

The effect of director busyness on corporate governance: an examination of the value of cash holdings

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ABSTRACT

This paper investigates the association between independent directors' unequal attention to a firm and the value of its cash holdings. Following Masulis and Mobbs (2014), we adopt market capitalization of a firm as a proxy for its relative prestige: firms with higher capitalization are viewed as more prestigious. We find that the cash holdings of firms with busy directors are valued higher for more prestigious firms and lower for less prestigious firms but the increased value is beneficial only to the firms where busy directors spend more time and attention. Specifically, one dollar of cash is valued at \$1.67 for firms without busy directors. When 10% of the firm's directors are busy directors, the value of one dollar in cash increases to \$1.78 for firms that are the same size as or bigger than the median size of firms which the busy directors serve, but decreases to \$1.33 for firms that are smaller than the median size of firms the busy directors serve. Previous studies have found both positive and negative effects of busy directors on corporate governance. This paper contributes to better understanding the mixed effects of busy directors on corporate governance. Busy directors can improve corporate governance for relatively more prestigious firms but weaken it for less prestigious firms.

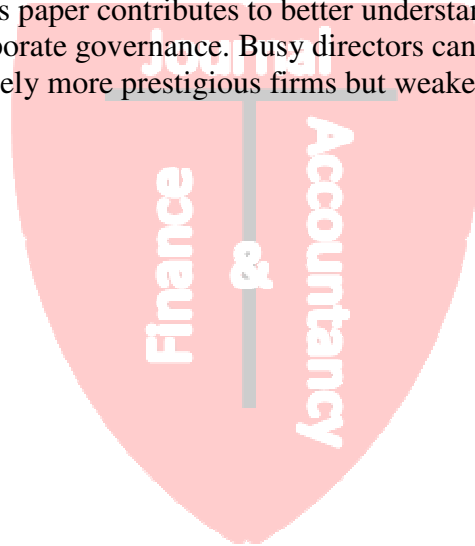
Keywords: multiple directorships, busy directors, firm reputation, cash holdings, corporate governance

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STRUCTURED ABSTRACT

- Purpose: This paper investigates the association between independent directors' unequal spending of attention to a firm and the value of its cash holdings.
- Design/methodology/approach: Following Masulis and Mobbs (2014), our study adopted the market capitalization of a firm as a proxy for the relative prestige of its directorship; firms with higher capitalization are viewed as more prestigious. The firm valuation model originally proposed by Fama and French (1998) is adopted in our analysis.
- Findings: We find that cash holdings of firms with busy directors are valued higher for more prestigious firms and lower for less prestigious firms but that the benefit is only for firms where busy directors spend more time and attention. Specifically, the value of one dollar of cash is valued at \$1.67 for firms without busy directors. When 10% of the directors are busy directors, the value of one dollar of cash increases to \$1.78 for firms that are the same size as or bigger than the median size of firms which the busy directors serve, but decreases to \$1.33 for firms that are smaller than the median size of firms the busy directors serve.
- Originality/value: This paper contributes to better understanding the mixed effects of busy directors on corporate governance. Busy directors can improve corporate governance for relatively more prestigious firms but weaken it for less prestigious firms.



1. INTRODUCTION

U.S. firms have increased their cash holdings significantly over the last few decades. For instance, the average cash-to-assets ratio for U.S. firms more than doubled (from 10.5% to 23.2%) between 1980 and 2006 (Bates et al. 2009). As a result, academic communities as well as mass media started to pay attention to the increase in cash holdings of U.S. firms. Since cash is more easily exploited by managers than physical assets, the value of cash holdings is highly affected by the corporate governance of a firm. For instance, Dittmar and Mahrt-Smith (2007) found that one dollar of cash in a firm with poor governance is valued at only \$0.42 to \$0.88 depending on assumptions, while that in a firm with good governance is valued as high as \$1.62. Good country-level investor protections (Pinkowitz et al. 2006) and U.S. cross-listing of firms (Frésard and Salva 2010) are also found to increase the value of cash holdings. These previous studies provide strong evidence that good corporate governance increases the value of cash holdings while bad corporate governance reduces it.

A busy director is defined as an independent director with three or more appointments to boards of directors (Fich and Shivdasani 2006). Because these directors may be too busy to spend enough time and effort on monitoring firms, they are expected to have a negative relationship with corporate governance. Several previous studies have found the expected negative association between the percentage of busy directors on a firm's board and the firm's corporate governance (Fich and Shivdasani 2006; Sarkar and Sarkar 2009; Jiraporn et al. 2009b; Ahn et al. 2010). But other studies show that director busyness has a positive effect on organizations by bringing financial and political resources from outside (Fama and Jensen 1983; Mason and Westphal 2001). By adopting the insightful approach introduced by Masulis and Mobbs (2014), we provide a partial answer to why there are contradictory findings about the influence of director busyness. In their unique research, Masulis and Mobbs (2014) investigate the reputation incentive of independent directors and indicate that directors with several directorships spend their effort on firms unequally based on the relative prestige of the firms. By using market capitalization as a proxy for a firm's prestige, they found that the same independent director who successfully monitors one firm can be less effective in monitoring another firm when the other firm is less prestigious than the former.

Employing similar approach, we observe that director busyness increases the cash value for relatively prestigious firms, but reduces cash value for relatively less prestigious firms. Specifically, the value of one dollar of cash is estimated as \$1.67 in U.S. stock markets for firms without busy directors. This result is similar to previous studies (Pinkowitz et al. 2006; Frésard and Salva 2010), implying that stock market investors believe that, overall, U.S. public firms have good corporate governance and, as a result, are less likely to invest in value-destroying projects. When we assume that 10% of independent directors in a firm are busy (serving on three or more boards of directors at the same time) and that the capitalization size of such a firm is the same as or bigger than the median size of firms that busy directors serve (called "prestigious firms"), the value of one dollar of cash holdings increases to \$1.78. However, for a firm which is smaller than the median capitalization size of firms which busy directors serve, called "less prestigious firms," and if 10% of the directors are busy directors the value of one dollar falls to a mere \$1.33.

The association between the busyness of directors and firm performance has been debated for several decades, but no clear relationship has been identified so far. One group of scholars claims a positive association while another finds a negative association. The former

group argues that multiple board memberships guarantees the director's ability (Fama and Jensen 1983) and therefore director busyness improves firm performance. Consistent with the view that multiple directorships is an evidence of high ability, Brickley et al. (1999) show that a CEO who has shown good performance is more likely to have directorships after being retired. Harford (2003) suggests that directors from better performing firms have a better chance of having multiple directorships in other firms, while those from worse performing firms have a lower probability of additional directorships. Ferris et al. (2003) find that when a firm adds a director with multiple directorships to its board, the stock market reacts positively to this news. In contrast, busy directors can have negative effects on corporate governance because multiple board memberships can decrease the effectiveness of a board in monitoring a firm and its managers when the busy directors invest unequal time and effort and do not pay enough attention to some firms. Fich and Shivdasani (2006) observe that busy directors leads to a firm's reporting worse performance and to a lower probability that an underperforming CEO will be fired. Jiraporn et al. (2009a) report that busy directors tend to be absent at board meetings more often. Recently, Ahn et al. (2010) have argued that busy directors of acquiring firms are negatively related to stock return on acquisition announcements. Even though many researchers have investigated the relationship between busy directors on the board and the monitoring effectiveness of the board, no clear agreement has been reached as to whether a greater proportion of busy directors on the board improves or weakens the monitoring effectiveness.

In this paper, we provide a partial explanation of previous contradictory results. We argue that the busyness of a director could be both beneficial and harmful to the value of the cash held by a firm. A busy director's network with other firms can improve corporate governance and in turn increase the value of cash holdings, but only if a director invests enough effort in monitoring the management of the firm. However, when a busy director does not invest enough effort, director busyness can impair firm value. Directors pay more attention to firms which are bigger in terms of capitalization and thus can provide higher prestige to directors. As a result, among firms which busy directors serve, only the relatively more prestigious firms benefit from busy directors and investors in the stock market consider the value of one dollar in cash as higher. However, the less prestigious firms where the busy directors serve on the board experience a drop in the value of their cash holdings.

2. RELATED LITERATURE AND HYPOTHESIS DEVELOPMENT

The potential benefits of holding excess cash, such as avoiding underinvestment and minimizing cash flow fluctuation risk, disappear, if a controlling party in the firm uses this cash for its own benefit. Among the many kinds of assets, cash holdings are more exposed than other assets to the possibility of being exploited by management for two reasons. First, as Myers and Rajan (1998) pointed out, it is easier to make cash disappear than to make a plant disappear. If management can make a decision about cash holdings without outsider monitoring, cash holdings are at risk of being exploited by management or controlling shareholders. Second, how cash is used inside a firm is highly discretionary. Even if insiders cannot directly use cash holdings for their own benefit, they might use cash for a negative net present value project which will eventually benefit themselves. For example, management can use cash holdings for empire-building projects or unnecessary acquisitions in order to increase their power and compensation, even when the expected net present value of investments is negative.

Recently, several researchers (Dittmar and Mahrt-Smith, 2007; Pinkowitz et al., 2006; Frésard and Salva, 2010) show how corporate governance affects value of cash holdings. These papers consistently suggest that good corporate governance increases the value of cash holdings, while bad corporate governance decreases it.

The association between busy directors and firm performance has been a topic of debate in an academic community for decades. Some scholars (Fama and Jensen, 1983; Brickley et al., 1999; Harford, 2003; Ferris et al., 2003) suggest that multiple board memberships can be viewed as a guarantee of a director's ability (Fama and Jensen 1983). Therefore, director busyness is expected to have positive association with firm performance in this argument.

In contrast to the positive views on busy directors, negative effects of busy directors have been also found in the previous studies (Fich and Shivdasani, 2006; Jiraporn et al., 2009a; Ahn et al., 2010), multiple board memberships are believed to deteriorate effectiveness of a board in monitoring a firm and managers, since busy directors cannot invest enough time and effort on each firm. Although recent researches tend to find negative association between busy directors and corporate governance while relatively older published papers tend to find positive association, there is no agreement on whether busy directors in public firms improve or deteriorate the monitoring effectiveness of a board of directors.

Masulis and Mobbs (2014) have attempted to untangle the puzzling relationship between director busyness and corporate governance. They investigate the reputation incentives of independent directors and find that directors with multiple board memberships spend their efforts unequally according to firms' relative prestige. Busy directors allocate more time and effort to the more prestigious firms, which are expected to enhance their reputation in the job market, but less time and effort on other firms, which are expected to be less rewarding. Specifically, they find that a firm with busy directors, for whom a focal firm is more prestigious, tends to have better performance and a higher Tobin's Q. In their study, market capitalization is adopted as a proxy for a firm's prestige, which is positively associated with greater visibility of directors (Shivdasani 1993; Adams and Ferreira 2008), directors' compensation (Ryan and Wiggins 2004), and the likelihood that the directors will be offered additional directorships (Yermack 2004; Fich 2005).

We also employ market capitalization as a measure of prestige and then investigate the impact of the busyness of board directors on corporate governance in the domain of cash holdings. We predict that directors will focus more effort on the relatively larger firms, those with higher market capitalization. So, given that the proportion of busy directors is fixed, the value of cash holdings will be higher for a prestigious firm that is larger than the median size of the firms each director serves, while it is lower for a less prestigious firm that is smaller than the median size. This leads us to our hypothesis.

H1: The effect of director busyness on the value of cash holdings is more positive for prestigious firms than for less prestigious firms among the firms which a busy director serves.

3. METHODOLOGY AND DATA

Model

Following previous studies (e.g. Pinkowitz et al. 2006; Dittmar and Mahrt-Smith 2007; Frésard and Salva 2010), we adopt the firm valuation model originally proposed by Fama and

French (1998). Although their equation is to estimate cross-sectional firm value, adding the interaction with cash holdings and director busyness makes it possible to measure how director busyness changes the value of cash holdings (Pinkowitz et al. 2006; Dittmar and Mahrt-Smith 2007; Frésard and Salva 2010). In this model, firm value is estimated by past change, future change, and current level of earnings; assets; research & development expenses; dividends; and interest expenses. These variables are believed to impact investors' expectations and therefore determine firm value. Changes in the variables are also included to control for the effects of profitability and financial and investment policies on firm value. Every variable is divided by net assets (total assets minus cash holdings) to increase firm attribute comparability and reduce the heteroskedasticity of data. Each variable is winsorized at the one percent level to eliminate the outlier effects. We use the following equation for empirical analysis:

$$\begin{aligned} \text{Market Capitalization}_{i,t} = & \beta_0 + \beta_1 \text{Busy Directors}_{i,t} + \beta_2 d\text{Cash}_{i,t} + \beta_3 (\text{Busy Directors}_{i,t} * d\text{Cash}_{i,t}) \\ & + \beta_4 \text{Earnings}_{i,t} + \beta_5 d\text{Earnings}_{i,t} + \beta_6 d\text{Earnings}_{i,t+1} + \beta_7 d\text{Net Asset}_{i,t} + \beta_8 d\text{Net Asset}_{i,t+1} + \\ & \beta_9 R\&D_{i,t} + \beta_{10} dR\&D_{i,t} + \beta_{11} dR\&D_{i,t+1} + \beta_{12} \text{Interests}_{i,t} + \beta_{13} d\text{Interest}_{i,t} + \beta_{14} d\text{Interest}_{i,t+1} \\ & + \beta_{15} \text{Dividends}_{i,t} + \beta_{16} d\text{Dividends}_{i,t} + \beta_{17} d\text{Dividends}_{i,t+1} + \\ & \beta_{18} d\text{Market_Capitalization}_{i,t+1} + \text{Year_Dummy}_t + \varepsilon_{i,t} \end{aligned} \quad (1)$$

where dX_t means a change of X from $t-1$ to t , *Market Capitalization* is a market value (stock market value + value of total liability), *Earnings* is earnings before extraordinary items, *R&D* is Research & Development expenses, *Interest* is interest expenses, *Dividends* is dividends payment, and *Busy Directors* is the proportion of busy directors on the board for firm i in year t . A director is classified as a busy director when he or she is serving on the board of directors for three or more firms at the same time.

The main variable of interest in this model is *Busy Directors*, which measures in general, on the firm level, how busy independent directors are. Three measures, *Busy Directors*, *Busy Directors High Prestige Firm*, and *Busy Directors Low Prestige Firm* are adopted. *Busy Directors* is the percentage of busy directors for firm i in year t . *Busy Directors*, ranges from zero percent (no directors) to one hundred percent (all directors), measures the busyness of the board of directors in general. The other two variables are more specific. *Busy Directors High Prestige Firm* is the percentage of busy directors when a firm is the median size or larger compared to all firms which busy directors serve, while *Busy Directors Low Prestige Firm* is the percentage of busy directors when a firm is smaller than the median size.

Firm size is a source of prestige in directors' views, as firm size has been found to have a positive relationship with directors' visibility (Shivdasani 1993; Adams and Ferreira 2008), directors' compensation (Ryan and Wiggins 2004), and the likelihood a director will achieve additional directorships (Yermack 2004; Fich 2005). When time, attention, or effort is limited, busy directors are expected to allocate more time, attention, and effort to more prestigious firms because of the possibility of higher personal rewards. Market capitalization as a proxy of a firm size (Masulis and Mobbs 2014) means that smallness is relatively less prestigious while a large size is relatively more prestigious. The threshold to divide prestigious firms and less prestigious firms is the median size of the firms the busy director serves as an independent director. The threshold varies from one busy director to another. Therefore, the same firm could be prestigious for someone with directorships in relatively small firms, but less prestigious for those with directorships in relatively big firms.

Data

In order to investigate the association between cash value and busy directors, we need firm-level characteristics and the composition of board members. The board composition data are from RiskMetrics, which provides directors' information starting in 1996. Firm characteristics data are retrieved from Compustat, Wharton Research Data Services. Because we are interested in how busy directors distribute their limited time and effort to different firms, small firms which do not require much effort are excluded from our final sample: the minimum size of firms in our analysis is 200 million dollars in terms of net assets. The result is 9,586 firm-year observations from 1,125 firms for the period 1996 through 2011.

Table 1 shows the industrial distribution of sample firms. Firms in manufacturing industries (SIC codes 2 and 3) are the most common in our sample, comprising more than 40% of all firms. Financial companies provide the second biggest part of the sample, with 15.6% of all firms. We investigated the relationship between busy directors and cash value after excluding regulated industries, those with SIC code starting with either four or six. The unreported results are consistent.

Table 2 shows the yearly distribution of sample firms. Because of data availability, there are more firms in more recent years. For instance, there are 347 sample firms in 1996 but 956 sample firms in 2011. To control for the effect of this unequal yearly distribution and other omitted factors associated with time, we include a year-fixed effect in the main equation model. Table 2 also reveals the trends over time of cash holdings and proportions of busy directors. The level of cash holdings doubled during the sample period, while the proportion of busy directors decreased. Sample firms in 1996 had cash holdings of up to 8.4% of net assets, but cash holdings in 2010 had increased to as much as 17.1% of net assets. In contrast, the proportion of busy directors fell by more than half: 21.5% of independent directors of sample firms had three or more directorships in 1996 but only 8.9% in 2011.

Table 3 reports the correlations between the variables used for the empirical tests. The lower triangle shows the Pearson correlation while the upper triangle shows the Spearman correlation. In our sample, a firm with higher market capitalization (the variable on the left hand side) tends to have higher earnings, higher R & D spending, higher dividend payments, and lower interest payments. Cash holdings are also positively correlated with earnings and R & D spending, implying that firms with high R & D spending and earnings tend to keep high cash holdings.

Table 4 reports descriptive statistics for the main variables used in the regression analyses. Among these variables, five are noteworthy: *Market Capitalization*, *Cash*, *Busy Directors*, *Busy Directors High Prestige Firm*, and *Busy Directors Low Prestige Firm*. On average, the market value of sample firms is as much as 1.565 times of net assets, while the cash holdings of sample firms are 13.3% of net assets. But the difference in cash holdings among sample firms is very large. For instance, a firm in the first quartile has cash holdings as much as 2.1% of its net assets, while the cash holdings of a firm in the third quartile are 15.5% of the firm's net assets. *Busy Directors*, the main independent variable, shows that for an average firm, 13.4% of independent directors are busy; that is, they are on the boards of three or more other sample firms. Among these 13.4% independent directors, 8.7% have directorships in relatively large companies, companies that are the same size or larger than the median size of firms a specific independent director serves, while 4.7% have directorships in relatively small companies.

4. MAIN RESULTS

In this section, we outline the main results and interpret them. Every p-value is estimated based on firm-clustering adjusted standard errors. As shown in Table 2, there is a big difference in the number of observations in different years. Thus, every regression analysis model includes year fixed effects. Before testing the hypothesis, we ran regressions with only the control variables (see Table 5). Most of the variables are significantly different from zero, and the high r-squared (67.9%) suggests that the model has strong power to predict the market values of firms. In Model 2, we added a *Cash*, a variable which reveals that one dollar of cash holdings for an average firm is valued at \$1.62 in the stock market. Frésard and Salva (2010) find that one dollar of cash holdings has less than one dollar in value when a country has weak institutions that protect investors. The fact that one dollar has a value of more than one dollar suggests that the U.S. stock market has well-developed institutions to protect minority shareholders' rights, so that investors are not very concerned about being exploited by management or majority shareholders. In order to assess whether busy directors are associated with the value of cash holdings, we add the interaction between *busy directors* and *cash* in Model 3. The coefficient is indistinguishable from zero, so we cannot conclude that busy directors are associated with the value of cash holdings.

The lack of a significant association between general director busyness and the value of cash holdings is not surprising because the busyness of directors could either strengthen or weaken a firm's corporate governance, which is closely associated with the firm's cash holding value. When a busy director is willing to allocate enough time and effort to a firm, his or her ability, expertise, and resources can strengthen the firm's corporate governance and thus improve the value of cash holdings for that firm. However, when a busy director spends less time or puts less effort into a firm because of time constraints, the busyness of directors hurts the corporate governance effectiveness and efficiency, which eventually decreases the cash holding value of the firm. To sum up, among firms where busy directors serve, some firms benefit from the busyness of directors but some are hurt by it.

Next, we run additional tests to untangle the effects of director busyness on cash holding values. We try to differentiate the firms that benefit from those that get hurt by their busyness. As mentioned in Section 2, a busy director's job priority arrangement could be affected by the prestige of the firm in which the director serves. The prestige of a firm is proxied by firm size (market capitalization). Therefore, we ran regressions including the interaction term for relatively big firms (*Busy Directors High Prestige Firm*) as well as that for relatively small firms (*Busy Director Low Prestige Firm*). The results in Table 6 are interesting. The estimated coefficients confirm that busy directors increase the value of cash holdings for relatively big firms while they decrease the value of cash holdings for relatively small firms. The hypothesis predicts that the coefficient of *Cash * Busy Directors High Prestige Firm* is significantly larger than that of *Cash * Busy Directors Low Prestige Firm*. The test to compare these two coefficients shows a significant difference (with 22.99 of Chi-squared and less than 0.1% p-value). This result implies that director busyness has different effects based on whether a firm is more prestigious than another firm.

We emphasize again that the size of a firm here is relative. Therefore, the same firm which is classified as small (less prestigious) for one independent director could be classified as large (more prestigious) for another director. Table 6 shows the results of Model 6, a full model with every variable. As in Model 4 and Model 5, the results in Model 6 signify that busy

directors improve corporate governance for relatively more prestigious firms but weaken it for relatively less prestigious firms. A greater portion of busy directors on the board improves corporate governance, and in turn increases investors' perceived value of one dollar of cash holdings, only when the firm is the same size as or larger than the median size of firms which a specific director serves, so that he or she is willing to spend enough attention and effort in monitoring managers. Specifically, the value of one dollar is \$1.67 for firms without busy directors and rises to \$1.78 when 10% of the independent directors are *Busy* and the firm belongs to a group of bigger firms among the firms these directors serve. However, it drops to \$1.33 when the firm belongs to a group of smaller firms. Taken as whole, the results support the view that the effects of busy directors are both good and bad. Busy directors are good for corporate governance because they are more capable and able to bring resources from other organizations as long as they are willing to invest enough time and effort in monitoring managers. However, when busy directors see a firm as less prestigious and thus are less willing to spend effort, they can weaken corporate governance.

5. CONCLUSION

Some previous studies argue for the positive aspects of multiple board memberships because reputations and social networks of directors can benefit the organization by providing more financial and political resources. Other scholars believe that multiple directorships damage the effectiveness of a director in monitoring management. This study provides a partial explanation as to why previous research found contradictory results. Director busyness itself is good for an organization because a director with multiple board memberships tends to have more ability and to bring valuable resources from other organizations. However, director busyness increases firm value only when directors spend enough effort and time in monitoring each firm; if directors do not, director busyness weakens firm value.

In this paper, we investigate the association between busy directors and the value of cash holdings. Previous literature such as Masulis and Mobbs (2014) find that directors with multiple directorships spend their attention and effort unequally, spending more time and effort on more prestigious firms, which can increase directors' reputation in the director labor market. Investors evaluate cash holdings more highly for firms with a greater portion of busy directors for whom a firm is bigger than the other firms the directors serve because they believe that busy directors will spend more time and effort in order to keep more prestigious directorships. Our study finds that the cash holdings of firms with busy directors are valued higher for more prestigious firms and lower for less prestigious firms but the increased value is beneficial only to the firms where busy directors spend more time and attention.

REFERENCES

- Adams, R. B., and D. Ferreira. 2008. Do directors perform for pay? *Journal of Accounting & Economics* 46 (1):154-171.
- Ahn, S., P. Jiraporn, and Y. S. Kim. 2010. Multiple directorships and acquirer returns. *Journal of Banking & Finance* 34 (9):2011-2026.
- Bates, T. W., K. M. Kahle, and R. M. Stulz. 2009. Why Do U.S. Firms Hold So Much More Cash than They Used To? *Journal of Finance* 64 (5):1985-2021.
- Brickley, J. A., J. S. Linck, and J. L. Coles. 1999. What happens to CEOs after they retire? New evidence on career concerns, horizon problems, and CEO incentives. *Journal of Financial Economics* 52 (3):341-377.
- Dittmar, A., and J. Mahrt-Smith. 2007. Corporate governance and the value of cash holdings. *Journal of Financial Economics* 83 (3):599-634.
- Fama, E. F., and K. R. French. 1998. Taxes, Financing Decisions, and Firm Value. *Journal of Finance* 53 (3):819-843.
- Fama, E. F., and M. C. Jensen. 1983. Separation of Ownership and Control. *Journal of Law and Economics* 26 (2):301-325.
- Ferris, S. P., M. Jagannathan, and A. C. Pritchard. 2003. Too Busy to Mind the Business? Monitoring by Directors with Multiple Board Appointments. *Journal of Finance* 58 (3):1087-1111.
- Fich, E. M. 2005. Are Some Outside Directors Better than Others? Evidence from Director Appointments by Fortune 1000 Firms. *Journal of Business* 78 (5):1943-1971.
- Fich, E. M., and A. Shivdasani. 2006. Are Busy Boards Effective Monitors? *Journal of Finance* 61 (2):689-724.
- Frésard, L., and C. Salva. 2010. The value of excess cash and corporate governance: Evidence from US cross-listings. *Journal of Financial Economics* 98 (2):359-384.
- Harford, J. 2003. Takeover bids and target directors' incentives: The impact of a bid on directors' wealth and board seats. *Journal of Financial Economics* 69 (1):51.
- Jiraporn, P., W. N. Davidson, P. DaDalt, and Y. Ning. 2009a. Too busy to show up? An analysis of directors' absences. *Quarterly Review of Economics & Finance* 49 (3):1159-1171.
- Jiraporn, P., M. Singh, and C. I. Lee. 2009b. Ineffective corporate governance: Director busyness and board committee memberships. *Journal of Banking & Finance* 33 (5):819-828.
- Mason, A. C., and J. D. Westphal. 2001. The Strategic Context of External Network Ties: Examining the Impact of Director Appointments on Board Involvement in Strategic Decision Making. *The Academy of Management Journal* 44 (4):639-660.
- Masulis, R. W., and S. Mobbs. 2014. Independent director incentives: Where do talented directors spend their limited time and energy? *Journal of Financial Economics* 111 (2):406-429.
- Myers, S. C., and R. G. Rajan. 1998. The paradox of liquidity. *Quarterly Journal of Economics* 113 (3):733-771.
- Pinkowitz, L. E. E., R. E. N. Stulz, and R. Williamson. 2006. Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A Cross-country Analysis. *Journal of Finance* 61 (6):2725-2751.
- Ryan, H. E., and R. A. Wiggins. 2004. Who is in whose pocket? Director compensation, board independence, and barriers to effective monitoring. *Journal of Financial Economics* 73 (3):497-524.

- Sarkar, J., and S. Sarkar. 2009. Multiple board appointments and firm performance in emerging economies: Evidence from India. *Pacific-Basin Finance Journal* 17 (2):271-293.
- Shivdasani, A. 1993. Board composition, ownership structure, and hostile takeovers. *Journal of Accounting & Economics* 16 (1-3):167-198.
- Yermack, D. 2004. Remuneration, Retention, and Reputation Incentives for Outside Directors. *Journal of Finance* 59 (5):2281-2308.



Table 1 Distribution based on industries

SIC	Freq.	Percent	Cum.
0	16	0.17	0.17
1	663	6.92	7.08
2	1,568	16.36	23.44
3	2,321	24.21	47.65
4	1,356	14.15	61.80
5	1,088	11.35	73.15
6	1,664	17.36	90.51
7	695	7.25	97.76
8	182	1.90	99.66
9	33	0.34	100.0
Total	9,586	100.00	

Table 2 Distribution based on years

Year	Freq.	Percent	Cum.	Cash	Busy Directors
1996	347	3.62	3.62	0.084	21.467
1997	356	3.71	7.33	0.085	20.853
1998	381	3.97	11.31	0.090	21.514
1999	431	4.50	15.80	0.089	19.846
2000	479	5.00	20.80	0.104	17.234
2001	478	4.99	25.79	0.118	17.950
2002	518	5.40	31.19	0.134	15.658
2003	556	5.80	36.99	0.140	16.214
2004	610	6.36	43.35	0.145	14.796
2005	661	6.90	50.25	0.138	12.434
2006	676	7.05	57.30	0.128	10.840
2007	680	7.09	64.40	0.128	10.504
2008	747	7.79	72.19	0.128	10.139
2009	823	8.59	80.77	0.166	9.374
2010	887	9.25	90.03	0.171	9.128
2011	956	9.97	100.00	0.158	8.865
Total	9,586	100			

Table 4 Descriptive Statistics

<i>Variable</i>	Obs	Mean	Std. Dev.	1st Quartile	2nd Quartile	3rd Quartile
Market Capitalization	9586	1.439	1.565	0.510	0.944	1.732
Cash	9586	0.133	0.200	0.021	0.058	0.155
Busy Director	9586	13.474	16.567	0.000	10.000	22.222
Busy Director High Prestige Firm	9586	8.741	13.337	0.000	0.000	14.286
Busy Director Low Prestige Firm	9586	4.733	9.454	0.000	0.000	9.091
Earnings, t	9586	0.080	0.074	0.042	0.074	0.113
Δ earnings, t	9586	0.000	0.062	-0.016	0.001	0.017
Δ Earnings, t+1	9586	-0.001	0.062	-0.017	0.000	0.016
R & D, t	9586	0.022	0.049	0.000	0.000	0.020
Δ R&D, t	9586	0.000	0.008	0.000	0.000	0.000
Δ R&D, t+1	9586	0.000	0.008	0.000	0.000	0.000
Dividends, t	9586	0.016	0.020	0.000	0.009	0.023
Δ Dividends, t	9586	0.000	0.005	0.000	0.000	0.001
Δ Dividends, t+1	9586	0.001	0.006	0.000	0.000	0.001
Interests, t	9586	0.015	0.012	0.005	0.014	0.022
Interests, t	9586	0.000	0.004	-0.002	0.000	0.001
Interests, t+1	9586	0.000	0.004	-0.002	0.000	0.001
Δ Net Assets, t	9586	0.068	0.146	-0.003	0.056	0.130
Δ Net Assets, t+1	9586	0.099	0.213	-0.004	0.056	0.143
Δ Market Capitalization, t+1	9586	-0.033	0.615	-0.178	0.001	0.167

Table 5 Regression Results

Model	(1)		(2)		(3)	
	coefficients	p-value	coefficients	p-value	coefficients	p-value
Cash			1.621***	0.000	1.623***	0.000
			(7.22)		(6.83)	
Busy Directors					0.001	0.615
					(-0.50)	
Cash*Busy Directors					0.000	0.972
					(-0.04)	
Earnings, t	12.758***	0.000	11.373***	0.000	11.376***	0.000
	(21.17)		(20.96)		(20.97)	
ΔEarnings, t	-2.824***	0.000	-2.620***	0.000	-2.621***	0.000
	(-8.93)		(-9.33)		(-9.38)	
ΔEarnings, t+1	6.050***	0.000	5.616***	0.000	5.617***	0.000
	(17.72)		(18.14)		(18.13)	
R&D, t	12.140***	0.000	8.899***	0.000	8.907***	0.000
	(16.07)		(10.44)		(10.47)	
ΔR&D, t	-1.498	0.544	-1.149	0.609	-1.169	0.602
	(-0.61)		(-0.51)		(-0.52)	
ΔR&D, t+1	10.257***	0.000	9.867***	0.000	9.845***	0.000
	(5.41)		(5.53)		(5.53)	
Dividends, t	3.866**	0.014	5.831***	0.000	5.894***	0.000
	(2.46)		(3.84)		(3.84)	
ΔDividends, t	5.582**	0.029	2.786	0.243	2.714	0.253
	(2.19)		(1.17)		(1.14)	
ΔDividends, t+1	10.767***	0.000	9.111***	0.000	9.117***	0.000
	(4.33)		(3.73)		(3.74)	
Interests, t	-	0.000	-	0.000	-	0.000
	18.432***		16.101***		16.090***	
	(-10.11)		(-9.22)		(-9.17)	
ΔInterests, t	10.986***	0.000	7.176***	0.008	7.134***	0.008
	(3.88)		(2.67)		(2.65)	
ΔInterests, t+1	-1.979	0.553	-4.233	0.170	-4.217	0.171
	(-0.59)		(-1.37)		(-1.37)	
ΔNet Assets, t	0.069	0.519	0.311***	0.005	0.307***	0.005
	(0.65)		(2.82)		(2.79)	
ΔNet Assets, t+1	0.478***	0.000	0.353***	0.000	0.352***	0.000
	(5.56)		(4.12)		(4.07)	
ΔMarket Capitalization, t+1	-0.470***	0.000	-0.445***	0.000	-0.445***	0.000
	(-13.62)		(-13.76)		(-13.76)	
Constant	0.327***	0.000	0.292***	0.000	0.304***	0.000
	(4.93)		(4.51)		(4.55)	
Year Fixed Effects	Yes		Yes		Yes	
Number of Observations	9586		9586		9586	

Adjust R² 0.679 0.703 0.703

*, **, *** denote significance at the 0.10, 0.05, and 0.01 levels based on a two-sided test.
t-statistics based on standard errors clustered by a firm are shown in parentheses.



Table 6 Regression Results

Model	(4)		(5)		(6)	
	coefficients	p-value	coefficients	p-value	coefficients	p-value
Cash	1.543***	0.000	1.747***	0.000	1.670***	0.000
	(6.74)		(7.49)		(6.93)	
Busy Directors High Prestige Firm	0.001	0.609			0.001	0.587
	(0.51)				(0.54)	
Busy Directors Low Prestige Firm			-0.002	0.128	-0.002	0.140
			(-1.52)		(-1.48)	
Cash * Busy Directors High Prestige Firm	0.011	0.239			0.011	0.208
	(1.18)				(1.26)	
Cash * Busy Directors Low Prestige Firm			-0.034***	0.001	-0.034***	0.002
			(-3.19)		(-3.10)	
Earnings, t	11.346***	0.000	11.312***	0.000	11.283***	0.000
	(20.67)		(21.06)		(20.80)	
ΔEarnings, t	-2.595***	0.000	-2.589***	0.000	-2.564***	0.000
	(-9.32)		(-9.33)		(-9.31)	
ΔEarnings, t+1	5.619***	0.000	5.603***	0.000	5.606***	0.000
	(18.07)		(18.17)		(18.10)	
R&D, t	8.871***	0.000	8.790***	0.000	8.760***	0.000
	(10.38)		(10.49)		(10.46)	
ΔR&D, t	-1.134	0.612	-1.201	0.589	-1.185	0.593
	(-0.51)		(-0.54)		(-0.54)	
ΔR&D, t+1	9.947***	0.000	9.769***	0.000	9.849***	0.000
	(5.56)		(5.54)		(5.58)	
Dividends, t	5.606***	0.000	5.739***	0.000	5.508***	0.000
	(3.66)		(3.79)		(3.61)	
ΔDividends, t	2.791	0.241	2.458	0.301	2.4666	0.298
	(1.17)		(1.04)		(1.04)	
ΔDividends, t+1	8.954***	0.000	8.811***	0.000	8.651***	0.000
	(3.65)		(3.63)		(3.55)	
Interests, t	-15.939***	0.000	-15.921***	0.000	-15.760***	0.000
	(-9.04)		(-9.21)		(-9.05)	
ΔInterests, t	7.114***	0.008	7.045***	0.009	6.986***	0.009
	(2.65)		(2.62)		(2.60)	
ΔInterests, t+1	-3.925	0.202	-3.553	0.243	-3.243	0.286
	(-1.28)		(-1.17)		(-1.07)	
ΔNet Assets, t	0.305***	0.005	0.275**	0.012	0.269**	0.013
	(2.78)		(2.51)		(2.48)	
ΔNet Assets, t+1	0.358***	0.000	0.347***	0.000	0.352***	0.000
	(4.18)		(3.98)		(4.03)	
ΔMarket Capitalization, t+1	-0.442***	0.000	-0.437***	0.000	-0.434***	0.000
	(-13.57)		(-13.61)		(-13.41)	
Constant	0.278***	0.000	0.322***	0.000	0.308***	0.000

	(4.27)	(4.86)	(4.63)
Year Fixed Effects	Yes	Yes	Yes
Number of observations	9586	9586	9586
Adjust R ²	0.704	0.705	0.706
Test of $\beta_4 = \beta_5$ Chi²			22.99
			0.000

*, **, *** denote significance at the 0.10, 0.05, and 0.01 levels based on a two-sided test. t-statistics based on standard errors clustered by a firm are shown in parentheses.

