# Are Foreign Directors Valuable Advisors or Ineffective Monitors?

Ronald W. Masulis*
Vanderbilt University


Cong Wang[*]
Chinese University of Hong Kong

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**Abstract:** Foreign independent directors serve on the boards of 14.6% of S&P 1500 firms over the 1998-2003 period. Using firm level fixed effects regressions, we find that companies with foreign independent directors are associated with lower firm performance measured by Tobin's Q.  Furthermore, we find that Tobin's Q is deceasing in the percentage of foreign independent directors. When firms have major foreign operations, the negative relation between foreign independent directors and firm performance is substantially weakened, but it remains negative.  At best this evidence offers weak support for the hypothesis that foreign directors offer valuable advice and is limited to firms with major foreign operations. In contrast the evidence supports the hypothesis that foreign directors in general weaken the CEO monitoring and disciplining functions of boards of directors. Consistent with this hypothesis, we also document that foreign independent directors are more likely to miss board meetings than domestic independent directors. Finally, firms with foreign independent directors, and especially when they sit on board audit committees, are more likely to have restated their financial reports. This body of evidence suggests that foreign independent directors on average are less effective monitors and contribute to weak corporate governance, and that this effect dominates the benefits realized from the advice they offer firm.

# 1. Introduction

The two major responsibilities of boards of directors are offering expert advice and hiring, firing and compensating senior management. If boards are optimally chosen, then directors should enhance a board's ability to fulfill these responsibilities. However, there are concerns that directors are not always chosen for these reasons, but instead are sometimes chosen to entrench current management. One interesting class of directors that appear to have conflicting effects on a board's ability to meet its responsibilities are foreign directors. The business press argues that foreign directors are valuable additions to boards because of their global perspective and their foreign expertise. On the other hand, given their distance from corporation offices and the greater cost of staying well informed about firm decisions, foreign directors are likely to weaken board oversight of senior management. We empirically examine the shareholder wealth effects of having foreign directors in U.S. corporations.

Klein (1998) argues that firms' economic needs determine who is appointed to sit on their boards. Some directors are placed on boards to address a firm's needs for special expertise and proprietary information. Coles, Daniel, and Naveen (2005) emphasize the advisory role of non-executive directors and document that firms with greater advisory needs, such as complex firms and diversified firms, benefit from larger boards of directors. Similarly, firms may hire foreign directors to seek their advice on business strategies on foreign operations and to benefit from their social and political connections in these foreign countries. A recent article in the *Wall Street Journal (WSJ)* points out that some U.S. companies recruit foreign directors to benefit from their experience and expertise on foreign operations. According to the *WSJ* article, Wal-Mart Stores Inc, which has 20% of its revenue from foreign operations, already has a foreign director sitting on its board, and is "actively

searching" for a second non-U.S. director.[1] Thus, foreign directors may make valuable additions to boards of corporations with existing or potentially significant foreign markets, operations, suppliers or competitors. One would expect a more positive effect on firm performance from having foreign directors on the boards of corporations where these foreign issues are important to shareholder wealth creation.

Monitoring by the board of directors is one important governance mechanism to ensure that a company is run in the interests of its shareholders, given that separation of ownership and control results in conflicts of interest between managers and shareholders in public corporations (Berle and Means (1932) and Jensen and Meckling (1976)). However, there are several concerns with the effectiveness of this mechanism. First, Jensen and Meckling's agency theory highlights a fundamental weakness with boards of directors, namely, that directors, like managers, are agents expected to pursue their private interests, which at times will conflict with the interests of shareholders. Second, there is substantial empirical research showing that boards do not always act in shareholders' best interests. This concern is especially serious for insider directors and to a lesser extent, outside directors with familial and financial ties to management, often termed "gray directors". Generally speaking, the corporate governance literature considers outside directors without direct ties to senior management, commonly termed "independent directors", the most effective monitors of management. However, the empirical evidence supporting this position is mixed.[2] We conjecture that not all independent directors are equally effective monitors, consistent with a

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[1]  Lublin, "Globalizing the boardroom", the *Wall Street Journal*, October 31, 2005.
[2] We classify directors into inside directors, gray directors and independent directors. Inside directors are the company's executives and officers. Gray directors generally have familial or financial ties to management. Independent directors are those who have no affiliations that may comprise their ability or incentives to perform oversight duties for the best interests of shareholder. Since the monitoring function of a board largely comes from independent directors, we only focus on them.

recent study by Fich and Shivdasani (2005). We extend their work by examining the effectiveness of foreign directors, rather than busy directors.

Recent corporate scandals in the U.S. by large public companies such as Enron, Tyco, Adelphia, and Worldcom raise questions about what are the important characteristics that lead boards of directors to fulfill their fiduciary duties and safeguard shareholder interests. Table 1 lists the names, primary employers, and home countries of Enron's independent directors during fiscal years from 1997 to 2001, the period when Enron committed the high profile accounting fraud. On the surface, the board looks very strong from a management oversight perspective, with a large majority of directors being independent. One interesting aspect of the Enron board is that two independent foreign directors were on the board and they were both members of Enron's audit committee during 1997-2001 when Enron committed serious earnings misstatements. [3] This raises important questions about the effectiveness of the management oversight function performed by independent directors, and foreign directors in particular.

What is the impact of foreign independent directors on firm value? How prevalent are foreign independent directors on the boards of U.S. public companies? Are foreign independent directors as effective monitors as domestic independent directors? Are there circumstances when appointing foreign independent directors is beneficial for firm performance? These are the crucial questions explored in this study.

One important function of independent directors is to monitor senior management. Foreign independent directors may not be as effective monitors as U.S. independent directors for several reasons. First, substantial oversight costs associated with the long geographic distance between a director's home and the company's headquarter reduces foreign directors'

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[3] As shown in Table 1, the two foreign directors are: Ronnie C. Chan, chairman of the Hang Lung Group in Hong Kong; and Paulo V. Ferraz Pereira, a senior executive of Group Bozano in Brazil.

ability to closely monitor management. To effectively oversee senior management, directors have to commit their time to attend regular board meetings. These oversight costs are likely to increase if the director lives far away from the firm on whose board he or she sits. Consistent with this argument, Lerner (1995) finds that venture capitalists are less likely to sit on boards of distant portfolio firms. Similarly, the time and energy spent on cross-border travels are likely to place excessive burden on foreign directors, potentially undermining their incentives and ability to effectively monitor senior management.[4] Second, many foreign directors are not familiar with the accounting standards, laws and regulations in the U.S., and lack the necessary knowledge to evaluate and challenge senior managers' decisions. Third, foreign director managers may be poorly versed in U.S. management methods, which may make it more difficult for them to evaluate the performance of U.S. senior managers. Fourth, if foreign directors come from countries with poor investor protections and weak standards of law enforcement, they may be insensitive to poor corporate governance policies. In contrast, directors residing in the U.S. are more likely to push for more rigorous corporate governance standards, given that the U.S. has stronger shareholder rights and higher law enforcement standards than most foreign countries (La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998), hereafter LLSV). In sum, we hypothesize that foreign directors contribute to less effective monitoring and disciplining of senior management, which enable managers to pursue their private benefits with less concern for the consequences. These increased agency costs are expected to lower firm performance.

An examination of S&P 1500 firms from 1998 to 2003 shows that foreign independent directors are present in 14.6% of these sample firm-years. Boards with foreign

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[4] In an interview with 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 some one 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."

directors on average have one fifth of their independent directors drawn from foreign countries, representing 13% of all board members. This is significant percentage of independent directors given that on average independent directors represent only 63% of board members. Thus, if foreign independent directors are less effective than their domestic counterparts, then the average proportion of active independent directors able to closely monitor management on shareholders' behalf drops from 63% to 50%. [5]

To examine whether foreign independent directors are effective monitors, we conduct three tests. In the baseline test, we estimate a firm-level fixed effects regression of firm value on the extent that foreign independent directors are on the board. The results show that firms with foreign independent directors have lower firm value, proxied by Tobin's Q. Moreover, Q is decreasing in the percentage of independent directors who come from foreign countries. The negative relation between foreign independent directors and Tobin's Q is robust to controlling for other determinants of Q, including firm size, growth options, operating performance, leverage, ownership structure and other board characteristics. However, the negative relation between foreign directors and Q is partially mitigated when firms have substantial foreign operations. This evidence suggests that foreign directors may play a more beneficial advisory role under these circumstances.

In further analysis of the relation between foreign directors and firm value, we rule out an alternative explanation for our empirical findings—reverse causality. It is possible that poorly performing managers appoint weak monitors, such as foreign directors, to entrench themselves. To investigate this possibility, we focus on the appointment of new independent directors and examine whether prior poor performance leads to the appointment of foreign

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[5] Fich and Shivdasani (2005) present evidence that busy directors are not effective monitors of management. Since on average 20% of firms' independent directors are busy directors, when combined with foreign independent directors, the proportion of active independent directors able to closely monitor management drops to substantially below 50%. Detailed summary statistics are presented in Table 2.

independent directors. In a logit regression of 5,810 independent director appointments between 1998 and 2003, we find that prior poor performance does not increase the likelihood of appointments of foreign directors. Therefore, the negative relation between foreign directors and firm value is unlikely to be driven by reverse causality.

In our second test, we investigate how the attendance records of foreign independent directors at board meetings differ from those of domestic independent directors. We find that foreign directors are two times more likely to miss 25% or more board meetings than domestic directors. This evidence supports the argument that geographic separation of director offices from firms' headquarters increases foreign directors' oversight costs and weakens their incentives and ability to closely monitor senior management.

Finally, we examine whether firms with foreign independent directors are more likely to misreport their earnings. The results show that firms with foreign independent directors are more likely to misstate earnings, and especially when they sit on board audit committees, where they would be unlikely to make a serious contribution to the oversight of the financial accounting reports. In summary, the evidence suggests that foreign directors are associated with weaker managerial monitoring and reduced effectiveness of the board as a corporate governance mechanism.

Our study contributes to the literature on corporate governance by analyzing an important dimension of board qualities—the presence of foreign directors. Previous research has focused on board independence as a proxy for board effectiveness and found mixed evidence of the importance of this board characteristic. [6, 7] Our study complements this

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[6] For example, see Weisbach (1988), Rosenstein and Wyatt (1990), Byrd and Hickman (1992), Cotter, Shivdasani and Zenner (1997), Bhagat and Black (1999), and Hermalin and Weisbach (2003).
[7] Other papers on board include studies on CEO/Chairman duality (Goyal and Park (2002), Masulis, Wang and Xie (2007)), board meeting frequency (Vafeas (1999)), the directors and officers (D&O) liability insurance (Core (2000)), the stock-based compensations of directors (Perry (1999), Yermack (2004)), the related-party transactions between firms and their directors(Gordon, Henry and Palia (2004), Kohlbeck and

literature by showing that independence is not enough to ensure effective monitoring and that additional director attributes contribute to the quality of oversight of a firm's senior management.

The remainder of the paper is organized as follows. Section 2 investigates whether foreign independent directors are related to firm value. Section 3 presents the tests on board meeting attendance. Section 4 examines the effect of foreign independent directors on earnings restatements. Section 5 concludes the paper.

## 2. Baseline test-Foreign directors and Tobin's Q

Our primary test focuses on the relation between foreign directors and firm value. If foreign directors contribute to lax monitoring, managers are more likely to engage in shirking and self-dealings and these increased agency costs will reduce firm value. We use Tobin's Q to measure firm value. The Q regression has been widely used in the corporate governance literature, including studies on the effects of ownership structure (Demsetz and Lehn (1985), Morck, Shleifer and Vishny (1988), McConnell and Servaes (1990), Himmelberg, Hubbard and Palia, (1999)), board size (Yermack (1996)), busy boards (Ferris et. al. (2003), Fich and Shivdasani (2005)), founding family ownership (Anderson and Reeb (2003), Villalonga and Amit (2005)), and shareholder rights (Gompers, Ishii, and Metrick (2003), Bebchuk, Cohen, and Ferrell (2004), Bebchuk and Cohen (2005)).

2.1 Sample construction

We start with the universe of firms in the Investor Responsibility Research Center (IRRC) director database, which covers firms in the S&P large-cap (500), mid-cap (400) and

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Mayhew (2005)), and how busy the directors are (Ferris, Jagannathan, and Pritchard (2003), Fich and Shivdasani (2005)). See Hermanlin and Weisbach (2003) for a survey of the literature.

small-cap (600) indices. The sample period is from 1998 to 2003. Beginning in 1998, IRRC recorded a director's primary employer and country of origin, the key information we use to identify foreign directors. The coverage of some other important director information, such as the director's shareholding and the director's committee affiliation, also started in 1998. We match the IRRC sample with Compustat to obtain company financial information. After excluding ADRs and firms incorporated in foreign countries, we have 7,533 firm-years in the sample.

## 2.2 Variable definitions and summary statistics

We calculate Tobin's Q as the market value of assets over the book value of assets. Following Kaplan and Zingales (1997) and Gompers et. al. (2003), the market value of assets is computed as the book value of total assets (Compustat item6) plus the market value of common stock (item25*item199) less the sum of the book value of common stock (item60) and balance sheet deferred taxes (item74).

All the director information is obtained from the IRRC director database. 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 affiliations that may compromise their ability or incentives to perform oversight duties for the best interests of shareholders. The remaining are gray directors.[8] Since the monitoring function of the board largely comes from independent directors, we focus exclusively on whether foreign independent directors are effective monitors.

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[8] According to IRRC, gray directors include "a former employee of the company or of a majority-owned subsidiary; a provider of professional services—such as legal, consulting or financial—to the company or an executive; a customer of or supplier to the company, unless the transaction occurred in the normal course of business; a designee under a documented agreement between the company and a group, such as a significant shareholder; a director who controls more than 50% of the company's voting power (and thus, would not be considered to represent the broader interests of minority shareholders); a family member of an employee; an interlocking directorship or an employee of an organization or institution that receives charitable gifts from the company".

We define foreign directors as individuals whose primary places of employment are outside the U.S. and its territories and retired individuals whose last places of employment were outside the U.S.[9] We create two measures to capture the extent of foreign director presence. The first is an indicator variable, which is one if at least one foreign independent director sits on the board, and zero otherwise. The other is the percentage of independent directors who are foreign directors. We expect these two variables to be negatively associated with Tobin's Q.

The summary statistics are shown in Table 3 and based on all the 7,533 firm-year observations. During 1998 to 2003, 14.6% of the firm-year observations have at least one foreign independent director. The average percentage of foreign independent directors is relatively small due to the fact that nearly 85% of the observations have no foreign independent directors. However, among boards with foreign directors, on average, nearly one fifth of their independent directors come from foreign countries. A typical foreign board has one foreign independent director, and the number ranges from 1 to 4.

In the Q regressions, we also control for other board attributes, firm ownership structure and firm characteristics that are documented in prior studies to affect firm value. The board characteristics we control for include board size, board independence, CEO/Chairman duality and percentage of busy independent directors, four attributes shown in prior work to affect how effectively a board functions. Yermack (1996) documents an inverse relation between board size and firm value. To capture this board size effect, we include the log of the number of directors on the board. While there is no consensus on whether a more independent board leads to better overall firm performance (Bhagat and

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[9] We recognize that retired foreign directors may have part time homes in the U.S. and some domestic executive directors work for U.S. firms' foreign divisions and thus are primarily based outside the U.S. We do not have information to further identify these cases. However, such cases would bias against our finding significant differences between foreign directors and domestic directors.

Black (1999) and Hermalin and Weisbach (2003)), we nevertheless control for the percentage of independent directors in the Q regression so that our results are comparable to those in prior studies. Prior studies also find that firms which combine the positions of CEO and Chairman are less likely to act in the best interests of shareholders when replacing a poorly performing CEO (Goyal and Park (2002)) or making acquisitions (Masulis, Wang and Xie (2007)). We create an indicator that equals one if a firm's CEO is also chairman of the board (COB), and zero otherwise. Finally, Fich and Shivdasani (2005) find that firms with busy boards have lower firm value. To reflect this concern we include the percentage of independent directors that are busy. We define busy directors as individuals serving on three or more boards that belong to the IRRC universe. [10]

In the Q regressions, we also control for firm ownership structure. Specifically, we include the percentage of a firm's common stock that is held by all the executives who sit on the board. We expect it to have a positive coefficient (Jensen and Meckling (1976), Yermack (1996)), reflecting better incentive alignment with shareholders. To account for the potential nonlinearity between firm value and insiders' share holdings (Morck et. al. (1988), McConnell and Servaes (1990)), we also include quadratic and cubic terms of insiders' stock ownership. Finally, we include aggregate stock ownership held by blockholders who are also independent directors. Blockholders are those who own at least 5% of the firm. Shleifer and Vishny (1986) argue that the presence of large shareholders can mitigate the agency problem between managers and shareholders, since investors holding a large block of shares have incentives to monitor the managers more intensively, overcoming the free-rider problem plaguing companies with diffuse ownership structures. The incentive to monitor should be particularly strong when a blockholder also sits on the board as an independent director.

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[10] This definition is slightly different from Fich and Shivdasani (2005) in that they count directorships in any publicly traded firms.

Therefore, we expect the aggregate stock ownership held by all independent director blockholders to be positively related to firm value.

The firm characteristics we control for include firm size, return on assets (ROA), leverage, growth options, and foreign operations, all defined at the prior fiscal year-end. Firm size is defined as the natural log of total assets. ROA is EBITDA over total assets. Leverage is the book value of all debts over total assets. Since Tobin's Q may also proxy for a firm's investment opportunities, it is important to control for growth options in the Q regressions. We measure growth opportunities by capital expenditures over total assets. Using R&D as an alternative measure for growth options generates similar results.

Finally, firms may hire foreign independent directors to obtain their advice on global expansion and foreign operations. Denis, Denis and Yost (2002) present evidence that globally diversified firms trade at a discount. Therefore, without controlling for global diversification, any negative relationship between the presence of foreign directors and firm value may be spurious. We define the degree of global diversification as the proportion of a firm's sales derived from foreign operations. Firms' foreign sales are obtained from Compustat's Geographic Segment data. [11]

The Appendix presents the detailed definitions for all of the aforementioned variables and Table 2 reports their summary statistics. The typical firm in our sample has 9 directors sitting on its board, two thirds of which are independent directors. The CEO and Chairman are the same person in 64% of firm-years. On a median board, about 19% of independent directors are classified as busy directors. This number is lower than that reported by Fich and Shivdasani (2005). There are two possible explanations for this difference. First, IRRC only includes directorships in the S&P 1500 universe of firms, while Fich and Shivdasani count

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[11] U.S. firms are required to report geographic segments that account for 10% of consolidated sales, profits, or assets. For a detailed description of Compustat's Geographic Segment data, please refer to Denis, et. al. (2002).

directorships in any publicly traded firms. Second, Fich and Shivdasani focus on *Forbes* 500 firms, while IRRC primarily covers a broader range of firms in the S&P 1500 index. The *Forbes* 500 firms on average are much larger than the average firm in IRRC, and larger firms tend to hire more directors sitting on multiple boards. Panel B of Table 2 lists the summary statistics for the ownership variables. The median insider stock ownership is 2%. Independent director blockholders occur in only 4% of the sample. Finally, the median firm has a Tobin's Q of 1.37 and obtains 8% of its total sales from foreign operations.

In the last two columns of Table 2, we also report the simple correlations between the explanatory variables and our two foreign director measures. Firms with larger board size and higher percentages of busy independent directors are more likely to have foreign directors. Furthermore, there is a negative correlation between foreign directors and insider ownership, and a positive correlation between foreign directors and firm size, leverage, age, and foreign operations.

2.3 Regression Results

We use a firm-level fixed effects regression to control for unobservable firm characteristics that might simultaneously affect the likelihood of foreign directors and level of firm performance. This approach is used by Himmelberg et. al. (1999) to examine the link between ownership and performance, and more recently, by Fich and Shivdasani (2005) to analyze the impact of busy boards on firm value. Besides firm-level fixed effects, we also include year fixed effects in the regression models. To reduce the impact of outliers, we winsorize all continuous variables at the 1st and 99th percentiles. The results are shown in Table 3. In parentheses are *p*-values based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering. In model (1), the estimate for the foreign director indicator is -0.091 and is significant at the 10% level, suggesting that firms with foreign

independent directors have lower Tobin's Q than firms with only domestic independent directors. In model (2), the foreign director indicator is replaced with the percentage of independent directors who are from foreign countries. The coefficient of the foreign director percentage is negative and significant with a *p*-value of 0.023. These findings are consistent with the conjecture that foreign independent directors are related to lower firm value.

As shown in Table 3, both the magnitude and statistical significance of the parameter estimates for the control variables across the four specifications are fairly stable and generally consistent with the findings in prior studies. For board characteristics, we find that the percentage of busy independent directors is significantly and negatively related to Tobin's Q. Board size is also negatively related to Tobin's Q and is significant in two of the specifications. CEO/Chairman duality has a negative effect on Tobin's Q, though it is statistically insignificant. Finally, the percentage of independent directors is not significantly related to Tobin's Q.

For the ownership variables, both the linear and cubic terms for insiders' stock ownership have positive and significant coefficients, while the estimate of the quadratic term is negative and significant. The estimated coefficients of these three terms indicate that firm value is at first increasing in insiders' share holdings up to 16%. Between 16% and 32%, firm value is negatively related to insiders' ownership, suggesting the entrenchment effect starts to dominate the alignment effect. Above 36%, insider holdings have a positive effect on firm value again. This pattern is generally consistent with the nonlinear relation between board ownership and firm value documented by Morck et. al. (1998), except that the inflection points they find are 5% and 25% respectively. The results in Table 4 also show that the aggregate stock ownership held by independent director blockholders is significantly and positively associated with Tobin's Q. Finally, among firm characteristics, firms with better operating performance (ROA) have significantly higher Tobin's Q, while firms with higher

levels of foreign operations have significantly lower firm value. CapEx has a significant and positive coefficient, suggesting that firms with more growth options have higher market values.

To test whether foreign independent directors play a positive advisory role among firms with foreign operations, we construct interaction terms between the two foreign director variables and the foreign operation measure. The regression results are presented in column (3) and (4) of Table 3. In model (3), the coefficient of the interaction between the foreign director indicator and the foreign operation measure is positive and significant at the 10% level. More interestingly, the foreign director indicator is still negative and becomes more significant after controlling for the interaction term. The evidence suggests that the negative effect of foreign directors on firm value is partially mitigated if the firm has foreign operations. However, the parameter estimates suggest that only when a firm has more than 60% of total sales from foreign operations can the positive effect of foreign independent directors' advisory services outweigh the negative impact of their weak monitoring. Since the mean of foreign operations in the entire sample is only 19%, the total effect of foreign independent directors on firm value, on average, is still negative. Furthermore, if a firm has no foreign operations, the negative incremental effect of foreign independent directors on firm value is much larger than that documented in model (1) of Table 3.

Similarly, in regression (4), the coefficient of the interaction term between the percentage of foreign independent directors and foreign operations is positive and significant. At the same time the coefficient on the percentage of foreign independent directors remains negative and becomes more significant ($p$-value decreases from 0.023 to 0.009). In summary, we uncover evidence that foreign independent directors can play a valuable advisory role in

firms with substantial foreign operations, which potentially mitigates the negative impact of foreign directors on firm value.[12]

2.4 Treating Canadian directors as U.S. directors

In this subsection, we classify Canadian directors as equivalent to U.S. domestic directors. There are two reasons to conduct this additional test. First, Canada is adjacent to the U.S. Since most major Canadian cities are near the U.S. border, the oversight costs due to geographic distance are much less of an issue for Canadian directors than for directors from other countries. 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 America and Canada are common-law countries; both countries have the same level of shareholder rights index and similar accounting disclosure quality; and both countries have strong systems of law enforcement (LLSV(1998)). Therefore, it is reasonable to assume directors who come from Canada are as effective in monitoring U.S. managers as domestic directors. After we treat Canadian directors as domestic directors, the proportion of firm-years with at least one foreign independent director sitting on the board drops from 14.6% to 12.5%.

Table 4 presents the regression results of this reclassification of Canadian directors. As shown in column (1) and (2) of Table 4, the negative relation between the two foreign

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[12] Compustat classifies firms' geographic segments into seven regions, i.e. Europe, Asia, Africa, Pacific, South America, Middle East, North America, and Other Foreign. We group a foreign director's home country into one of these seven regions and find that if a firm has a foreign independent director and at the same time operating activities in foreign countries, in 93% of the cases, the foreign director comes from the same region where the foreign operations are located. We create a dummy variable for such cases and interact this variable with foreign operations. We find that the estimated coefficient is very similar to that of the interaction between foreign director indicator and foreign operations, both economically and statistically. We choose to use the latter one, because it is possible that even though the foreign director does not come from the same region where the firm's foreign operations are located, he or she may still have expertise and information advantages over domestic directors due to culture and historical reasons. For instance, a director from France may be familiar with the local culture and market conditions of an African country that is a former colony of France.

director variables and Tobin's Q becomes more pronounced, both economically and statistically. For example, the coefficient on the foreign director indicator is -0.144 (*p*-value=0.019), compared to -0.091 (*p*-value=0.077) in Table 3; and the coefficient on the percentage of foreign independent directors is -0.670 (*p*-value=0.010), compared to -0.556 (*p*-value=0.023) in Table 3. In column (3) and (4) of Table 4, we also control for the interactions between the two foreign director variables and foreign operations. The coefficient estimates on these interactions are larger in magnitudes and statistically more significant than those presented in Table 3. For other control variables, the estimates and significance levels are very similar to those reported in Table 3.

In summary, the initial conclusion concerning the effect of foreign directors on firm value is strengthened when Canadian directors are treated as equivalent to U.S. domestic directors. This suggests that directors from Canada share clear similarities with U.S. domestic directors in the effectiveness of monitoring management. Treating them in the same way as other foreign directors lowers the power to detect the effect of foreign directors on firm value. On the other hand, this evidence also reinforces our hypothesis that higher oversight costs due to large distance and lack of strong governance skills or awareness appear to undermine foreign directors' ability to effectively monitor U.S. managers.


2.5 Other sensitivity tests

As a robustness check, we use a different calculation of Tobin's Q. Following Smith and Watts (1992), we compute the numerator, which represents the market value of total assets, as the book value of total assets (Compustat item 6) plus the market value of common stock (item 25*item 199) less the book value of common stock (item 60). The regression

results are very similar to those presented in Table 4. We also use industry-adjusted Q and the results are qualitatively similar.[13]

As an alternative measure of firm performance, we also consider accounting based measures. Specifically, we use the annual return on assets (ROA), which is defined as EBITDA (item 13) over the book value of total assets (item 6), as the dependent variable. However, the estimated coefficients for the foreign director indicator and the percentage of foreign independent directors are not significant. The *t*-statistics are never greater than one. We also use different definitions of ROA, including the ratio of EBIT over total assets, net income over total assets, and their industry-adjusted forms. These alternative measures also yield insignificant results for foreign director variables. One possible explanation for the lack of significance in the ROA regressions is that accounting numbers are very short-term in nature and more vulnerable to managerial manipulation. In section 4, we do find that firms with foreign independent directors are more likely to misstate their earnings, which is consistent with this concern.

Finally, the negative relation between Tobin's Q and foreign directors is robust to: (i) measuring firm size by net sales (item 12) or market value of assets; (ii) measuring growth options by R&D over total assets; (iii) replacing aggregate stock ownership held by all independent director blockholders with the number of independent director blockholders or with an indicator variable that is one if there is at least one independent director blockholder; (iv) excluding firms in financial and utility industries; (v) replacing the CEO/Chair duality indicator variable with another indicator that is equal to one if a non-employee serves as Chairman of the board, and zero otherwise; (vi) replacing the level of foreign operations with an indicator that is equal to one if the firm has foreign operations, and zero otherwise.

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[13] A firm's industry-adjusted Q is defined as its raw Q minus the median Q in the firm's Fama-French (48) industry in the observation year.

2.6 Endogeneity

The firm-level fixed effects regression only controls for potential omitted variables. However, another form of endogeneity problem, reverse causality, is still left unaddressed. An alternative explanation for the prior results is that poorly performing managers appoint ineffective monitors, such as foreign directors, to entrench themselves. If this is the case, then the conclusion should be that it is a lower Tobin's Q that leads to the appointment of foreign directors to the board. To address this possibility, we use a logit model to examine which factors contribute to the appointment of foreign independent directors.

The IRRC database provides the year in which the director begins his or her board service. Using this information, we examine 5,810 independent director appointments from 1998 to 2003. Among these newly appointed independent directors, 181 (approximately 3%) come from foreign countries. The null hypothesis is that poor performance measured by past Tobin's Q is associated with more foreign director appointments. In the logit regression model, the dependent variable is one if a foreign independent director is appointed and zero if a domestic independent director is appointed.

The explanatory variables in the logit model include the appointing firm's financial characteristics and governance structure for the year before the appointment, and the appointee's personal characteristics at the time of appointment. Firm financial characteristics include firm size, leverage, foreign operations, and, most importantly, Tobin's Q, all measured in the year prior to the appointment year. The governance variables are the same as those in the Tobin's Q regressions in Table 3. Finally, the foreign director's personal characteristics may also affect the probability that a new board membership is offered and accepted. For example, if a foreign director is as busy as a domestic director, i.e. they have the same number of other board memberships, the domestic director is more likely to be

favored over the foreign director. This follows because the foreign director has to spend more time and energy on the cross-border trips, making the position more costly to perform from the foreign director's perspective. Other director characteristics that we control for are: (i) a "senior" director indicator (directors who are 70 or more years old); (ii) and an indicator if the director is CEO of another firm.

The logit model estimates are reported in Table 5. Model (1) and (2) use data on all the independent director appointments. Model (3) and (4) present regression results based on a subsample in which board structure information for the recruiting firm is available during the 12 months prior to when the new director joins the board. This second restriction reduces the sample size to 3,579 new appointments, among which 111 (approximately 3%) are appointments of foreign independent directors. In both regressions, we control for year and Fama-French 48 industry dummies.

In the first two specifications, we only include the Tobin's Q of the fiscal year preceding the appointment, i.e. $Q_{t-1}$. In regression (3) and (4), we also control for $Q_{t-2}$. As shown in Table 6, neither $Q_{t-1}$ nor $Q_{t-2}$ has a significant coefficient estimate in any of the four specifications. Therefore, prior performance does not appear to contribute to the appointment of a foreign independent director. In all the regressions, the coefficient estimates of foreign operations are positive and highly significant, suggesting that firms hire foreign directors because of their expertise on foreign operations.

Among other firm characteristics, firm size also has a positive and significant coefficient in the first two regressions. For the appointee's characteristics, we find that the number of other IRRC board memberships reduces a foreign director's chance of joining the board. This is consistent with the conjecture that higher oversight costs make a busy foreign director unattractive. Alternatively, busy foreign directors may be reluctant to join a U.S.

board due to time commitment. Finally, the results from the last two specifications show that a board with a lower percentage of independent directors and a higher percentage of busy directors is more likely to hire a foreign director.

As a robustness check, we use alternative measures of a firm's past performance, including industry-adjusted Tobin's Q, raw ROA, and industry-adjusted ROA. None of these measures has a significant coefficient. We also classify Canadian directors as U.S. domestic directors and re-estimate the logit regressions. Again, past performance measures do not have significant coefficients. In summary, it is unlikely that poor prior performance leads to the appointment of foreign independent directors, i.e. the negative relation between foreign independent directors and firm value is unlikely to be the result of reverse causality.

We also recognize a specific endogeneity issue associated with firm fixed effects models, i.e. within-firm board composition changes might be endogenous. For example, when a U.S. firm successfully acquires a relative large foreign target, some directors from the target board normally join the board of the U.S. firm. If the addition (or reduction) in the numbers of foreign independent directors is due to large foreign acquisitions, then the negative effects documented in the previous sections may just reflect the impact of these acquisitions on firm performance. To rule out this alternative explanation, we obtain a list of bidders from SDC that acquired at least one foreign target during our sample period. We also require that deal value exceeds 5% of the bidder's size, so that some target board members are likely to be appointed to the board of the combined firm. There are a total of 167 acquiring firms during 1998 to 2003. We exclude these companies from our sample firms and re-estimate the Q regressions in Table 3 and obtain very similar results (unreported, but available on request). Therefore, the negative relation between foreign independent directors and firm performance is unlikely to be the result of large foreign acquisitions.

### 3. Board meeting attendance

In this section, we conduct another more direct test to assess whether foreign independent directors are effective monitors. Specifically, we focus on directors' attendance records at board meetings. Foreign directors conceivably have information disadvantages over domestic directors, because when they join the board of a U.S. firm, they must face different market conditions, unfamiliar accounting standards, and U.S. laws and regulations. One way for foreign directors to alleviate the asymmetric information problem and more effectively fulfill their duties to monitor management is to regularly attend board meetings. However, the long geographic distance substantially increases the time and energy spent by a foreign director commuting to the meetings. This higher transportation cost creates a disincentive for foreign directors to regularly attend board meetings and undermines their ability to closely monitor senior management. Indeed, a director's attendance record has been used by institutional investors to evaluate a director's performance. Directors who are unable to attend regular board meetings are often criticized as being ineffective monitors by institutional shareholders and other business commentators.

U.S. publicly listed firms are required to disclose a director's board meeting attendance record in their annual proxy filings. However, firms are only required to list the directors who attended less than 75 percent of board meetings during the past fiscal year. This information is also recorded in the IRRC director database. We focus on the attendance records of all independent directors and create a variable that is one if the independent director attended *less* than 75 percent of board meetings during the fiscal year, and zero otherwise. We use this indicator as the dependent variable and conduct a logit regression. The key explanatory variable is an indicator for foreign independent directors. We also include an indicator variable for directors from Canada. The unit of observation for the logit regressions is director-firm-year. We exclude any directors who have recently joined the

board within the last 12 months. These newly appointed directors inevitably miss some board meetings within the appointment year even though they may attend all meetings after joining the board. By requiring firms to also have financial data available from Compustat, we further reduce our sample to 44,660 director-firm-year observations.

In Panel A of Table 6, we first present a comparison of the characteristics of foreign independent directors and domestic independent directors. As shown in the first row, 7% of foreign independent directors attend less than 75% of board meetings, while 3% of domestic independent directors fall into this category. The difference is significant at 1% level. We also assess the differences in other director characteristics, including director age, number of IRRC board memberships, CEO director, and director stock ownership. The table shows that there is no significant difference in director age. However, on average, foreign directors are more likely to be the CEOs of other firms, though economic difference is rather small (21% of domestic directors compared to 23% of foreign directors). In addition, U.S. directors on average hold 0.3 more IRRC directorships than foreign directors. Finally, foreign directors' stock ownership is significantly less than that of domestic directors.[14]

Panel B of Table 6 presents logit model estimates. In model (1) we use the entire sample, i.e. all the 44,660 director-firm-year observations in which firm financial data is available for the fiscal year when the director's attendance is recorded. Model (2) is based on 33,776 director-firm-year observations in which the firm also has available board data. In both specifications, the estimated coefficients of the indicator for directors from foreign countries are positive and highly significant, suggesting that foreign directors are more likely to miss board meetings than domestic directors. However, among foreign directors, directors

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[14] This difference may be due to the difference in firm size. Large firms tend to hire foreign directors and directors in large firms hold less stock than directors in small firms because of wealth constraints. We also compare the foreign directors' stock ownership to that of domestic directors sitting on the same board. The difference is not significantly different from zero, both for the mean and median test.

from Canada are less likely to miss board meetings, as indicated by the negative and significant coefficient of Canadian director indicator in column (2). For directors' other characteristics, we find that directors who are also CEOs of other firms and directors who have a higher number of other board memberships are more likely to miss board meetings. This is consistent with the argument that CEO-directors may be more distracted by the day-to-day operations in their own firms (Booth and Deli (1996)) and directors sitting on several boards are more likely to over-commit their time, which undermines their ability to closely oversee senior management (Fich and Shivdasani (2005)).[15]

Among firm characteristics, we observe that independent directors in large firms and/or older firms have better attendance records than those in small and/or young firms. Large and/or older firms are subject to more scrutiny from news media, security analysts and institutional investors and thus, the reputation costs of missing regular board meetings for individual directors are higher.[16] Alternatively, large and old firms may have the ability to attract better independent directors, who commit to consistently showing up at regular board meetings.[17] The estimated coefficient of leverage is insignificant in the full sample, but is positive and significant for the smaller sample. A possible explanation for the positive coefficient is that leverage acts as another governance mechanism and it is a substitute for intensive monitoring by independent directors. Of the board characteristics and ownership structure variables included in model (2), only board size and aggregate stock ownership held by insiders have significant coefficients. Specifically, independent directors sitting on large

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[15] We discover one source of costs of hiring a CEO-director or a director sitting on multiple boards. On the other hand, CEO-directors might be valuable because of their unique expertise and talents (Fich (2005)). Busy directors might also benefit the firm if the number of directorships measures a director's experience and reputation (Fama (1980), Fama and Jensen (1983), Ferris, Jagannathan, and Pritchard (2003)).

[16] These costs include a higher probability to be dismissed and the lost meeting fees which tend to be much higher in large firms than in small firms.

[17] 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 the level of foreign operations has an estimated coefficient of virtually zero with $p$-value over 0.5, and adding this variable does not affect other parameter estimates.

boards have a higher propensity to miss board meetings than those sitting on small boards. This result complements prior evidence that the free-riding problem is more acute on large boards than on small boards (Lipton and Lorsch (1992), Jensen (1993), Yermack (1996), Eisenberg, Sundgren, and Wells (1998)). The coefficient estimate for aggregate insider stock ownership is positive and significant at the 1% level, suggesting that senior managers with greater stock ownership are more aligned with shareholders and hence require less intensive board monitoring.

Finally, we recognize that attending regular board meeting is not a sufficient condition for an independent director to be an able monitor. This is especially true when the CEO controls the flow of information before and during board meetings. Of course, independent directors can seek more information by visiting the company headquarters and meeting with other senior managers (Lerner (1995)). However, these actions represent substantial oversight costs, especially for foreign directors who face much more travel time to the firm's headquarters, as suggested by the poor board meeting attendance records.

## 4. Foreign directors and earnings restatements

As a further test of the monitoring effectiveness of foreign directors, we next examine whether the presence of foreign directors increases a firm's propensity to misreport earnings. Managers have incentives to overstate earnings to meet or beat analysts' forecasts, increase the value of their stock and stock option holdings, and avoid being fired due to bad performance.

We obtain a list of firms that have recently restated their financial statements from a report compiled by The General Accounting Office (GAO).[18] The GAO report lists 919 restatement announcements by all U.S. companies for the period from January 1997 to June 2002. Firms in this list restated their financial reports due to accounting irregularities. Burns and Kedia (2005) extend this list for S&P 1500 firms through the end of 2002. The GAO report provides the names of restating firms and the year during which the restatements are announced. We obtain the fiscal years and quarters that were misreported and the direction of the restatements from Burns and Kedia (2005).[19] We match the restatement sample with the IRRC director database to obtain 195 firm-years with misreported earnings. This approximately represents 3% of the 6,004 firm-years, which is similar to the percentage of misstatement firm-years reported by Burns and Kedia (266 misreporting firm-years out of a sample of 8,208 firm-years).

To examine what factors have impacts on misreporting, we use a logit model and present the regression results in Table 7. The dependent variable is one if a firm misreported earnings during the firm-year, and zero otherwise. In model (1), the key explanatory variable is the foreign director indicator. Its coefficient is positive and highly significant. In model (2), the foreign director indicator is replaced with the percentage of foreign independent directors. The estimated coefficient for this variable is also positive and significant. These results suggest that firms with foreign independent directors sitting on boards are more likely to misreport earnings.

In model (3), we construct a second indicator variable that is one if at least one foreign independent director sits on the audit committee at the time of misstatement and zero

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[18] For a detailed discussion of the GAO data, please refer to Burns and Kedia (2005). Burns and Kedia examine the effect of CEO's equity-based compensation on misreporting and obtain their restatement sample primarily from the GAO report.
[19] We thank Natasha Burns and Simi Kedia for kindly sharing their data.

otherwise. The primary function of the audit committee is to oversee a firm's financial reporting process. Therefore, a foreign director sitting on the audit committee may have a greater impact on misreporting. As shown in column (3), the foreign audit committee indicator also has a positive coefficient that is significant at the 1% level. Finally, in model (4) we control for the percentage of audit committee members who are foreign independent directors. The estimated coefficient of this variable is 1.766 and is significant at below the 5% level.

To measure audit committee independence, we include an additional indicator variable that equals one if all the audit committee members are independent directors, and zero otherwise. The Sarbanes-Oxley Bill, passed in October 2002, specifically requires U.S. public firms to have their audit committees comprised entirely of independent directors. However, consistent with Agrawal and Chadha (2005), the estimated coefficient for the audit committee independence indicator is not significant in any of the four specifications. This may reflect the fact that independence is not closely correlated with accounting expertise and monitoring intensity.[20]

The remaining control variables are identical to those included in previous regressions. Ownership variables and other board characteristics are not significantly related to the likelihood of a firm misstating its earnings. For firm characteristics, we find that larger firms, older firms and firms with higher debt levels have a higher propensity to misreport.[21,][22]

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[20] Agrawal and Chadha (2005) find that firms whose boards or audit committees have an independent director with financial expertise are less likely to restate earnings.

[21] Firms with higher leverage have incentives to overstate their earnings to avoid violating debt covenants.

[22] Misreporting does not necessarily mean overstating earnings. Firms may also understate their earnings, e.g., for tax purposes. Consistent with Burns and Kedia (2005), we find around 7% of the restatements involve understating earnings. Excluding these understatements does not result in statistically significant changes for the estimates of foreign director variables.

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

## 5. Conclusions

This paper examines how the presence of foreign independent directors influences the effectiveness of monitoring by board of directors. We document the frequent presence of foreign independent directors on the boards of the S&P 1500 firms from 1998 to 2003. Specifically, we find that foreign independent directors are present in about 14.6% of the firm-years. Boards with foreign directors on average have one fifth of all their independent directors drawn from foreign countries. We find evidence that foreign directors are associated with lower firm value and weaker monitoring of management.

Foreign directors appear to be less effective monitors of management for several reasons. They face substantial oversight costs that are associated with the long travel distances and they are likely to lack adequate knowledge and understanding of U.S. accounting standards, laws and regulations. Using firm-level fixed effects regressions, we find that companies with foreign independent directors exhibit weaker firm performance, measured by Tobin's Q and our firm performance measure is decreasing in the percentage of independent directors drawn from foreign countries. However, the negative relation between foreign directors and Tobin's Q is mitigated when firms have foreign operations, suggesting that foreign directors can play a valuable advisory role when these firms have significant foreign operations. We also find that prior poor performance of these firms does not

contribute to the appointment of foreign directors, suggesting that the negative relation between foreign directors and Tobin's Q is unlikely to be a result of reverse causality.

We further examine the potential causes for the weak performance of firms with foreign independent directors. We show that foreign directors have a higher probability of missing a significant portion of board meetings than domestic directors, which is consistent with these directors monitoring senior management less consistently or intensely. Furthermore, firms with foreign directors, and especially when they sit on the audit committees, are more likely to misreport earnings. Taken as whole, this evidence suggests that foreign directors are less effective monitors of management and are less effective shareholder representatives, at least when firms lack substantial foreign operations.

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Table 1. Enron's independent directors during 1997-2001

| Director Name | Years on board (till 2001) | Primary Employment | Country Origin | On the audit committee during 1997-2001 |
|---|---|---|---|---|
| Ronnie C. Chan | 1996-2001 | Hang Lung Group | Hong Kong (China) | Yes |
| Paulo V. Ferraz Pereira | 1999-2001 | Group Bozano | Brazil | Yes |
| Norman P. Blake Jr. | 1993-2001 | Turnaround Specialist | United States | No |
| Bruce Willison | 1997-1999 | H.F. Ahmanson Co. | United States | Yes |
| Jerome J. Meyer | 1997-2000 | Tektronix Inc. | United States | No |
| Robert K. Jaedicke | 1985-2001 | Professor at Graduate School of Business, Stanford University | United States | Yes |
| Wendy L. Gramm | 1993-2001 | Economist, George Mason University | United States | Yes |
| Frank Savage | 1999-2001 | Alliance Capital Management | United States | No |
| John H. Duncan | 1985-2001 | Private investor in Houston | United States | No |
| Charles A. Lemaistre | 1985-2001 | Anderson Cancer Center, University of Texas | United States | No |
| John Mendelsohn | 1999-2001 | Anderson Cancer Center, University of Texas | United States | Yes |
| Charles E. Walker | 1985-1999 | Walker & Walker LLC | United States | No |
| Herbert S. Winokur Jr. | 1985-2001 | Capricorn Holdings Inc. | United States | No |

Data source: IRRC director database and Enron's proxy statements

Table 2: Summary Statistics

The sample consists of 7,533 firm-year observations from 1998 to 2003. Variable definitions are in Appendix.

| Variable | Mean | Std. Deviation | Median | Correlation with Foreign director | Correlation with percentage of foreign independent directors |
|---|---|---|---|---|---|
| *Panel A: Board characteristics* | | | | | |
| Foreign director (dummy variable) | 0.15 | 0.35 | 0 | 1.00 | 0.84 [a] |
| | | | | | *(<0.01)* |
| Percentage of foreign independent directors | 2.9% | 8.3% | 0% | 0.84 [a] | 1.00 |
| | | | | *(<0.01)* | |
| Percentage of foreign independent directors (when Foreign director=1) | 19.6% | 11.8% | 16.7% | -- | -- |
| Number of foreign independent directors (when Foreign director=1) | 1.3 | 0.6 | 1 | -- | -- |
| Board size | 9.5 | 3.0 | 9 | 0.17 [a] | 0.07 [a] |
| | | | | *(<0.01)* | *(<0.01)* |
| Percentage of independent directors | 63.3% | 18.4% | 66.7% | 0.13 [a] | 0.01 |
| | | | | *(<0.01)* | *(0.27)* |
| CEO/Chairman duality (dummy variable) | 0.64 | 0.48 | 1 | 0.01 | -0.01 |
| | | | | *(0.55)* | *(0.28)* |
| Percentage of independent busy directors | 18.6% | 22.0% | 14.3% | 0.14 [a] | 0.07 [a] |
| | | | | *(<0.01)* | *(<0.01)* |
| | | | | | |
| *Panel B: Ownership Structure* | | | | | |
| Inside directors' stock holdings | 6.8% | 13.2% | 1.9% | -0.07 [a] | -0.04 [a] |
| | | | | *(<0.01)* | *(<0.01)* |
| Independent director blockholder (dummy variable) | 0.04 | 0.20 | 0 | -0.01 | -0.01 |
| | | | | *(0.56)* | *(0.48)* |
| Independent director blockholders' holdings | 0.7% | 4.3% | 0% | -0.001 | -0.004 |
| | | | | *(0.90)* | *(0.73)* |
| Number of independent director blockholders | 0.05 | 0.28 | 0 | 0.01 | -0.01 |
| | | | | *(0.53)* | *(0.56)* |
| Independent director blockholders' holdings (when independent director blockholder=1) | 16.6% | 13.5% | 12.0% | -- | -- |
| Number of independent director blockholders (when independent director blockholder=1) | 1.3 | 0.6 | 1 | -- | -- |

*Panel C: Firm Characteristics:*

| | | | | | |
|---|---|---|---|---|---|
| Tobin's Q | 1.85 | 1.45 | 1.37 | 0.01 | 0.01 |
| | | | | (0.52) | (0.55) |
| Industry-adjusted Tobin's Q | 0.44 | 1.34 | 0.07 | -0.01 | -0.01 |
| | | | | (0.50) | (0.22) |
| Total Assets (in millions) | 13,600 | 64,594 | 1,717 | 0.13 [a] | 0.08 [a] |
| | | | | (<0.01) | (<0.01) |
| Leverage | 0.25 | 0.23 | 0.23 | 0.06 [a] | 0.05 [a] |
| | | | | (<0.01) | (<0.01) |
| ROA | 0.12 | 0.11 | 0.12 | 0.02 [c] | 0.01 |
| | | | | (0.08) | (0.45) |
| Industry-adjusted ROA | 0.04 | 0.17 | 0.03 | 0.01 | 0.01 |
| | | | | (0.31) | (0.69) |
| Growth Options | 0.05 | 0.05 | 0.03 | -0.002 | 0.02 |
| | | | | (0.84) | (0.12) |
| Foreign operations | 0.19 | 0.23 | 0.08 | 0.18 [a] | 0.18 [a] |
| | | | | (<0.01) | (<0.01) |
| Firm Age | 24 | 19 | 18 | 0.14 [a] | 0.07 [a] |
| | | | | (<0.01) | (<0.01) |

Table 3. Fixed Effects Regressions Explaining Firm Performance: Independent Foreign Directors and Firm Value

The sample consists of 7,533 firm-year observations from 1998 to 2003. The dependent variable is the firm's Tobin's Q. Variable definitions are in Appendix. In parentheses are *p*-values based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering. [a], [b], and [c] stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for firm fixed effects and year fixed effects, whose coefficient estimates are suppressed for brevity.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| *Key Explanatory Variables:* | | | | |
| Foreign director | -0.091 [c] | | -0.167 [b] | |
| | (0.077) | | (0.022) | |
| Percentage of foreign independent directors | | -0.556 [b] | | -0.866 [a] |
| | | (0.023) | | (0.009) |
| (Foreign director * Foreign operations) | | | 0.266 [c] | |
| | | | (0.100) | |
| (Percentage of foreign independent directors * Foreign operations) | | | | 1.086 [c] |
| | | | | (0.080) |
| *Other board Characteristics:* | | | | |
| Percentage of independent directors | -0.052 | -0.073 | -0.046 | -0.070 |
| | (0.628) | (0.499) | (0.673) | (0.514) |
| Percentage of independent busy directors | -0.186 [b] | -0.188 [b] | -0.183 [b] | -0.185 [b] |
| | (0.040) | (0.038) | (0.043) | (0.041) |
| CEO/Chair duality | -0.028 | -0.027 | -0.029 | -0.027 |
| | (0.213) | (0.233) | (0.212) | (0.237) |
| Log(board size) | -0.107 | -0.115 [c] | -0.109 | -0.117 [c] |
| | (0.121) | (0.096) | (0.117) | (0.091) |
| *Ownership Structure:* | | | | |
| Inside directors' stock holdings | 3.030 [a] | 2.988 [a] | 3.021 [a] | 2.980 [a] |
| | (0.003) | (0.004) | (0.003) | (0.004) |
| (Inside directors' stock holdings) $^2$ | -13.852 [b] | -13.693 [b] | -13.855 [a] | -13.669 [b] |
| | (0.014) | (0.015) | (0.014) | (0.015) |
| (Inside directors' stock holdings) $^3$ | 19.176 [b] | 19.009 [b] | 19.195 [b] | 18.987 [b] |
| | (0.016) | (0.017) | (0.016) | (0.017) |
| Independent director blockholders' holdings | 0.402 [c] | 0.400 [c] | 0.395 [c] | 0.391 [c] |
| | (0.051) | (0.053) | (0.055) | (0.058) |
| *Firm Characteristics:* | | | | |
| Foreign operations | -0.248 [b] | -0.251 [b] | -0.314 [a] | -0.315 [a] |
| | (0.020) | (0.018) | (0.007) | (0.006) |
| Log(total assets) (in millions) | -0.554 [a] | -0.553 [a] | -0.552 [a] | -0.553 [a] |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Leverage | -0.246 | -0.246 | -0.246 | -0.246 |
| | (0.270) | (0.270) | (0.270) | (0.270) |
| ROA | 1.602 [a] | 1.603 [a] | 1.600 [a] | 1.594 [a] |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Growth Options | 0.746 [a] | 0.736 [b] | 0.747 [a] | 0.740 [b] |
| | (0.010) | (0.011) | (0.010) | (0.011) |
| Firm Age | 0.356 | 0.361 | 0.350 | 0.354 |
| | (0.498) | (0.493) | (0.507) | (0.502) |
| Firm fixed-effects | Yes | Yes | Yes | Yes |
| Year fixed-effects | Yes | Yes | Yes | Yes |
| Number of Obs. | 7,533 | 7,533 | 7,533 | 7,533 |
| Adjusted R$^2$ | 76.68% | 76.70% | 76.69% | 76.71% |

Table 4. Fixed Effects Regressions Explaining Tobin's Q: Independent Foreign Directors and Firm Value
—Treating Canadian Directors as U.S. Directors

The sample consists of 7,533 firm-year observations from 1998 to 2003. The dependent variable is the firm's Tobin's Q. Variable definitions are in Appendix. In parentheses are *p*-values based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering. [a], [b], and [c] stand for statistical significance based on two-sided tests at the 1%, 5%, and 10% level, respectively. All regressions control for firm fixed effects and year fixed effects, whose coefficient estimates are suppressed for brevity.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| *Key Explanatory Variables:* | | | | |
| Foreign director | -0.133 [b] | | -0.237 [b] | |
| | (0.019) | | (0.003) | |
| Percentage of foreign independent directors | | -0.670 [a] | | -1.156 [a] |
| | | (0.010) | | (0.002) |
| (Foreign director * Foreign operations) | | | 0.351 [b] | |
| | | | (0.039) | |
| (Percentage of foreign independent directors * Foreign operations) | | | | 1.487 [b] |
| | | | | (0.030) |
| | | | | |
| *Other board characteristics:* | | | | |
| Percentage of independent directors | -0.062 | -0.074 | -0.041 | -0.062 |
| | (0.583) | (0.495) | (0.703) | (0.583) |
| Percentage of busy independent directors | -0.186 [b] | -0.188 [b] | -0.181 [b] | -0.184 [b] |
| | (0.040) | (0.038) | (0.045) | (0.043) |
| CEO/Chair duality | -0.028 | -0.027 | -0.028 | -0.026 |
| | (0.221) | (0.242) | (0.222) | (0.254) |
| Log(board size) | -0.105 | -0.115 [c] | -0.106 | -0.117 [c] |
| | (0.130) | (0.090) | (0.126) | (0.090) |
| *Ownership Structure:* | | | | |
| Inside directors' stock holdings | 3.040 [a] | 2.983 [a] | 3.035 [a] | 2.969 [a] |
| | (0.003) | (0.004) | (0.003) | (0.004) |
| (Inside directors' stock holdings) $^2$ | -13.896 [b] | -13.674 [b] | -13.930 [a] | -13.631 [a] |
| | (0.014) | (0.015) | (0.013) | (0.015) |
| (Inside directors' stock holdings) $^3$ | 19.230 [b] | 18.991 [b] | 19.293 [b] | 18.952 [b] |
| | (0.016) | (0.017) | (0.015) | (0.017) |
| Independent director blockholders' holdings | 0.399 [c] | 0.405 [b] | 0.387 [c] | 0.396 [c] |
| | (0.052) | (0.050) | (0.060) | (0.055) |
| *Firm Characteristics:* | | | | |
| Foreign operations | -0.246 [b] | -0.249 [b] | -0.325 [a] | -0.336 [a] |
| | (0.021) | (0.019) | (0.005) | (0.004) |
| Log(total assets) (in millions) | -0.553 [a] | -0.552 [a] | -0.552 [a] | -0.550 [a] |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Leverage | -0.246 | -0.246 | -0.246 | -0.247 |
| | (0.270) | (0.270) | (0.270) | (0.270) |
| ROA | 1.604 [a] | 1.607 [a] | 1.599 [a] | 1.598 [a] |
| | (0.000) | (0.000) | (0.000) | (0.000) |
| Growth Options | 0.746 [a] | 0.730 [b] | 0.747 [a] | 0.731 [b] |
| | (0.010) | (0.012) | (0.010) | (0.012) |
| Firm Age | 0.356 | 0.361 | 0.349 | 0.352 |
| | (0.498) | (0.492) | (0.508) | (0.504) |
| | | | | |
| Firm fixed-effects | Yes | Yes | Yes | Yes |
| Year fixed-effects | Yes | Yes | Yes | Yes |
| Number of Obs. | 7,533 | 7,533 | 7,533 | 7,533 |
| Adjusted $R^2$ | 76.70% | 76.71% | 76.71% | 76.73% |

Table 5. Logit Regressions: Probability of Independent Foreign Director Appointments

Model (1) uses 5,810 independent director appointments in which the appointing firm has available financial data. Model (2) uses 3,579 independent director appointments in which the appointing firm also has board data during the year before the appointment. The dependent variable is 1 if an foreign independent director is appointed, 0 if a domestic independent director is appointed. Other variable definitions are in Appendix. In parentheses are *p*-values based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering. [a], [b], and [c] 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 industry fixed effects, whose coefficient estimates are suppressed for brevity.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| *Firm Characteristics:* | | | | |
| $Q_{t-1}$ | -0.005 | -0.06 | -0.017 | -0.023 |
| | (0.857) | (0.827) | (0.649) | (0.538) |
| $Q_{t-2}$ | | 0.002 | | 0.009 |
| | | (0.939) | | (0.774) |
| Log(total assets) (in millions) | 0.273 [a] | 0.273 [a] | 0.128 | 0.128 |
| | (0.000) | (0.000) | (0.118) | (0.119) |
| Leverage | -0.813 | -0.812 | -0.319 | -0.313 |
| | (0.115) | (0.116) | (0.552) | (0.562) |
| Foreign operations | 1.352 [a] | 1.352 [a] | 2.107 [a] | 2.105 [a] |
| | (0.001) | (0.001) | (0.000) | (0.000) |
| Firm Age | 0.004 | 0.004 | 0.012 [b] | 0.012 [b] |
| | (0.362) | (0.362) | (0.015) | (0.015) |
| | | | | |
| *Appointee's Characteristics:* | | | | |
| CEO | 0.050 | 0.050 | -0.109 | -0.108 |
| | (0.782) | (0.782) | (0.649) | (0.651) |
| Old director | -0.692 | -0.692 | -0.131 | -0.129 |
| | (0.330) | (0.330) | (0.854) | (0.856) |
| Number of other IRRC board memberships | -0.417 [a] | -0.417 [a] | -0.312 [b] | -0.312 [b] |
| | (0.001) | (0.001) | (0.020) | (0.020) |
| | | | | |
| *Board Characteristics:* | | | | |
| Percentage of independent directors | | | -1.085 [c] | -1.085 [c] |
| | | | (0.089) | (0.089) |
| Percentage of busy independent directors | | | 1.250 [b] | 1.248 [b] |
| | | | (0.048) | (0.048) |
| CEO/Chair duality | | | -0.264 | -0.264 |
| | | | (0.210) | (0.210) |
| Log(board size) | | | 0.152 | 0.157 |
| | | | (0.693) | (0.685) |
| | | | | |
| *Ownership Structure:* | | | | |
| Inside directors' stock holdings | | | -0.732 | -0.733 |
| | | | (0.579) | (0.579) |
| Independent director blockholders' holdings | | | 0.144 | 0.144 |
| | | | (0.713) | (0.712) |
| | | | | |
| Year fixed-effects | Yes | Yes | Yes | Yes |
| Industry fixed-effects | Yes | Yes | Yes | Yes |
| | | | | |
| Number of Obs. | 5,810 | 5,810 | 3,579 | 3,579 |
| Peudo-$R^2$ | 8.47% | 8.47% | 11.29% | 11.29% |

Table 6. Logit regressions: Probability of Attendance at Board Meetings

The sample consists of 44,660 director-firm-year observations from 1998 to 2003. Panel A presents the characteristics comparison between foreign independent directors and domestic director. [a], [b], and [c] stand for statistical significance based on tests of difference in means or medians. Panel B presents the results of the logit regression analysis of determents of board meeting attendance. Model (1) uses all the 44,660 director-firm-year observations. Model (2) uses 33,776 director-firm-year observations which the firm has board structure information during the past year. The dependent variable is 1 if the independent director attended less than 75 percent of board meetings during the fiscal year, 0 otherwise. Other variable definitions are in Appendix. In parentheses are $p$-values based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering. [a], [b], and [c] 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 industry fixed effects, whose coefficient estimates are suppressed for brevity.

Panel A: Director characteristics comparison

| | | Domestic directors (1) | Foreign directors (2) | Difference (2)-(1) |
|---|---|---|---|---|
| Missing board meetings (=1 if the director attends less than 75% of the board meetings during the fiscal year) | Mean | 0.03 | 0.07 | 0.04 [a] |
| | Median | 0.00 | 0.00 | 0.00 |
| Director Age | Mean | 60.02 | 59.80 | -0.22 |
| | Median | 60.00 | 60.00 | 0.00 |
| Total directorships in IRRC firms | Mean | 1.81 | 1.51 | -0.30 [a] |
| | Median | 1.00 | 1.00 | 0.00 |
| CEO director (=1 if the director is the CEO of another firm) | Mean | 0.21 | 0.23 | 0.02 [b] |
| | Median | 0.00 | 0.00 | 0.00 |
| Director stock ownership in the firm | Mean | 0.17% | 0.08% | -0.09% [b] |
| | Median | 0.02% [b] | 0.01% | -0.01% [a] |

| | (1) | (2) |
|---|---|---|
| *Independent Director's Characteristics:* | | |
| Directors from foreign countries | 1.254 [a] | 1.170 [a] |
| | (0.000) | (0.000) |
| Directors from Canada | -0.896 | -0.914 [c] |
| | (0.107) | (0.100) |
| Old director | -0.030 | -0.067 |
| | (0.774) | (0.563) |
| Number of IRRC | 0.122 [a] | 0.105 [a] |
| board memberships | (0.000) | (0.004) |
| CEO director | 0.415 [a] | 0.361 [a] |
| | (0.000) | (0.000) |
| Director stock ownership | 0.633 | 0.095 |
| | (0.690) | (0.968) |
| *Firm  Characteristics:* | | |
| Log(total assets) (in millions) | -0.078 [b] | -0.209 [a] |
| | (0.011) | (0.000) |
| Leverage | 0.242 | 0.459 [c] |
| | (0.286) | (0.069) |
| Tobin's Q | -0.002 | -0.012 |
| | (0.858) | (0.542) |
| ROA | -0.379 | -0.292 |
| | (0.295) | (0.496) |
| Firm age | -0.007 [a] | -0.010 [a] |
| | (0.002) | (0.000) |
| *Board Characteristics:* | | |
| Percentage of independent directors | | 0.339 |
| | | (0.232) |
| Percentage of busy independent directors | | 0.252 |
| | | (0.261) |
| CEO/Chair duality | | -0.035 |
| | | (0.700) |
| Log(board size) | | 1.380 [a] |
| | | (0.000) |
| *Ownership Structure:* | | |
| Inside directors' stock holdings | | 0.810 [a] |
| | | (0.003) |
| Independent director blockholdings | | -0.822 |
| | | (0.458) |
| Year fixed-effects | Yes | Yes |
| Industry fixed-effects | Yes | Yes |
| Number of Obs. | 44,660 | 33,776 |
| Peudo-$R^2$ | 2.89% | 4.12% |

Table 7. Logit Regressions: Probability of Earnings Restatements and Existence of Independent Foreign Directors

The sample consists of 6,004 firm-years, 195 of which are restating-firm-years. The dependent variable is 1 if the firm misreported earnings during fiscal year, and 0 otherwise. Other variable definitions are in Appendix. In parentheses are $p$-values based on standard errors adjusted for heteroskedasticity (White (1980)) and firm clustering. [a], [b], and [c] 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 industry fixed effects, whose coefficient estimates are suppressed for brevity.

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| *Board Characteristics:* | | | | |
| Foreign director | 0.563 [b] | | | |
| | (0.013) | | | |
| Percentage of foreign independent directors | | 1.662 [b] | | |
| | | (0.017) | | |
| Foreign independent director on audit committee | | | 0.604 [b] | |
| | | | (0.031) | |
| Percentage of audit committee members who are foreign independent directors | | | | 1.766 [b] |
| | | | | (0.020) |
| 100% independent audit committee | 0.238 | 0.240 | 0.228 | 0.220 |
| | (0.222) | (0.220) | (0.240) | (0.259) |
| Percentage of independent directors | -0.538 | -0.373 | -0.447 | -0.414 |
| | (0.342) | (0.508) | (0.427) | (0.461) |
| Percentage of busy independent directors | -0.560 | -0.563 | -0.538 | -0.508 |
| | (0.414) | (0.404) | (0.431) | (0.454) |
| CEO/Chair duality | -0.099 | -0.108 | -0.107 | -0.103 |
| | (0.566) | (0.531) | (0.536) | (0.550) |
| Log(board size) | -0.484 | -0.401 | -0.421 | -0.406 |
| | (0.221) | (0.313) | (0.286) | (0.304) |
| *Ownership Structure:* | | | | |
| Inside directors' stock holdings | -1.170 | -1.112 | -1.115 | -1.093 |
| | (0.136) | (0.154) | (0.155) | (0.162) |
| Independent director blockholdings | 1.317 | 1.375 | 1.430 | 1.390 |
| | (0.253) | (0.250) | (0.246) | (0.258) |
| *Firm  Characteristics:* | | | | |
| Log(total assets) (in millions) | 0.147 [c] | 0.159 [b] | 0.158 [c] | 0.164 [b] |
| | (0.071) | (0.048) | (0.051) | (0.043) |
| Leverage | 0.746 [c] | 0.755 [c] | 0.752 [c] | 0.751 [c] |
| | (0.085) | (0.083) | (0.082) | (0.084) |
| Tobin's Q | -0.005 | -0.002 | -0.004 | -0.003 |
| | (0.831) | (0.928) | (0.860) | (0.880) |
| ROA | 0.226 | 0.236 | 0.202 | 0.238 |
| | (0.767) | (0.760) | (0.792) | (0.759) |
| Foreign operations | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.509) | (0.493) | (0.453) | (0.356) |
| Firm age | 0.013 [b] | 0.014 [b] | 0.013 [b] | 0.013 [b] |
| | (0.022) | (0.019) | (0.027) | (0.023) |
| Year fixed-effects | Yes | Yes | Yes | Yes |
| Industry fixed-effects | Yes | Yes | Yes | Yes |
| Number of Obs. | 6,004 | 6,004 | 6,004 | 6,004 |
| Peudo-$R^2$ | 7.74% | 7.58% | 7.62% | 7.62% |

| Variable | Definitions |
|---|---|
| *Panel A: Board characteristics* | |
| Percentage of foreign independent directors | The percentage of independent directors who comes from foreign countries. |
| Foreign director (dummy variable) | 1 if the board has at least one foreign independent director, and 0 otherwise. |
| Board size | The number of directors sitting on board. |
| Percentage of independent directors | The percentage of directors who are independent. |
| CEO/Chairman duality (dummy 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. |
| | |
| *Panel B: Ownership Structure* | |
| Inside directors' stock holdings | The aggregate percentage ownership held by all executives who sit on the board. |
| Independent director blockholder (dummy variable) | 1 if an independent director is also a blockholder, and 0 otherwise. Blockholders are investors with at least 5% share ownership in the firm. |
| Independent director blockholdings | Aggregate share ownership percentage held by all individual blockholders who are also independent directors. Blockholders are investors with at least 5% share ownership in the firm. |
| Number of independent director blockholders | The number of individual blockholders who are also independent directors. Blockholders are investors who have at least 5% ownership of the firm. |
| | |
| *Panel C: Firm Characteristics* | |
| Tobin's Q | Market value of asset over book value of asset: (Compustat item 6 - item 60 + item 25 * item 199) / item 6. |
| Firm size | Log of total assets (in millions). |
| Leverage | Book value of debts over book value of total assets: (item 34 + item 9)/ item 6. |
| ROA | Operating income before depreciation (item 13), scaled by book value of total assets (item 6). |
| Growth options | Capital Expenditures (item 128), scaled by book value of total assets (item 6). |
| Foreign operations | Proportion of net sales that come from the operations in foreign countries. The data is from the Compustat Segment database. |
| Firm Age | Number of years since the first date appearing in CRSP. |
| | |
| *Panel D: Director characteristics* | |
| CEO (dummy variable) | 1 if the director is the CEO of some other firm, 0 otherwise. |
| Director's age | Director's age at proxy statement date. |
| Old director (dummy variable) | 1 if the director is over 70, 0 otherwise. |