly stock returns during past five years as a proxy for firm risk to capture possible CEO demand for higher compensation for bearing greater firm risk. We control for a firm's foreign sales percentage, since firms with greater international operations may require

more qualified CEOs or alternatively, CEOs may demand higher pay for managing more complex and geographically dispersed operations. To the extent that higher-quality CEOs command higher compensation, we directly control for managerial quality measured by a firm's industry-adjusted operating income growth over the previous three years, following Morck, Shleifer, and Vishny (1990).

Column (1) in Panel A of Table VI presents coefficient estimates from the CEO compensation regression. We find that FID presence has a significantly positive effect on CEO compensation, which is consistent with the hypothesis that boards with FIDs are less effective in controlling CEOs' self serving behavior and tend to approve overly generous CEO pay packages. In economic terms, everything else being equal, CEO compensation at firms with FIDs is about 10% higher than that at firms without FIDs. In column (2), we examine the effect of FIDs sitting on the board's compensation committee. We replace the FID indicator with two indicator variables, one for firms with FIDs on their compensation committees, and the other for firms that have FIDs on their boards, but not on their compensation committees.³³ We find that both indicator variables have significant and positive coefficients, with the one for compensation committee FIDs being about 55% larger in magnitude, though the difference is not statistically significant.

An alternative to the agency interpretation of our finding is an optimal contracting perspective, which posits that higher CEO compensation simply reflects competitive-level pay for either higher managerial quality or greater managerial risk aversion. Although the CEO compensation regressions in Panel A include explicit linear controls for managerial quality and firm risk, we conduct additional tests to distinguish the agency interpretation from the optimal contracting explanation. Specifically, we follow the approach of Core, Holthausen, and Larcker (1999) and compute the portion of CEO compensation explained by FID presence based on the coefficient estimates from the regression in column (1) of Panel A of Table VI. We then estimate

³³ About 39% of FIDs sit on compensation committees.

regressions of ROA and Tobin's Q against the FID-driven portion of CEO compensation, while controlling for a number of firm financial and governance characteristics related to firm performance. If the FID-driven portion of CEO compensation reflects optimal contracting, we expect it to have either a positive or zero impact on future firm performance and value. However, if it reflects excessive compensation due to agency problems, we expect it to have a negative effect on future firm performance and value. Untabulated results indicate that the imputed CEO compensation due to FID presence has a significantly negative effect on both ROA and Tobin's Q, thus supporting the agency interpretation of the higher CEO compensation associated with FIDs. Despite the evidence from these additional tests, we recognize that the possibility remains that the higher CEO compensation associated with FID presence could reflect differences in managerial quality or risk aversion, attributes that are either unobservable or very difficult to measure with precision.

As the final analysis of this section, we examine whether FID presence affects another dimension of executive compensation, i.e., the distribution of CEO pay between equity based and cash based. We start by estimating separate regressions of CEO cash-based compensation, which includes annual salary and bonus, and equity-based compensation, which includes restricted stock and stock option awards received by CEOs during a fiscal year. Results in Panel B of Table VI show that the presence of FIDs significantly increases CEO cash pay, but its effect on CEO equity-based pay is insignificant. We then analyze the percentage of equity-based compensation in total CEO pay, which is equal to the value of annual restricted stock and stock option awards scaled by total annual compensation. Unreported regression results show that the FID indicator has a negative, albeit insignificant, effect on the percentage of equity-based compensation. We obtain similar findings when we replace the percentage of equity-based pay by the pay-for-performance sensitivity generated by annual stock and option grants to CEOs scaled by total CEO compensation. This evidence suggests that the higher CEO total pay associated with FID presence is not compensation for bearing greater risk due to a higher proportion of equity-based pay.

Overall, it appears that firms with FIDs pay their CEOs significantly higher compensation, especially the cash-based portion. These results reinforce the notion that FIDs weaken the management oversight by boards and lead to more agency problems.

VII. Analysis of CEO turnovers

In this section, we examine how the presence of FIDs impacts the effectiveness of boards in disciplining poorly performing CEOs, since evaluating managerial performance and replacing underperforming CEOs is one of the major responsibilities of boards. This is also a continuation of our analyses from earlier sections that show that boards with FIDs are less effective in monitoring and disciplining CEOs, which is likely to lead to weaker firm performance. How boards respond to poor managerial performance is the focus of our investigation in this section. Prior research finds that poorly governed firms characterized by, for example, less independent boards (Weisbach (1988)) and busier boards (Fich and Shivdasani (2006)), are less likely to terminate poorly performing CEOs. We hypothesize that the logistical difficulties, information deficiency, and lack of familiarity with U.S. management, accounting, and corporate governance practices impair FIDs' ability to evaluate managerial competence and make them more reluctant to either instigate or support management changes.

To test our conjecture, we construct a sample of 8,461 firm-year observations by merging our IRRC sample with the ExecuComp database. Jenter and Kanaan (2010) identify all CEO turnovers for ExecuComp firms from 1993 to 2001 by comparing the identity of a firm's CEO in two consecutive years. For each turnover event, they locate its announcement date by searching new reports in *Factiva*, and then follow the criteria used by Parrino (1997) to classify whether the turnover is voluntary or forced. Specifically, a turnover is classified as forced if the press reports that the departing CEO is fired, forced out, or retires/resigns due to policy differences or pressure. In addition, for departing CEOs below age 60, a turnover is also classified as forced if either the press does not report the reason for departure as death, poor health, or the acceptance of another

position (including the chairmanship of the board), or the press reports that the CEO is retiring, but does not announce the retirement at least six months before the succession. We follow the same data collection procedure and expand Jenter and Kanaan's turnover dataset to 2006.³⁴ In our IRR-ExecuComp merged sample, there are a total of 988 CEO turnovers, of which 265 (or 27%) are forced. The unconditional probability of either a voluntary or forced turnover is almost 12% and forced turnovers have an unconditional probability of a little over 3%.

We estimate a probit model where the dependent variable is equal to one if a firm experiences a forced CEO turnover in a given year. The key explanatory variables are the firm's industry-adjusted return on assets (ROA) over the previous fiscal year and its interaction term with the indicator variable for FID presence. We use accounting returns rather than stock returns as our performance metric because the latter also incorporates the probability of future CEO turnovers and thus, suffers from a look-ahead bias (Weisbach (1988)). We expect the probability of forced CEO turnovers to be negatively related to prior operating performance. Our main focus, however, is on the coefficient of the interaction term, as a positive coefficient would indicate that FID presence reduces a board's responsiveness to poor firm performance relative to its industry peers in making CEO retention/dismissal decisions and vice versa. The probit model also controls for the same set of firm financial and governance characteristics used in the earnings restatement and CEO compensation regressions.

We present the results from the CEO dismissal regressions in Table VII. In column (1), we find that the industry-adjusted ROA has a significantly negative coefficient, indicating that poorly performing CEOs are more likely to be terminated. This is consistent with the evidence from numerous prior studies (see, e.g., Coughlan and Schmidt (1985), Weisbach (1988), and Fich and Shivdasani (2006)). In column (2), we find that the interaction term between FID presence and industry-adjusted ROA has a significantly positive coefficient, suggesting that boards with FIDs are less likely to remove poorly performing CEOs. Untabulated results show that the

³⁴ We thank Dirk Jenter and Fadi Kanaan for generously sharing their CEO turnover data.

coefficient on the interaction term remains significantly positive, even when we include interaction terms between operating performance and all the major governance variables used in the probit regression. This suggests that the effect of FID presence on the sensitivity of forced CEO turnover to performance is not due to other governance mechanisms. To further ensure that our findings are not driven by any spurious correlation between FID presence and the CEO turnover-performance sensitivity, we run a placebo test by estimating a probit model of voluntary CEO turnovers. Results presented in columns (3) and (4) show that FID presence is not significantly related to the relation between voluntary CEO turnovers and firm performance.³⁵ Overall, the evidence we present in this section suggests that FID presence undermines the effectiveness of boards in handling one of its most important tasks, i.e., critically evaluating managerial performance and replacing underperforming CEOs when necessary.

VIII. Analysis of Firm Performance

Evidence in the prior sections indicates that FIDs bring firms both benefits (through valuable counsel) and costs (through lax monitoring). In this section, we evaluate the net impact of FIDs on firm performance. Our primary measure of firm performance is ROA, defined as the ratio of earnings before interest, taxes, depreciation and amortization (EBITDA, Compustat item 13) over year-end book value of total assets (item 6).³⁶ If the value added by FIDs' international expertise outweighs the elevated agency costs caused by their lax monitoring, we should observe a positive relation between FID presence and ROA; otherwise, a negative relation.

VIII-A. OLS Regressions of ROA

We first estimate OLS regressions of ROA against the presence of FIDs while controlling for a wide array of firm financial and governance characteristics found in the prior literature to be

³⁵ The number of observations is reduced to 8,196 since we exclude firm-years with forced turnovers.

³⁶ Our results are robust to computing ROA as net income (item 18) divided by total assets.

related to firm performance. In particular, we control for the percentage of a firm's total sales from foreign operations, which measures the importance of the firm's foreign operations and/or its degree of global diversification. This variable is positively correlated with the presence of FIDs (see Table II), consistent with firms with substantial foreign operations being more likely to hire foreign independent directors for their expertise, and it may be negatively correlated with firm performance, based on the evidence in Denis, Denis, and Yost (2002) that globally diversified firms exhibit underperformance. Therefore, without controlling for the percentage of foreign sales, we may uncover some spurious relationship between FID presence and firm performance.

Panel A of Table VIII presents the OLS regression results. In column (1), we find that the FID indicator has a negative effect on ROA that is significant at the 1% level. In economic terms, everything else being equal, the ROA of firms with FIDs is about 0.01 lower than that of firms without FIDs. This evidence suggests that the costs of FIDs appear to outweigh the benefits, resulting in firm underperformance.

In column (2), we explore whether the effect of FIDs on firm performance varies with the importance of a firm's operations in the FID home region. Our conjecture is that firms derive more benefits from FIDs if they have more significant operations in their FID's home region. To test this hypothesis, we construct an interaction term between the FID indicator and a firm's percentage of sales from its FID's home region, and re-estimate the regression in column (1) with the interaction term as an additional explanatory variable.³⁷ Results presented in column (2) offer some support for our conjecture. Specifically, the FID indicator itself continues to have a significantly negative coefficient, but the coefficient estimate on the interaction term is positive, albeit insignificant.

³⁷ About 50% of firm-year observations with FIDs report sales from their FID's home region and the average percentage of sales from the FID's home region is about 12.4%.

With respect to control variables, we find that larger firms tend to be more profitable, while companies engaging in more R&D activities are less profitable presumably as a result of the immediate expensing of R&D expenditures. In addition, foreign sales contribute negatively to firm profitability, offering a possible explanation for the finding in Denis, Denis and Yost (2002) that globally diversified firms tend to trade at a discount. Both stock beta and stock return volatility have significantly negative associations with ROA. The coefficients on the governance variables such as board structure and stock ownership are consistent with the evidence from Morck, Shleifer, and Vishny (1988), McConnell and Servaes (1990), Yermack (1996), Fich and Shivdasani (2006), and Masulis, Wang, and Xie (2007).

VIII-B. Endogeneity of Foreign Directors on Board

A common problem that plagues OLS regressions of firm performance is the endogeneity issue. In our context, the problem arises when FIDs are not randomly distributed among firms and their presence in a firm may be determined by factors related to the firm's demand for FIDs and the willingness of FID candidates to join the firm. If some of these factors correlate with firm performance, but are not adequately controlled for in performance regressions, then measures of FID presence could be correlated with the error terms of performance regressions, thereby biasing the OLS coefficient estimates. For example, it is possible that entrenched CEOs enjoy more managerial slack and extract greater private benefits, which hurt firm performance, and such CEOs may also encourage the appointment of outside directors with constrained monitoring ability, such as foreign directors and busy directors, to preserve their control.

We employ two econometric approaches to address the endogeneity problem.³⁸ The first one is a firm fixed-effects regression, which controls for any time-invariant firm-specific factors

³⁸ The ideal strategy to deal with this endogeneity problem is to utilize natural or quasi-natural experiments in which the value of the endogenous variable is driven by an exogenous shock. However, these experiments are rare in the finance realm with very few exceptions such as the 1980 oil price increase examined by Lamont (1997) and the passage of the Sarbanes-Oxley Act (2002).

that relate to both firm performance and FID presence, mitigating concerns about omitted variables. However, firm fixed-effects regressions may lack power to detect the effects of slow-changing explanatory variables such as ownership structure and board characteristics (Zhou (2001)). In addition, it is unclear whether the within-firm time-series variations of the explanatory variables, which these regressions rely on, are exogenous themselves.³⁹ With these caveats in mind, we estimate a firm fixed-effects regression of ROA against FID presence and its interaction with the percentage of sales from the FID home region. The results are reported in column (3) of Panel A, Table VIII. We find that firm performance is negatively related to the FID indicator, but positively related to the interaction term, with both relations statistically significant. This evidence paints a more nuanced picture of the effect of FIDs. For firms with low presence in their FID's home region, the benefits brought forth by FIDs are dominated by the agency costs of their lax monitoring. However, FIDs make increasingly greater contributions to firm performance as firms generate a larger percentage of sales from operations in the FID's home region, reflecting the benefits of FID local expertise.

We complement the firm fixed-effects regression with an instrumental variable (IV) approach where we estimate ROA regressions in a two-stage least square (2SLS) framework. We construct two instrumental variables. The first variable captures the intuition that FIDs may prefer to sit on boards of firms whose headquarters they can more easily reach, and it is defined as an indicator variable equal to one if a firm's headquarters is located within 100 kilometers of one of the top-10 international airports in the U.S.^{40, 41} The second variable captures the idea that firms

³⁹ Another limitation of the fixed effects regression is that in order to eliminate the endogeneity problem, both firm and CEO fixed effects may be required, along with matching equations that account for endogenous sorting between firms and managers. We thank the referee for pointing this out.

⁴⁰ The top-10 U.S. airports in terms of international passenger traffic are New York (JFK, La Guardia, and Newark), Miami, Los Angeles, Chicago, San Francisco, Atlanta, Washington DC (Dulles), Boston, Detroit, and Houston. We exclude Honolulu and Orlando due to their tourist destination status and Agana, Guam due to its geographic separation from the continental U.S. We thank Richard Champley at the United States Department of Commerce (DOC) for providing us the information. The DOC started compiling such information from 2003. Other than occasional shuffles in relative ranking, there was no change in the list's composition between 2003 and 2006.

with a greater overseas reputation may be more likely to attract FIDs. To measure a firm's overseas reputation, we create an indicator variable equal to one for firms that are cross-listed on a foreign exchange at the beginning of our sample period and expect it to be positively related to FID presence. To qualify as proper instruments, these variables need to be correlated with the endogenous regressors (i.e., the validity requirement), but uncorrelated with the error terms from ROA regressions (i.e., the exclusion restriction).⁴²

In the first stage, we estimate a probit model where the dependent variable is the FID indicator and report the results in Panel B of Table VIII. We find that our IVs satisfy the validity requirement since they are significantly and positively related to FID presence. The marginal effects of the IVs are 0.031 and 0.046, respectively, suggesting that all else being equal, the probability of having a FID is 3.1 percentage points higher for firms located within 100 kilometers of a top-10 U.S. international airport and 4.6 percentage points higher for cross-listed firms. These effects are economically meaningful, given that the unconditional probability of FID presence is about 12.7% for our sample. In addition, when we estimate the probit model as a linear probability model, we find that the adjusted partial R-squared attributable to the IVs is highly significant at the 1% level.

In Panel C of Table VIII, we estimate the second-stage regressions where the dependent variable is ROA and the FID indicator is replaced by its instrumented value from the first stage. The model specifications are otherwise identical to those in Panel A. Results presented in column (1) show that FID presence on average continues to have a significant and negative effect on ROA, reaffirming the evidence from the OLS regressions in Panel A. An advantage of having

⁴¹ A growing body of research uses geography-base variables to explain cross-sectional variations in firm characteristics and policies. See, e.g., Kedia and Rajgopal (2009), Hochberg and Lindsey (2010), Becker, Cronqvist, and Fahlenbrach (2010), and Knyazeva, Knyazeva, and Masulis (2011).

⁴² Prior studies, e.g., Doidge, Karolyi, and Stulz (2004), show that foreign firms cross listed in the U.S. are associated with higher valuations, but there is no evidence that U.S. firms are worth more when listed abroad, probably because the high standards of corporate governance and disclosure and the developed capital markets in the U.S. make any potential benefits from cross listing in a foreign country minimal. Nevertheless, we conduct an over-identification test later to ensure that our cross-listing variable passes the exclusion restriction.

two IVs and only one endogenous regressor is that we can conduct an overidentification test of whether the IVs satisfy the exclusion restriction. We find that they do; the Hansen-Sargan J statistic for the overidentification test has a p -value of 0.20, which means we are unable to reject the null hypothesis that both instruments are exogenous. Column (2) of Panel C presents the results from the second-stage ROA regression that include the interaction term between FID presence and a firm's percentage of sales from its FID's home region as an additional regressor. The FID indicator continues to have a significantly negative coefficient and the coefficient estimate on the interaction term is significantly positive, echoing the results from the firm fixed-effects regression.

VIII-C. Regression Analysis of Tobin's Q

We also estimate regressions of Tobin's Q as a measure of firm value.⁴³ We calculate Tobin's Q as a firm's market value of assets over its book value of assets, where we compute the market value of assets as the book value of assets (item 6) plus the market value of common stock (item 25 $\times$ item199) minus the book value of common stock (item 60). The first two columns in Panel A of Table IX present the coefficient estimates from OLS regressions controlling for year and industry fixed effects. In column (1), when the FID indicator itself is included as an explanatory variable, it has a significant and negative effect on Tobin's Q. This result suggests that FID presence lead to a discount in firm valuation, consistent with the negative effect of FID presence on firm operating performance found earlier. In column (2), when both the FID indicator and its interaction with the firm's percentage of sales from the FID's home region are included as regressors, the FID indicator itself retains its significantly negative coefficient, and the coefficient for the interaction term is positive, but insignificant.

⁴³ We recognize that Tobin's Q can also proxy for investment opportunities and may at times be subject to the influence of market misvaluations. Erickson and Whited (2006) also discuss the measurement issues with different constructs of Tobin's Q. Nonetheless, we examine the relation between FID presence and Tobin's Q as a supplement to our analysis of ROA so as to provide a more complete picture about the effect of FIDs on firm performance.

To address the endogeneity of FID presence, we first estimate a firm fixed-effects regression and report the results in column (3) of Panel A of Table IX. Consistent with the OLS results, the FID indicator has a positive coefficient and its interaction term has a negative one, although both are insignificant, most likely due to a lack of sufficient time-series variation. We then resort to 2SLS regressions using the two IVs introduced in the previous section. The second-stage results reported in Panel B of Table IX show that the FID indicator has a significant and negative effect on Tobin's Q, while its interaction term has a significant and positive coefficient, echoing the evidence from the operating performance analysis. Our findings on the control variables are largely in line with the prior literature (Morck, Shleifer, and Vishny (1988), McConnell and Servaes (1990), Yermack (1996), Gompers, Ishii, and Metrick (2003), and Fich and Shivdasani (2006)).

Overall, our analysis of ROA and Tobin's Q suggests that firms reap more benefits from having FIDs when they have larger operations in the FID's home region, but FID presence has a negative effect on firm performance when a strong business presence in the FID's home region is lacking, indicating that in such instances the costs of FIDs' lax monitoring outweigh the benefits from their expertise. The existence of a negative relation between FID presence on the board and firm performance suggests that there are some transaction costs or impediments that make it difficult for firms to remove FIDs from their boards.⁴⁴ Several constraints of this nature come to mind. First, removing a director before his/her term expires may negatively impact a firm's reputation in the corporate director labor market and hinder its future director recruiting efforts. Second, in about 60% of our sample firms, director terms are staggered, so only one third of directors stand for election every year. Thus, it can take up to three years for directors to be removed through the election process. Finally, the evidence in our paper suggests that CEOs benefit from lax monitoring by FIDs. They appear to be able to extract more private benefits of control and become more entrenched with FIDs on board. Therefore, CEOs have little or no

⁴⁴ For further discussion of this issue, see Coles (2008). We thank the referee for suggesting this point.

incentive to agitate for the removal of FIDs and in fact can have substantial incentives to recommend including them. Given the important role that CEOs can play in the director appointment process, it is not surprising that firms continue to employ FIDs despite the adverse effects we identify.

IX. Announcement Effects of Foreign Independent Director Appointments

As our final test of the net effect of FIDs, we construct an uncontaminated sample of announcements of FID appointments and examine how the stock market reacts to such events. Previous studies beginning with Rosenstein and Wyatt (1990) have used this approach to evaluate a director's contribution to board effectiveness and firm value.

For FIDs in our sample, we gather information on when they joined their current boards and search Lexis-Nexis Academic around that time for the first public disclosure date of the appointments. We exclude appointments whose initial public disclosure is through a proxy statement filing, since proxy statements contain myriad of other information such as corporate ownership structure and executive compensation and perquisite commitments, making it difficult to attribute any stock price reactions around proxy mailing date to any particular piece of information in the proxy. This initial process gives us 247 non-proxy announcements of FID appointments. We then remove those contaminated by confounding events such as announcements of earnings, management turnover, acquisitions, restructurings, dividends and stock repurchases. We also drop announcements of multiple director appointments. Panel A of Table X provides a complete list of confounding events and their frequency. The final sample contains 91 "clean" announcements of FID appointments between 1982 and 2006, with 36% of them taking place prior to our sample period.

We follow the event study methodology in Brown and Warner (1980) and estimate the cumulative abnormal returns (CARs) over a 3-day event window (-1, +1) with event date 0 being the announcement date. We estimate the coefficients of a standard market model using daily

stock returns over the period (-210, -11) and the CRSP value-weighted return as the market return. Panel B of Table X presents the event study results. On average the market reacts negatively to firms' decision to bring FIDs on board, as the 3-day CARs have a mean of -0.56% and a median of -0.46%, both statistically significant with two-sided p -values of 0.054 and 0.015, respectively. This finding is consistent with the expectation by shareholders of U.S. companies that the costs generated by FIDs in the form of weakened board effectiveness and increased agency problems exceed the benefits their expertise will bring.

We then explore cross-sectional variations in the stock price reactions to FID appointments by regressing announcement-period CARs against appointing-firm and FID-home country characteristics. Specifically, the explanatory variables we use are the appointing firm's market capitalization, ROA, Tobin's Q, and percentage of sales from the FID's home region, and the FID home country's GDP per capita, GDP growth rate, and anti-director rights index (La Porta et al. (1997) and Spamann (2010)). Firm-level variables are measured at the fiscal year end prior to FID appointments, and GDP data are for the calendar year prior to FID appointments. We expect the announcement effects to be positively related to a firm's Tobin's Q and the percentage of sales from the FID's home region, with the former proxying for the firm's growth opportunities and the latter capturing the extent to which the firm can benefit from FID presence.⁴⁵ We also expect FID-appointment announcement returns to increase with a FID home country's GDP growth rate and anti-director rights index, since faster growing economies can offer greater opportunities for overseas expansion by U.S. firms and FIDs from countries with better corporate governance are less likely to display lax monitoring that plague FIDs in general.

Despite the small sample size, we find ample support for our conjectures. Specifically, results presented in Table XI show that Tobin's Q, GDP growth rate, and the anti-director rights index all have positive effects on announcement-period CARs that are significant at the 10%

⁴⁵ FIDs' knowledge and understanding of their home markets would be most valuable to U.S. firms making an initial entry into those regions. Thus, ideally we would like to measure a U.S. firm's plan to enter a foreign market, but such an ex-ante proxy is difficult to construct.

level. As expected, the percentage of appointing firm's sales from the FID's home region has a positive coefficient, but it is insignificant, likely due to the small sample size.

Finally, we compare FID appointments to domestic independent director (DID) appointments by the same FID appointing firms. For each FID appointing firm analyzed in Panels A and B of Table X, we determine when its DIDs were initially appointed and search Lexis-Nexis Academic around that time for the first non-proxy public disclosure date of each appointment. We identify 458 announcements of DID appointments. After removing those contaminated by confounding events, we obtain a sample of 210 "clean" announcements (see Panel C of Table X). The cumulative abnormal return over the 3-day event window (-1, 1) has a mean of 0.58% (two-sided p -value: 0.019) and a median of 0.16% (two-sided p -value: 0.077). The mean difference in announcement returns between FID and DID appointments is significant with a p -value of 0.012 and the median difference is also significant with a p -value of 0.008 (see Panel D of Table X). The evidence indicates that shareholders view appointments of DIDs significantly more favorably than those of FIDs.⁴⁶

X. Additional Analysis⁴⁷

X-A. Differentiating among foreign directors

⁴⁶ An alternative explanation for the event study evidence is that FID appointments may signal a company's intention to pursue growth opportunities beyond its national border, which investors may view as an indication of either the exhaustion of domestic growth opportunities or planned global empire building by managers. Either interpretation could cause the company's stock price to drop. We examine the 3-year average domestic sales growth before FID appointments to see whether FID appointments tend to follow declines in domestic businesses. We also examine the 3-year average domestic sales growth after FID appointments to see whether FID appointments tend to foreshadow declines in domestic operation. Neither analysis yields a significant difference between FID appointing firms and their industry peers, indicating that FID appointing firms do not experienced any slowdown in domestic businesses in comparison to their industry peers. We further examine whether FID appointments tend to be followed by significant growth in foreign operation, and again find no evidence of greater foreign sales growth rate for FID appointing firms compared to their industry peers. While it is difficult to completely rule out this signaling explanation, our analysis indicates that it is unlikely to be entirely responsible for the negative market reactions to FID appointments.

⁴⁷ All results in this section are available upon request.

We delve into the cross section of countries where FIDs come from and single out Canada and Mexico. Canada stands out from other foreign countries for two reasons. First, most major Canadian cities are near the Canada-U.S. border, and there are few restrictions on traveling from Canada to the U.S., especially for Canadian citizens. The geographic proximity coupled with being in the same time zones also makes it easier for Canadian directors to follow news development in the U.S., especially in areas near the Canada-U.S. border. Therefore, the time and energy drain is less for Canadian directors to perform their oversight and advisory functions at U.S. companies. Second, Canada shares many similarities with the U.S. in terms of culture, political and economic systems, commercial laws, shareholder protections and accounting standards. For example, both countries are governed by a common law legal system, have the same level of shareholder rights index and similar accounting disclosure quality, and have strong systems of law enforcement (La Porta et al. (1997)). Mexico also warrants separate attention because it shares a long border with the U.S. However, unlike Canada, many large Mexican cities are not located close to the U.S. border, and traveling to U.S. from Mexico requires a visa. In addition, Mexico differs from the U.S. in nearly as many aspects as Canada is similar to the U.S., such as economic development, legal system, investor protection, language, and culture.

A re-examination of directors' board meeting attendance indicates that the attendance records of Canadian directors are significantly better than those of other FIDs and are indistinguishable from those of domestic directors, while Mexican directors miss board meetings as often as other non-Canadian FIDs. In light of the similar board meeting attendance behavior of Canadian directors and domestic directors, we reclassify Canadian directors as domestic and redefine the FID presence measures accordingly. This lowers the percentage of firm-year observations with FIDs to 11%. We repeat all our earlier analysis using the revised FID presence measures, and find that our results continue to hold. As another robustness check, we also create two indicator variables for the presence of Canadian FIDs and non-Canadian FIDs, respectively, and use them to substitute for the FID indicator in our regressions. We find that the Canadian-FID

indicator has insignificant effects on specific corporate policies and overall firm value and performance, while the indicator for non-Canadian FIDs has significant and adverse impact on board decision making and corporate performance and value.

We also separately examine FIDs from the U.K. Despite the similarities in language, culture, legal origin and investor protection between the U.S. and U.K., we find that U.K. directors are still significantly more likely to miss board meetings than domestic directors, and their presence contributes to a greater likelihood of earnings restatement, higher CEO compensation, lower CEO turnover-performance sensitivity, and poorer firm performance. These results are consistent with geographic distance preventing FIDs from being effective monitors of management, even when they come from countries similar to the U.S.

X-B. Corporate Governance in FIDs' Home Countries

Our explanation for the lax monitoring by FIDs is that the logistical difficulties and information disadvantage that FIDs face due to their geographic location undermine their incentives and ability to provide adequate management oversight. Another dimension of FIDs' geography location is the corporate governance of their home countries. Given the strength of U.S. shareholder rights and law enforcement (La Porta et al. (1997)), many FIDs are from countries with weaker investor protections and legal systems. As a result, they may be less sensitive to poor corporate governance and managerial self-serving behavior than U.S. based independent directors, who are accustomed to higher standards. This low sensitivity toward protecting shareholder interests may contribute to the negative effects of FID presence on corporate decision making, firm performance, and shareholder value.

We examine this conjecture by creating interaction terms between FID presence and the FID home country's anti-director rights index (La Porta et al. (1997) and Spamann (2010)) and anti-self dealing index (Djankov et al. (2008)). We include these interaction terms as additional explanatory variables in earnings restatement, CEO compensation, CEO turnover, and firm

performance regressions, but none of these interaction terms has a significant coefficient. However, we do find that FIDs from weak corporate governance countries display an even greater tendency to miss board meetings than FIDs from strong corporate governance countries. Therefore, there is some evidence that the corporate governance environment of a FID's home country matters, but it is primarily the logistical and informational challenges created by geographic distance that drive the monitoring deficiencies of FIDs.

X-C. FIDs from Cross-border Acquisitions

One potential source of a negative relation between FID presence and firm performance is cross-border acquisitions. Specifically, when a U.S. firm acquires a relatively large foreign target, some target directors may join the acquirer's board. To the extent that the acquisition destroys shareholder value and causes the U.S. firm to underperform (Moeller and Schlingemann (2005)), a negative correlation between FID presence and firm performance would result.⁴⁸ To rule out this alternative explanation, we obtain from SDC a list of U.S. companies that acquired at least one foreign target from 1995 to 2006.⁴⁹ We also require that the deal value exceed 5% of the acquirer's market value of assets, so that some target board members are likely to be appointed to the board of the combined firm. There are 284 such firms in our sample. We repeat our analyses excluding these observations and obtain very similar results. Therefore, cross-border acquisitions do not appear to drive our findings on the relation between firm performance and FID presence.

XI. Conclusions

In this study we examine independent directors of U.S. firms who are based in foreign countries, and investigate how their geographic location affects their ability to perform their

⁴⁸ Note that this explanation cannot explain our evidence on board meeting attendance, earnings restatement, CEO compensation, and FID appointment announcement returns.

⁴⁹ To the extent that cross-border acquisitions have long-term effects on firm performance, acquisitions that occur prior to our sample period of 1998 to 2006 may continue to affect firm performance during our sampler period. To account for this possibility, we include the three years preceding our sample period.

monitoring and advisory duties. About 13% of U.S. firms have foreign independent directors on their boards. On the positive side, FIDs can utilize their international background and expertise to enhance the advisory function of boards and benefit firms with substantial foreign operations or plans for overseas expansion. On the negative side, the geographic distance between FIDs and corporate headquarters, as well as national borders with passport and custom controls create significant obstacles for FIDs to effectively participate in the governance of U.S. firms.

Our analysis of specific actions undertaken by directors and corporate policies they help formulate indicates that FIDs bring both benefits and costs to the firms they serve. Specifically, we find that firms with FIDs make better cross-border acquisitions when they pursue targets from the home regions of FIDs, evidence of the value added by FID expertise. However, we also find that FIDs are more likely to miss board meetings than domestic independent directors, and that firms with FIDs pay their CEOs excessively high compensation, are more likely to engage in intentional financial misreporting, and are less responsive in replacing poorly performing CEOs. These findings point to the monitoring deficiencies of FIDs and suggest that they undermine the effectiveness of board oversight and contribute to more managerial slack and misbehavior.

We next evaluate the net effect of FIDs on firm performance. Our results show that firms with FIDs exhibit significantly poorer performance, especially when they do not have significant business presence in the FID's home region, consistent with costs of FIDs outweighing benefits in such instances. But, as firms generate a higher percentage of total sales from their operation in the FID's home region, they derive more benefits from FID expertise. We also find that the announcements of FID appointments elicit significantly negative stock market reactions, signaling shareholder skepticism about FID contributions to firm value. Overall, our findings call for a balanced approach toward the hiring of foreign independent director by U.S. firms, and suggest that a careful cost-benefit analysis is warranted in such decisions.

The same considerations should also apply to non-U.S. firms. Companies from countries with weak investor protection may benefit from appointing outside directors from countries with

stronger investor protection as a way of improving board monitoring and overall corporate governance. However, given the obstacles faced by foreign directors as accentuated by our study and the experiences of Korean companies, it is unclear if the expected benefits outweigh the expected costs. Further research on this issue is clearly needed. In the short run, any foreign director appointment decision needs to be well thought out, since it may have the unintended negative consequence of weakening corporate governance rather than strengthening it.

References

- Adams, R.B., and Ferreira, D., 2007. A theory of friendly boards. *Journal of Finance* 62, 217-250.
- Adams, R.B., and Ferreira, D., 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics* 94, 291-309.
- Adams, R.B., Hermalin, B.E., and Weisbach, M.S., 2009. The role of boards of directors in corporate governance: A conceptual framework & survey. *Journal of Economic Literature*, forthcoming
- Agrawal, A., and Chadha, S., 2005. Corporate governance and accounting scandals. *Journal of Law and Economics* 48, 371-406.
- Agrawal, A., and Knoeber, C., 2001. Do some outside directors play a political role? *Journal of Law and Economics* 44, 179-198.
- Andrade, G., Mitchell, M., and Stafford, E., 2001. New evidence and perspectives on mergers, *Journal of Economic Perspectives* 15, 103-120.
- Bae, K., Stulz, R.M., and Tan, H., 2008. Do local analysts know more? A cross-country study of performance of local analysts and foreign analysts. *Journal of Financial Economics* 88, 581-606.
- Becker, B., Cronqvist, H., and Fahlenbrach, R., 2010. Estimating the effects of large shareholders using a geographic instrument. *Journal of Financial and Quantitative Analysis*, forthcoming.
- Bertrand, M., and Mullainathan S., 1999. Corporate governance and executive pay: Evidence from takeover legislation. Working paper, University of Chicago and Harvard University.
- Bhagat, S., and Black, B., 1999. The uncertain relationship between board composition and firm performance. *Business Lawyer* 54, 921-963.

- Boone, A., Field, L., Karpoff, J., and Raheja, C., 2007. The determinants of corporate board size and composition: an empirical analysis. *Journal of Financial Economics* 85, 66–101.
- Booth, J.R., and Deli, D.N., 1996. Factors affecting the number of outside directorships held by CEOs. *Journal of Financial Economics* 40, 81-104.
- Borokhovich, K.A., Brunarski, K.R., and Parrino, R., 1997. CEO contracting and antitakeover amendments. *Journal of Finance* 52, 1495-1517.
- Brickley, J.A., Coles, J.L., and Terry, R.L., 1994. Outside directors and the adoption of poison pills. *Journal of Financial Economics* 35, 371-390.
- Brickley, J.A., and Zimmerman, J.L., 2010. Corporate governance myths: Comments on Armstrong, Guay, and Weber. Working Paper, University of Rochester.
- Brown, S., and Warner, J., 1980. Measuring security price performance. *Journal of Financial Economics* 8, 205-258.
- Burns, N., and Kedia, S., 2006. The impact of performance-based compensation on misreporting. *Journal of Financial Economics* 79, 35-67.
- Byrd, J.W., and Hickman, K.A., 1992. Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics* 32, 195–221.
- Cai, J., Garner, J.L., and Walkling R.A., 2009. Electing directors. *Journal of Finance* 64, 2389-2421.
- Chhaochharia, V., and Grinstein, Y., 2007. Corporate governance and firm value: The impact of the 2002 governance rules. *Journal of Finance* 62, 1789-1825.
- Coles, J., 2008. Disclosure policy: A discussion of Leuz, Triantis, and Wang (2008) on “going dark.” *Journal of Accounting and Economics* 45, 209-220.
- Coles, J., Daniel, N., and Naveen, L., 2010. Co-opted boards. Working paper, Arizona State University.

- Core, J.E., Holthausen, R.W., and Larcker, D.F., 1999. Corporate governance, chief executive officer compensation, and firm Performance. *Journal of Financial Economics* 51, 371-406.
- Coughlan, A., and Schmidt, R., 1985. Executive compensation, management turnover, and firm performance: An empirical investigation. *Journal of Accounting and Economics* 7, 43-66.
- Coval, J., and Moskowitz, T., 1999. Home bias at home: Local equity preference in domestic portfolios. *Journal of Finance* 54, 2045-2073.
- Coval, J., and Moskowitz, T., 2001. The geography of investment: Informed trading and asset prices. *Journal of Political Economy* 109, 811-841.
- Denis, D.J., Denis, D.K., and Yost, K., 2002. Global diversification, industrial diversification, and firm value. *Journal of Finance* 57, 1951-1979.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., and Shleifer, A., 2008. The law and economics of self-dealing. *Journal of Financial Economics* 88, 430-465.
- Doidge, C., Karolyi, G.A., and Stulz, R.M., 2004. Why are foreign firms listed in the U.S. worth more? *Journal of Financial Economics* 71, 205-238.
- Eckbo, E., Thorburn K., 2000. Gains to bidder firms revisited: Domestic and foreign acquisitions in Canada. *Journal of Financial and Quantitative Analysis* 35, 1-25.
- Eisenberg, T., Sundgren, S., and Wells, M.T., 1998. Larger board size and decreasing firm value in small firms. *Journal of Financial Economics* 48, 35-54.
- Erickson, T., and Whited, T., 2006. On the accuracy of different measures of Q. *Financial Management* 35, 5-33.
- Fahlenbrach, R., 2009. Shareholder rights, boards, and CEO compensation. *Review of Finance* 13, 81-113.
- Fahlenbrach, R., Low, A., and Stulz, R.M., 2009. Why do firms appoint CEOs as outside directors? *Journal of Financial Economics* forthcoming.

- Fama, E.F., and French, K.R., 1997. Industry costs of equity. *Journal of Financial Economics* 43, 153-194.
- Fich, E.M., and Shivdasani, A., 2006. Are busy boards effective monitors? *Journal of Finance* 61, 689-724.
- Fuller, K., Netter, J., and Stegemoller, M., 2002. What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. *Journal of Finance* 57, 1763-1794.
- Gompers, P., Ishii, J., and Metrick, A., 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118, 107-155.
- Gompers, P., Ishii, J., and Metrick, A., 2009. Extreme governance: An analysis of dual-class companies in the United States. *Review of Financial Studies* forthcoming.
- Grinblatt, M., and Keloharju, M., 2001. Distance, language, and culture bias: The role of investor sophistication. *Journal of Finance* 56, 1053-1073.
- Harris, M., and Raviv, A., 2008. A theory of board control and size. *Review of Financial Studies* 21 (4): 1797-1832.
- Hennes, K. M., Leone, A.J., and Miller, B.P., 2008. The importance of distinguishing errors from irregularities in restatement research: The case of restatements and CEO/CFO turnover. *The Accounting Review* 83, 1487-1519.
- Hermalin, B.E., and Weisbach, M.S., 2003. Boards of directors as an endogenously determined institution: A survey of the economic literature. *FRBNY Economic Policy Review* 9, 7-26.
- Hochberg, Y., and Lindsey, L., 2010. Incentives, targeting, and firm Performance: An analysis of non-executive options. *Review of Financial Studies*, forthcoming.
- Huberman, G., 2001. Familiarity breeds investment. *Review of Financial Studies* 14, 659-680.
- Hwang, B., and Kim, S., 2009. It Pays to Have Friends. *Journal of Financial Economics* 93, 138-158.

- Ivkovich, Z., and Weisbenner, S., 2005. Local does as local Is: Information content of the geography of individual investors common stock investments. *Journal of Finance* 60, 267-306.
- Jensen, M., 1993. The modern industrial revolution, exit and the failure of internal control systems. *Journal of Finance* 48, 831-880.
- Jenter, D., and Kanaan, F., 2010. CEO turnover and relative performance evaluation. *Journal of Finance*, forthcoming.
- Kang, J., and Kim, J., 2008. The geography of block acquisitions. *Journal of Finance* 63, 2817-2858.
- Karpoff, J.M. Lee, D.S., and Martin, G.S., 2008. The cost to firms of cooking the books. *Journal of Financial and Quantitative Analysis* 43, 581-612.
- Kedia, S., and Rajgopal, S., 2009. Neighborhood matters: The impact of location of broad-based option plans. *Journal of Financial Economics* 92 (1), 109-127.
- Klein, A., 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics* 33, 375-400.
- Knyazeva, A., Knyazeva, D. and Masulis, R., 2011. Local director talent and board composition. Working paper, University of Rochester.
- Lamont, O.A., 1997. Cash flow and investment: Evidence from internal capital markets. *Journal of Finance* 52, 83-109.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R., 1997. Legal determinants of external finance. *Journal of Finance* 52, 1131-1150.
- Lehn, K.M., Patro, S., and Zhao, M., 2009. Determinants of the size and composition of US corporate boards: 1935-2000. *Financial Management* 38 (4), 747-780.
- Lerner, J., 1995. Venture capitalists and the oversight of private firms. *Journal of Finance*, 50, 320-318.

- Linck, J.S., Netter, J.M., and Yang, T., 2008. The determinants of board structure. *Journal of Financial Economics* 87, 308-328.
- Lipton, M., and Lorsch, J.W., 1992. A modest proposal for improved corporate governance. *Business Lawyer* 1, 59-77.
- Nguyen, B.D., and Nielsen, K., 2010. The value of independent directors: Evidence from sudden death. *Journal of Financial Economics* 98, 550-567.
- Malloy, C., 2005. The geography of equity analysis. *Journal of Finance* 60, 719-755.
- Masulis, R., Wang, C., and Xie, F., 2007. Corporate governance and acquirer returns. *Journal of Finance* 62, 1851-1889.
- Masulis, R., Wang, C., and Xie, F., 2009. Agency problems at dual-class companies. *Journal of Finance* 64, 1695-1725.
- McConnell, J., and Servaes, H., 1990. Additional evidence on equity ownership and corporate value. *Journal of Financial Economics* 27, 595-612.
- Moeller, S.B., and Schlingemann, F.P., 2005. Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions. *Journal of Banking and Finance* 29, 533-564.
- Morck, R., Shleifer, A., and Vishny, R.W., 1990. Do managerial incentives drive bad acquisitions? *Journal of Finance* 45, 31-48.
- Morck, R., Shleifer, A., and Vishny, R.W., 1988. Management ownership and market valuation. *Journal of Financial Economics* 20, 293-315.
- Parrino, R., 1997. CEO turnover and outside succession: A cross-sectional analysis. *Journal of Financial Economics* 46 (2), 165-197.
- Petersen, M., 2009. Estimating standard errors in finance panel data sets: Comparing approaches. *Review of Financial Studies* 22, 435-480.
- Rosenstein, S., and Wyatt, J.G., 1990. Outside directors, board independence and shareholder wealth. *Journal of Financial Economics* 26, 175-191.

- Sarkissian, S., and Schill, M.J., 2009. Are there permanent valuation gains to overseas listing? *Review of Financial Studies* 22, 371-412.
- Sarkissian, S., and Schill, M.J., 2004. The overseas listing decision: New evidence of proximity preference. *Review of Financial Studies* 17, 769-809.
- Schwert, W., 1996. Markup pricing in mergers & acquisitions. *Journal of Financial Economics* 41, 153-192.
- Spamann, H., 2010. The “antidirector rights index” revisited. *Review of Financial Studies* 23, 467-486.
- Srinivasan, Suraj, 2005, Consequences of financial reporting failure for outside directors: Evidence from accounting restatements, *Journal of Accounting Research* 43, 291-334.
- Uysal, V.B., Kedia, S., and Panchapagesan, V., 2008. Geography and acquirer returns. *Journal of Financial Intermediation* 17, 256-275.
- Vafeas, N., 1999. Board Meeting Frequency and Firm Performance. *Journal of Financial Economics* 53, 113-142.
- Weisbach, M.S., 1988. Outside directors and CEO turnover. *Journal of Financial Economics* 20, 431-460.
- White, H., 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48, 817-838.
- Yermack, D., 1996. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40, 185-212.
- Zhou, X., 2001. Understanding the determinants of managerial ownership and the link between ownership and performance: Comment. *Journal of Financial Economics* 62, 559-571.
- Zhu, N., 2002. The local bias of individual investors. Working Paper, University of California at Davis.

Table I. Distributions of sample firms and FIDs

Panel A: Year distribution of sample firms					
Year	# of firms	# of firms with at least one FID	# of firms with multiple FIDs	% of firms with at least one FID	# of FIDs/# of all independent directors, conditional on FID presence
1998	1,181	124	18	10.50%	17.86%
1999	1,213	153	29	12.61%	18.36%
2000	1,183	148	31	12.51%	19.23%
2001	1,114	146	30	13.11%	19.65%
2002	1,131	157	30	13.88%	18.74%
2003	1,049	142	32	13.54%	18.34%
2004	1,096	145	32	13.23%	17.63%
2005	1,033	134	26	12.97%	16.42%
2006	979	122	22	12.46%	16.37%
1998-2006	9,979	1,271	250	12.74%	18.13%

Panel B: Country distribution of FIDs		
Country	Frequency	Percent
Argentina	11	0.70%
Australia	21	1.33%
Belgium	16	1.02%
Bermuda	5	0.32%
Brazil	28	1.78%
Canada	293	18.59%
China	4	0.25%
Colombia	8	0.51%
Finland	4	0.25%
France	74	4.70%
Germany	168	10.66%
Hong Kong	26	1.65%
Ireland	2	0.13%
Israel	17	1.08%
Japan	78	4.95%
Luxembourg	8	0.51%
Mexico	112	7.11%
Monaco	5	0.32%
Netherlands	118	7.49%
Norway	6	0.38%
Philippine	1	0.06%
Puerto Rico	1	0.06%
Russia	4	0.25%
Singapore	8	0.51%
South Africa	6	0.38%
Spain	11	0.70%
Sweden	41	2.60%
Switzerland	49	3.11%
Taiwan	10	0.63%
United Kingdom	441	27.98%
Total	1576	100%

Table II: Summary statistics

The sample consists of 9,979 firm-year observations from 1998 to 2006. Variable definitions are in the Appendix. Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Variable	Mean	Std.	Median	Correlation with FID indicator	Correlation with FID percentage
<i><u>Panel A: Governance variables</u></i>					
FID indicator (=1 if a firm has FIDs, 0 otherwise)	0.127	0.333	0	1.00	0.878*** (0.000)
FID percentage (FIDs /independent directors)	2.31%	6.88%	0%	0.878*** (0.000)	1.00
FID percentage when FID indicator=1	18.13%	9.22%	16.67%	--	--
Number of FIDs when FID indicator=1	1.240	0.531	1	--	--
GIM-index	9.316	2.649	9	0.019* (0.062)	-0.012 (0.245)
Board size	9.509	2.880	9	0.157*** (0.000)	0.063*** (0.000)
Percentage of independent directors	67.06%	17.04%	70.00%	0.092*** (0.000)	0.017* (0.084)
Independent board (=1 if % of independent directors>50%)	0.803	0.398	1	0.069*** (0.000)	0.004 (0.695)
CEO/Chairman duality	0.659	0.474	1	0.025** (0.014)	0.010 (0.304)
Percentage of independent busy directors	17.04%	20.21%	12.50%	0.077*** (0.000)	0.019* (0.055)
Directors' stock ownership	0.083	0.121	0.033	-0.088*** (0.000)	-0.060*** (0.000)
Independent director blockholder (indicator variable)	0.035	0.183	0	-0.007 (0.492)	-0.020* (0.051)
<i><u>Panel B: Firm characteristics</u></i>					
ROA	0.127	0.093	0.123	-0.005 (0.648)	-0.002 (0.863)
Tobin's Q	1.892	1.264	1.442	0.024** (0.019)	0.030*** (0.003)
Market cap (in millions)	7,975	25,339	1,662	0.142*** (0.000)	0.096*** (0.000)
R&D/Sales	0.039	0.089	0	0.059*** (0.000)	0.074*** (0.000)
Foreign sales percentage	0.190	0.231	0.078	0.210*** (0.000)	0.214*** (0.000)

Table III. Regression analysis of acquirer returns from cross-border acquisitions

The sample consists of 520 cross-border acquisitions by U.S. firms in our sample during the period of 1998 to 2006. The dependent variable is the bidder's 5-day cumulative abnormal return in percentage points. Other variable definitions are in the Appendix. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for year and Fama-French 48-industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1)	(2)
<u>Key independent variables:</u>		
FID indicator	1.185 (1.336)	
FID from the same region as the target firm		2.101* (1.749)
FID not from the same region as the target firm		0.406 (0.398)
<u>Control variables: Bidder and deal characteristics</u>		
Log(Market cap)	-0.139 (0.373)	-0.150 (0.402)
Foreign sales percentage	0.726 (0.402)	0.621 (0.342)
ROA	-6.980 (1.261)	-7.314 (1.308)
Tobin's Q	0.038 (0.313)	0.048 (0.389)
R&D/Sales	3.400 (0.964)	3.311 (0.936)
GIM-index	0.062 (0.369)	0.058 (0.347)
Board size	-0.160 (0.856)	-0.158 (0.851)
Independent board	0.601 (0.569)	0.608 (0.577)
Percentage of busy independent directors	-4.554** (2.541)	-4.498** (2.515)
CEO/Chair duality	-0.357 (0.425)	-0.332 (0.395)
Directors' stock ownership	4.771 (1.205)	4.747 (1.200)
Independent director blockholder	-0.144 (0.091)	-0.136 (0.087)
Relative deal size	2.877 (0.801)	2.979 (0.818)
Public target	-2.726* (1.951)	-2.680* (1.911)
Private target	-0.055 (0.062)	-0.086 (0.098)
Proportion of deal value paid by bidder stock	-0.034* (1.966)	-0.035** (1.981)
Tender offer	-0.319	-0.362

	(0.193)	(0.219)
Competed deal	1.720	1.753
	(0.925)	(0.944)
Hostile deal	4.416**	4.351**
	(2.498)	(2.510)
Year fixed-effects	Yes	Yes
Industry fixed-effects	Yes	Yes
Number of Obs.	520	520
Adjusted-R ²	0.052	0.053

Table IV. Probit regressions of independent directors' board meeting attendance

The sample consists of 48,112 director-firm-year observations from 1998 to 2006. The table presents results from probit regressions of independent directors' board meeting attendance. The dependent variable is equal to one if an independent director attended less than 75% of board meetings during a fiscal year and zero otherwise. Post-SOX is an indicator variable that is equal to one for years after 2002 and zero otherwise. Other variable definitions are in the Appendix. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and director clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

	Coefficient (t-stat)	Marginal effect
<u><i>Director characteristics:</i></u>		
Indicator for foreign directors	0.439*** (5.160)	0.029
Number of IRRC board seats	0.047*** (3.457)	0.002
Indicator for CEO directors	0.175*** (4.982)	0.009
<u><i>Firm characteristics:</i></u>		
Log(Market cap)	-0.073*** (4.450)	-0.003
ROA	-0.200 (0.737)	-0.009
One-year market-adjusted stock returns	0.057* (1.655)	0.002
Tobin's Q	0.046*** (2.759)	0.002
Number of board meetings	-0.009 (1.402)	-0.0004
Director meeting fee	-0.065*** (2.865)	-0.003
GIM-index	-0.023*** (2.780)	-0.001
Board size	0.037*** (4.464)	0.002
Independent board	0.054 (1.037)	0.002
Percentage of busy independent directors	0.054 (0.550)	0.002
CEO/Chair duality	-0.028 (0.740)	-0.001
Directors' stock ownership	0.230 (1.095)	0.010
Independent director Blockholder	-0.243** (2.061)	-0.008
Post-SOX (=1 if after 2002)	-0.231*** (7.262)	-0.011
Number of Obs.		48,112
Pseudo-R ²		0.033

Table V. Probit regressions of earnings restatements

The sample consists of 8,924 firm-year observations. The dependent variable in column (1) is equal to one for firm-years whose financial results were later restated and zero otherwise. The dependent variable in columns (2) and (3) is equal to one for firms-years whose financial results were restated due to irregularities (i.e. intentional manipulation) and zero otherwise. Other variable definitions are in the Appendix. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for year fixed effects and Fama-French 48-industry fixed effects, whose coefficient estimates are suppressed for brevity.

	(1) Restatements (=1 for 821 firm-years)		(2) Restatements due to irregularities (=1 for 272 firm-years)		(3) Restatements due to irregularities (=1 for 272 firm-years)	
	Coefficient (t-stat)	Marginal effects	Coefficient (t-stat)	Marginal effects	Coefficient (t-stat)	Marginal effects
<i><u>Key independent variables:</u></i>						
FID indicator	-0.019 (0.327)	-0.003	0.154** (2.175)	0.010		
FID on audit committee (=1 for firms with FIDs on their audit committees)					0.202** (2.242)	0.014
No FID on audit committee (=1 for firms with FIDs on boards but not on audit committees)					0.098 (0.981)	0.006
<i><u>Control variables:</u></i>						
Log(Market cap)	0.054*** (3.517)	0.009	0.047** (2.021)	0.003	0.047** (2.015)	0.003
Foreign sales percentage	0.085 (0.977)	0.014	0.407*** (3.396)	0.025	0.406*** (3.383)	0.024
ROA	-0.845*** (3.862)	-0.137	-1.676*** (5.415)	-0.101	-1.689*** (5.444)	-0.102
Tobin's Q	-0.046** (2.426)	-0.008	-0.018 (0.625)	-0.001	-0.018 (0.627)	-0.001
GIM-index	-0.008 (1.130)	-0.001	-0.011 (1.078)	-0.001	-0.012 (1.110)	-0.001
Board size	0.000 (0.016)	0.000	0.005 (0.516)	0.000	0.005 (0.523)	0.000
Independent board	-0.025 (0.495)	-0.004	-0.155** (2.145)	-0.010	-0.154** (2.135)	-0.010
% of busy independent directors	-0.123 (1.284)	-0.020	0.210 (1.601)	0.013	0.207 (1.579)	0.012
CEO/Chair duality	0.016 (0.388)	0.003	0.099 (1.600)	0.006	0.097 (1.575)	0.006
Directors' stock ownership	-0.275 (1.545)	-0.045	-1.243*** (3.653)	-0.075	-1.240*** (3.650)	-0.075
Independent director blockholder	-0.054 (0.476)	-0.008	0.030 (0.163)	0.002	0.028 (0.149)	0.002
Year fixed-effects	Yes		Yes		Yes	
Industry fixed-effects	Yes		Yes		Yes	
Number of Obs.	8,924		8,924		8,924	
Pseudo-R ²	0.075		0.111		0.111	

Table VI. Regression analysis of CEO compensation

The sample consists of 7,296 firm-year observations. In Panel A, the dependent variable is the logarithmic transformation of CEO total compensation in million dollars. In Panel B, the dependent variable is the logarithmic transformation of CEO cash compensation (i.e. salary plus bonus) in million dollars in columns (1) and (2) and the logarithmic transformation of CEO equity-based compensation in million dollars in columns (3) and (4). Managerial quality is measured by a firm's industry-adjusted operating income growth over the previous three years, which is defined as $(EBITDA_{t-1} - EBITDA_{t-4})/EBITDA_{t-4}$, adjusted for industry median for the same performance measure. Other variable definitions are in the Appendix. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for year and Fama-French 48-industry fixed effects, whose coefficient estimates are suppressed for brevity.

Panel A: Regressions of total CEO compensation		
	Dependent variable: Log(total CEO compensation)	
	(1)	(2)
<u>Key independent variables:</u>		
FID indicator	0.106** (2.504)	
FID on compensation committee (=1 for firms with FIDs on their compensation committees)		0.132** (2.258)
No FID on compensation committee (=1 for firms with FIDs on boards but not on compensation committees)		0.085* (1.754)
<u>Control variables:</u>		
Managerial quality	0.039*** (3.861)	0.039*** (3.866)
Log(Market cap)	0.413*** (25.432)	0.413*** (25.425)
R&D/Sales	-0.235 (0.811)	-0.236 (0.815)
Foreign sales percentage	0.208*** (2.775)	0.206*** (2.757)
Stock return volatility	9.284*** (5.883)	9.305*** (5.901)
Current-year market-adjusted stock returns	0.312*** (12.706)	0.312*** (12.712)
Prior-year market-adjusted stock returns	0.094*** (4.341)	0.094*** (4.337)
GIM-index	0.015** (2.421)	0.015** (2.436)
Board size	0.005 (0.631)	0.005 (0.643)
Independent board	0.084** (2.029)	0.084** (2.033)
Percentage of busy independent directors	0.270*** (3.531)	0.269*** (3.524)
CEO/Chair duality	0.169*** (5.551)	0.170*** (5.566)
Directors' stock ownership	-0.994*** (4.678)	-0.994*** (4.673)
Independent director blockholder	0.065 (0.900)	0.064 (0.888)
Year fixed-effects	Yes	Yes
Industry fixed-effects	Yes	Yes
Number of Obs.	7,296	7,296
Adjusted-R ²	0.529	0.529

Panel B: Regressions of CEO cash-based and equity-based compensation

	Dependent variable: Log(salary + bonus)		Dependent variable: Log(equity-based pay)	
	(1)	(2)	(3)	(4)
<i>Key independent variables:</i>				
FID indicator	0.135*** (3.311)		0.090 (1.084)	
FID on compensation committee (=1 for firms with FIDs on their compensation committees)		0.141*** (2.819)		0.091 (0.748)
No FID on compensation committee (=1 for firms with FIDs on boards but not on compensation committees)		0.131*** (2.831)		0.088 (0.965)
<i>Control variables:</i>				
Managerial quality	0.013 (1.224)	0.013 (1.224)	0.068*** (3.049)	0.068*** (3.049)
Log(Market cap)	0.204*** (9.706)	0.204*** (9.704)	0.525*** (15.220)	0.525*** (15.223)
R&D/Sales	-1.018*** (4.317)	-1.018*** (4.318)	-0.267 (0.427)	-0.267 (0.427)
Foreign sales percentage	-0.032 (0.362)	-0.032 (0.365)	0.521*** (3.134)	0.521*** (3.134)
Stock return volatility	-3.061 (1.613)	-3.056 (1.610)	16.888*** (4.999)	16.889*** (5.000)
Current-year market-adjusted stock returns	0.311*** (11.384)	0.311*** (11.383)	0.342*** (6.458)	0.342*** (6.458)
Prior-year market-adjusted stock returns	0.108*** (5.163)	0.108*** (5.162)	0.113** (2.364)	0.113** (2.363)
GIM-index	0.014* (1.903)	0.014* (1.904)	0.026* (1.937)	0.026* (1.936)
Board size	0.030*** (3.549)	0.030*** (3.550)	0.022 (1.370)	0.022 (1.372)
Independent board	0.075 (1.518)	0.075 (1.519)	0.286*** (2.850)	0.286*** (2.850)
Percentage of busy independent directors	0.315*** (4.170)	0.315*** (4.164)	0.539*** (3.237)	0.538*** (3.239)
CEO/Chair duality	0.130*** (4.046)	0.130*** (4.041)	0.227*** (3.345)	0.227*** (3.343)
Directors' stock ownership	-0.635*** (2.814)	-0.635*** (2.813)	-2.899*** (5.510)	-2.899*** (5.509)
Independent director blockholder	0.027 (0.347)	0.027 (0.345)	0.283* (1.810)	0.283* (1.809)
Year fixed-effects	Yes	Yes	Yes	Yes
Industry fixed-effects	Yes	Yes	Yes	Yes
Number of Obs.	7,296	7,296	7,296	7,296
Adjusted-R ²	0.313	0.313	0.311	0.311

Table VII. Probit regressions of CEO turnovers

The sample consists of 8,461 firm-years. The dependent variable in column (1) and (2) is a dummy variable equal to one for forced CEO turnovers. The dependent variable in column (3) and (4) is a dummy variable equal one for voluntary CEO turnovers. Return on assets (ROA) is adjusted for industry median. Other variable definitions are in the Appendix. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for year and Fama-French 48-industry fixed effects, whose coefficient estimates are suppressed for brevity.

	Forced turnovers		Voluntary turnovers	
	(1)	(2)	(3)	(4)
<i>Key independent variables:</i>				
Industry-adjusted ROA $t-1$	-1.532*** (3.574)	-1.769*** (4.083)	-0.004 (0.014)	0.029 (0.109)
FID indicator		-0.026 (0.277)		0.052 (0.778)
FID indicator $\times$ Industry-adjusted ROA $t-1$		1.617* (1.823)		-0.215 (0.401)
<i>Control variables:</i>				
Log(Market cap)	-0.036 (1.483)	-0.038 (1.546)	-0.002 (0.110)	-0.003 (0.161)
R&D/Sales	-0.896** (2.133)	-0.847** (1.982)	0.322 (1.084)	0.321 (1.081)
Foreign sales percentage	0.204 (1.321)	0.171 (1.101)	-0.012 (0.109)	-0.021 (0.193)
GIM-index	0.011 (0.933)	0.010 (0.912)	-0.006 (0.782)	-0.006 (0.737)
Board size	0.000 (0.011)	-0.002 (0.180)	0.039*** (4.471)	0.038*** (4.313)
Independent board	0.060 (0.773)	0.051 (0.656)	-0.106** (1.963)	-0.106** (1.964)
Percentage of busy independent directors	0.171 (1.127)	0.181 (1.189)	0.099 (0.970)	0.103 (1.006)
CEO/Chair duality	-0.137** (2.357)	-0.136** (2.332)	0.361*** (7.991)	0.360*** (7.990)
Directors' stock ownership	-0.613** (1.992)	-0.619** (2.011)	-0.351* (1.798)	-0.341* (1.750)
Independent director blockholder	0.184 (1.222)	0.183 (1.208)	0.072 (0.586)	0.071 (0.576)
Year fixed-effects	Yes	Yes	Yes	Yes
Industry fixed-effects	Yes	Yes	Yes	Yes
Number of Obs.	8,461	8,461	8,196	8,196
Pseudo-R ²	0.057	0.059	0.032	0.032

Table VIII. Firm performance regressions analysis: FIDs and ROA

The sample consists of 9,979 firm-year observations from 1998 to 2006. Panel A presents the OLS and firm fixed-effects regressions, where the dependent variable is a firm's return on assets (ROA). Independent variable definitions are in the Appendix. Panel B presents the first-stage results of the 2SLS regressions. The instruments used are an indicator variable for firms headquartered within 100 kilometers of a top-10 U.S. international airport and another indicator variable for firms cross-listed on a major foreign exchange. Panel C presents the second-stage results from 2SLS regressions. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for year and Fama-French 48-industry fixed effects, whose coefficient estimates are suppressed for brevity.

Panel A: OLS and firm fixed-effects regressions of ROA			
	(1) OLS	(2) OLS	(3) Firm fixed-effects
<i>Key explanatory variables:</i>			
FID indicator	-0.010*** (2.626)	-0.012** (2.500)	-0.006* (1.807)
FID indicator × Percentage of sales from FID home region		0.020 (0.896)	0.032* (1.735)
<i>Control variables:</i>			
Log(Market cap)	0.022*** (17.865)	0.022*** (17.882)	0.040*** (23.343)
R&D/Sales	-0.373*** (15.973)	-0.373*** (15.939)	-0.484*** (13.197)
Foreign sales percentage	-0.016* (1.946)	-0.017** (2.054)	-0.027** (2.550)
Stock beta	-0.002* (1.911)	-0.002* (1.922)	-0.001 (1.317)
Stock return volatility	-0.172*** (6.553)	-0.172*** (6.556)	-0.030 (1.585)
GIM-index	-0.000 (0.540)	-0.000 (0.540)	-0.002** (2.299)
Board size	-0.005*** (8.526)	-0.005*** (8.493)	-0.001* (1.940)
Independent board	0.002 (0.485)	0.002 (0.496)	-0.001 (0.632)
Percentage of busy independent directors	-0.044*** (6.056)	-0.044*** (6.041)	-0.010** (1.992)
CEO/Chair duality	-0.009*** (3.461)	-0.009*** (3.450)	-0.002 (1.007)
Directors' stock ownership	0.090*** (2.976)	0.090*** (2.978)	-0.024 (0.809)
(Directors' stock ownership) ²	-0.122*** (2.835)	-0.122*** (2.835)	0.027 (0.662)
Independent director blockholder	0.003 (0.429)	0.003 (0.429)	0.006 (1.370)
Firm fixed-effects	No	No	Yes
Year fixed-effects	Yes	Yes	Yes
Industry fixed-effects	Yes	Yes	No
Number of Obs.	9,979	9,979	9,979
Adjusted R ²	0.394	0.394	0.786

Panel B: First stage of 2SLS regressions	
Dependent variable: FID indicator	Probit coefficient (t-stat)
<i>Instrumental variables:</i>	
Indicator for firms headquartered within 100 kilometers of a top international airport	0.173** (2.007)
Cross-listing indicator	0.269* (1.861)
<i>Control variables:</i>	
Log(Market cap)	0.083*** (2.661)
R&D/Sales	0.238 (0.495)
Foreign sales percentage	0.964*** (4.854)
Stock beta	0.005 (0.224)
Stock return volatility	0.114 (0.236)
GIM-index	-0.022 (1.457)
Board size	0.119*** (7.437)
Independent board	0.180** (2.248)
Percentage of busy independent directors	-0.387** (2.092)
CEO/Chair duality	0.017 (0.271)
Directors' stock ownership	-0.755 (0.872)
(Directors' stock ownership) ²	-0.443 (0.322)
Independent director blockholder	0.067 (0.341)
Year fixed-effects	Yes
Industry fixed-effects	Yes
Number of Obs.	9,979
Adjusted /Pseudo R ²	0.175

Panel C: Second stage of 2SLS regressions		
Dependent variable: ROA	(1)	(2)
<u>Key explanatory variables:</u>		
FID indicator	-0.063*** (4.724)	-0.063*** (4.772)
FID indicator × Percentage of sales from FID home region		0.040** (2.074)
<u>Control variables:</u>		
Log(Market cap)	0.028*** (15.535)	0.028*** (15.557)
R&D/Sales	-0.354*** (15.019)	-0.355*** (15.067)
Foreign sales percentage	0.048*** (3.047)	0.050*** (3.171)
Stock beta	-0.002* (1.767)	-0.002* (1.725)
Stock return volatility	-0.159*** (6.065)	-0.159*** (6.057)
GIM-index	-0.002*** (2.879)	-0.002*** (2.904)
Board size	0.003 (1.549)	0.003 (1.574)
Independent board	0.013*** (3.035)	0.013*** (3.052)
Percentage of busy independent directors	-0.065*** (7.407)	-0.065*** (7.444)
CEO/Chair duality	-0.008*** (2.819)	-0.008*** (2.809)
Directors' stock ownership	0.038 (1.187)	0.038 (1.164)
(Directors' stock ownership) ²	-0.144*** (3.313)	-0.145*** (3.315)
Independent director blockholder	0.007 (0.884)	0.007 (0.887)
Year fixed-effects	Yes	Yes
Industry fixed-effects	Yes	Yes
Number of Obs.	9,979	9,979
Adjusted R ²	0.398	0.398

Table IX. Firm performance regressions analysis: FIDs and Tobin's Q

The sample consists of 9,979 firm-year observations from 1998 to 2006. Panel A presents the OLS and firm fixed-effects regressions, and Panel B presents the second-stage results from 2SLS regressions. In both Panels, the dependent variable is a firm's Tobin's Q. Independent variables are as defined in the Appendix. In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for year and Fama-French 48-industry fixed effects, whose coefficient estimates are suppressed for brevity.

Panel A: OLS and firm fixed-effects regressions of Tobin's Q			
	(1) OLS	(2) OLS	(3) Firm fixed-effects
<u>Key explanatory variables:</u>			
FID indicator	-0.144*** (2.638)	-0.158** (2.542)	-0.055 (0.892)
FID indicator × Percentage of sales from FID home region		0.128 (0.361)	0.216 (0.796)
<u>Control variables:</u>			
Log(Market cap)	0.460*** (21.827)	0.459*** (21.825)	0.843*** (30.476)
R&D/Sales	1.910*** (4.872)	1.915*** (4.854)	-1.436*** (2.963)
Foreign sales percentage	-0.242* (1.959)	-0.250** (1.971)	-0.445*** (2.864)
Stock beta	-0.015 (1.073)	-0.015 (1.077)	-0.011 (1.076)
Stock return volatility	1.102*** (3.973)	1.101*** (3.972)	1.509*** (6.321)
GIM-index	-0.008 (1.014)	-0.008 (1.014)	-0.029*** (2.796)
Board size	-0.096*** (10.656)	-0.096*** (10.642)	-0.048*** (7.923)
Independent board	0.046 (0.949)	0.046 (0.954)	-0.044* (1.651)
Percentage of busy independent directors	-0.688*** (6.335)	-0.687*** (6.332)	-0.202*** (2.888)
CEO/Chair duality	-0.148*** (4.144)	-0.148*** (4.144)	-0.055** (2.562)
Directors' stock ownership	2.282*** (5.115)	2.283*** (5.114)	1.921*** (5.234)
(Directors' stock ownership) ²	-2.558*** (4.107)	-2.558*** (4.107)	-1.428*** (2.799)
Independent director blockholder	-0.040 (0.405)	-0.040 (0.406)	-0.068 (1.179)
Firm fixed-effects	No	No	Yes
Year fixed-effects	Yes	Yes	Yes
Industry fixed-effects	Yes	Yes	No
Number of Obs.	9,979	9,979	9,979
Adjusted R ²	0.412	0.412	0.797

Panel B: Second stage of 2SLS regressions		
Dependent variable: Tobin's Q	(1)	(2)
<u>Key explanatory variables:</u>		
FID indicator	-0.741*** (4.094)	-0.748*** (4.150)
FID indicator × Percentage of sales from FID home region		0.553* (1.714)
<u>Control variables:</u>		
Log(Market cap)	0.530*** (18.436)	0.530*** (18.472)
R&D/Sales	2.136*** (5.387)	2.125*** (5.348)
Foreign sales percentage	0.506** (2.170)	0.533** (2.290)
Stock beta	-0.013 (0.928)	-0.012 (0.881)
Stock return volatility	1.251*** (4.432)	1.255*** (4.450)
GIM-index	-0.028*** (2.958)	-0.028*** (2.984)
Board size	-0.010 (0.414)	-0.009 (0.393)
Independent board	0.177*** (3.112)	0.178*** (3.131)
Percentage of busy independent directors	-0.928*** (7.374)	-0.932*** (7.418)
CEO/Chair duality	-0.129*** (3.567)	-0.128*** (3.554)
Directors' stock ownership	1.671*** (3.717)	1.661*** (3.692)
(Directors' stock ownership) ²	-2.824*** (4.452)	-2.825*** (4.453)
Independent director blockholder	0.002 (0.024)	0.003 (0.028)
Year fixed-effects	Yes	Yes
Industry fixed-effects	Yes	Yes
Number of Obs.	9,979	9,979
Adjusted R ²	0.415	0.415

Table X. Announcement returns of independent director appointments

There are 91 uncontaminated announcements of foreign independent director appointments and 210 uncontaminated announcements of domestic independent director appointments. Cumulative abnormal returns (CARs) are estimated using the market model for the 3-day window (-1, +1). Date 0 is the announcement date obtained from news search in Lexis-Nexis. In parentheses are *p*-values from the tests on whether the average or median CAR is significantly different from zero. Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively.

Panel A: Identification of uncontaminated announcements of FID appointments

All announcements of appointing foreign independent directors	247
Less: Earnings announcement	45
Less: Management guidance	2
Less: CEO/CFO/Chairman/President/Vice-president turnover	28
Less: Acquisition or asset sale announcement	10
Less: Dividend or share repurchase announcement	38
Less: Security offering announcement	4
Less: Announcement of strategic alliances and joint ventures	4
Less: New products launch	2
Less: Announcement of class action law suit	1
Less: CEO rejected takeover rumor	1
Less: Multiple directors appointed	19
Less: Earnings restatement	1
Less: Debt retirement	1
Uncontaminated announcements	91

Panel B: Announcement effects of FID appointments

	Mean	Median
CAR(-1,+1) of whole sample (N=91)	-0.56%*	-0.46%**
	(0.054)	(0.015)

Panel C: Identification of uncontaminated announcements of domestic independent director appointments

All announcements of domestic independent director appointments	458
Less: Earnings announcement	46
Less: Management guidance	2
Less: CEO/CFO/Chairman/President/Vice-president turnover	14
Less: Acquisition or asset sale announcement	21
Less: Dividend or share repurchase announcement	45
Less: Announcement of strategic alliances and joint ventures	5
Less: New products launch	6
Less: CEO rejected takeover rumor	1
Less: Multiple directors appointed	108
Uncontaminated announcements	210

Panel D: Announcement effects of domestic independent director appointments		
	Mean	Median
CAR(-1,+1) of domestic independent director appointments (N=210)	0.58%** (0.019)	0.16%* (0.077)
<i>p</i> -values for tests for mean and median differences between FID and domestic independent director appointments	0.012	0.008

Table XI. Cross-sectional regression of announcement returns of FID appointments

The sample consists of 90 announcements of foreign independent director appointments. The dependent variable is the announcement-period cumulative abnormal returns (CAR) over the 3-day event window (-1, 1). The antidirector rights index is from Spamann (2010). In parentheses are t-statistics based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering (Petersen (2009)). Superscripts ***, **, and * stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. Coefficient estimates for year fixed effects are suppressed for brevity.

	Dependent variable: CAR(-1,+1)
<u><i>Firm characteristics:</i></u>	
Log(Market cap)	-0.309 (1.531)
ROA	-0.580 (0.197)
Tobin's Q	0.169* (1.809)
Percentage of sales from FID home region	1.474 (0.807)
<u><i>FID country characteristics:</i></u>	
Log(GDP per capita)	-0.030 (0.048)
GDP growth rate	0.214* (1.725)
Antidirector rights index	0.641* (1.950)
Number of Obs.	90
Adjusted R ²	0.014

Appendix: Variable definitions

Variable	Definitions
FID indicator	1 if a firm has FIDs on board and 0 otherwise.
FID percentage	The percentage of independent directors who are FIDs.
Board size	The number of directors sitting on board.
Percentage of independent directors	The percentage of directors who are independent.
Independent board (indicator variable)	1 if percentage of independent directors >50%, and 0 otherwise.
CEO/Chairman duality (indicator variable)	1 if CEO is also the Chairman of the board, and 0 otherwise.
Percentage of busy independent directors	The percentage of independent directors who hold 3 or more other directorships in the IRRC universe firms.
GIM-index	Shareholder rights index from Gompers, Ishii and Metrick (2003)
Directors' stock ownership	The aggregate percentage ownership held by all directors.
Independent director blockholder	1 if an independent director is also a blockholder and 0 otherwise.
Tobin's Q	Blockholders are investors with at least 5% share ownership in the firm. Market value of assets over book value of assets: (Compustat item 6 - item 60 + item 25 * item 199) / item 6, measured at the fiscal year end.
ROA	Operating income before depreciation (item 13) scaled by book value of total assets (item 6), measured at the fiscal year end.
Firm size	Logarithmic transformation of the market value of equity (market capitalization), measured at the fiscal year end.
R&D/sales	R&D expenses (item 46) scaled by net sales (item 12), measured at the fiscal year end.
Foreign sales percentage	Proportion of net sales that come from the operations in foreign countries, measured at the fiscal year end. The data is from the Compustat Segment database.
Stock beta	Estimated from the market model using the monthly stock returns during a fiscal year. The market index is the CRSP value-weighted return.
Stock return volatility	Standard deviation of a firm's monthly stock returns during a fiscal year.

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