

DO HIGH-ABILITY CEOS MATTER TO SHAREHOLDERS? EVIDENCE USING A UNIQUE MEASURE FOR CEO ABILITY

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ABSTRACT

I examine the effect of CEO ability on firm performance. My analysis uses a unique measure of CEO ability that is based on CEOs' commitment decisions in U.S. presidential elections. Intuitively, CEO ability is measured based on how well they forecast U.S. presidential elections, one year prior to the race, relative to the candidates' expected chances of winning. I find that this measure of CEO ability is positively related to firm performance. Interestingly, high ability CEOs have a greater impact on Tobin's Q in small firms than in large firms. Yet, high ability CEOs have the greatest dollar impact on shareholder value in large firms. Lastly, I provide evidence that CEO ability is also related to the CEOs' compensation contracts, in the notion that high ability CEOs are rewarded with higher levels of cash-based compensation and stock-based incentives, as well as higher levels of total compensation.

Keywords: CEO Ability, CEO Political Contributions, Firm Performance, Executive Compensation

I. INTRODUCTION

In the United States, individual donors to presidential campaigns are a matter of public record with the Federal Election Committee. In the early stages of the election process there is substantive discussion about the potential candidates, with numerous entrants in both parties in years without an incumbent running for president. The earliest stages of the contest act to sort out exactly who will be the candidates for each of the major parties. Traditionally, the first substantive contest occurs in Iowa in January of the election year. Interestingly, among the multitude of individual donors in the early stages of the election there are quite a few chief executive officers of U.S. corporations. For instance, in the 2000 presidential election, 475 different CEOs of large publicly traded firms made individual donations to particular presidential candidates. Similarly, in 2008, 428 CEOs made similar donations to particular presidential candidates. Political scientists suggest that such donations are not undertaken lightly and represent a deep commitment by the donor (Brown, Hedges, & Powell, 1980a, 1980b). These donations often represent an extensive degree of evaluation, time commitment, and personal interest of the donor (Hedges, 1984).

Avidly following or becoming involved in early stage presidential elections is of keen interest to political junkies. Numerous media outlets, polling operations, and the Iowa electronic market provide a constant stream of information and analysis for political enthusiasts. In a similar fashion, the business press and popular press suggest that employees spend an inordinate amount of time focusing on a variety of external interests such as fantasy football, March madness, and the World Cup (Weiss, 2007). Analyzing such data and picking the potential winners is time consuming and business consultants report that activities, such as fantasy football, costs firms hundreds of millions of dollars each week in lost productivity (Woodward, 2007). Focusing on early stage presidential elections, at least a first brush, seem an unproductive use of CEO time. Of course, CEOs making donations to presidential candidates may be seeking influence with their personal political contribution. Yet, Faccio (2006) suggests that CEO personal contributions are so small (limit of \$2,400) that among the millions of individual donations they appear to be an unlikely source of political connections. A more plausible interpretation suggests that CEOs who spend effort and energies on activities that seem unrelated to improving firm appear would be a distraction. This perspective suggest that personal political involvement by CEOs is more comparable to golf or other non-business hobbies that CEOs pursue (Yermack, 2006). In a similar fashion, those interested in presidential elections often spend a lot of time and energy in following this particular game. In this vein, CEO political donations may capture how the

political junkie spends his/her time in a fashion unrelated to firm operations. This inattentive manager hypothesis implies that CEO presidential campaign donations are negatively related to firm performance.

Yet, the notion that CEO donations to presidential campaigns represent inattention is not complete. Picking a potential candidate, making the donation, and committing to such a pursuit may simply reflect on managers with strong work ethics and ability. High achieving CEOs, recognize their own talents, and seek to add value in multiple aspects of their lives. Specifically, the CEO decision to provide personal contributions to presidential political campaigns might instead point to high CEO ability or effort. This perspective suggests that CEO political donations would be positively related to firm performance, high ability CEOs lead to good firm performance. Thus, CEO political contributions may capture the ability of CEOs to assess potential outcomes, evaluate the results, and make decisions based on their assessments. In this context, capturing the predictive ability of the CEO (how good was their pick?) provides a proxy of CEO decision-making ability.

I explore the relation between CEO personal contributions to presidential candidates and firm performance. Using both the decision to contribute and the quality of the prediction in presidential primaries, I conduct a cross-sectional comparison of donating and non-donating CEOs. My first tests focuses on testing the inattentive manager hypotheses by comparing donating and non-donating CEOs. I then attempt to differentiate between several competing hypotheses by focusing on the quality of the implied presidential prediction.

Using CEO personal donations to presidential campaigns present two difficulties for empirical analysis. First, with such small limits (\$2,400), relative to CEO average salaries of \$6.4 million, CEOs may donate to several different candidates, which potentially confounds any analysis. Moreover, at such relatively small donation levels, this may represent more of an impulse donation rather than a reasoned decision by CEO. Second, CEOs may simply provide donations to a particular party, regardless of the chances of the party winning, out of personal viewpoints. This perspective suggests that CEOs are not assessing potential party chances but instead the donation represents the exercise of their free speech. Evaluating potential primary results, rather than just the final outcome of the election, potentially provides an avenue to address this potential favoritism.

My analysis seeks to incorporate each of these issues into developing my measures and test procedures. I focus on CEOs who provide a single donation to one particular presidential candidate prior to the Iowa primaries. These early and small donations to a wide-open field seem unlikely to garner political influence. Moreover, the fact that the CEO makes a single donation, rather than spreading

these small donations among the candidates, suggests this decision is not about simply buying political influence but rather a reasoned CEO choice. I use two separate presidential elections, 2000 and 2008, because they represent differing party wins and do not have incumbent presidents in the election. I use data from the Iowa Political markets to determine expected candidate performance at the time of the donation. My primary measure of CEO prediction ability is based on the chosen presidential candidates' expected performance before the Iowa primaries relative to their expected performance after the Iowa primaries.

Focusing on CEOs with donations to single candidate pre-Iowa, I find 384 and 340 such donations in 2000 and 2008, respectively. Aggregating across both elections I find that CEOs provide support to a wide range of candidates pre-Iowa. Out of these 724 donations, I observe that 70% are for republicans and 30% are for democrats. Across these donations I find they are spread among front-runners, those in the middle of the pack, and long shot candidates. In the 2008 election, for instance, I find 214 chose a republican candidate and 126 chose a democrat. 21% donated to the front-running republican candidate and 24% to the front-running democrat candidate. 8 different candidates were supported in the Republican primary pre-Iowa and 5 democrat candidates were supported.

Using this data on CEO presidential predictions, I find firms with CEOs that donate to presidential elections, pre-Iowa, outperform the firms who have CEOs that do not make such donations. Moreover, I find that CEO prediction ability is positively related to firm performance. Specifically, I find that a one standard deviation increase in our CEO prediction ability measure is associated with a 2.4% increase in firm value. These appear to be inconsistent with the attentive manager hypothesis.

Interestingly, among all the firms included in our sample, the lowest level belongs to the low-ability CEOs in larger firms. Yet, high prediction ability CEOs have the greatest dollar impact on shareholder value in large firms. Specifically, I find \$3.6 billion increase in firm value for high ability CEOs, while such a change in firm value in small firms is around \$30 million. Intuitively, these results suggest that a CEO has a greater percentage effect in small firms but that the dollar impact is greater in large firms. One potential interpretation of this evidence suggests that larger firms should be willing to pay a larger premium to hire talented CEOs relative to smaller firms.

Next, I examine the relation between CEO prediction ability and the level of their compensation contracts. I find that CEO prediction ability is associated with higher compensation. On average, high prediction ability CEOs earn about 30% more than low ability CEOs. Finally, I explore the notion that political influence leads to the associations documented in this study. If managerial donations or

predictive ability capture managerial talent, then firm performance should be high before and after the donation (i.e., relatively unchanged). In contrast, if CEO political donations gain political influence, then Tobin's Q should increase after the donation. I find no evidence of a change in Tobin's Q with the managerial donation.

This study makes three potential contributions. First, I introduce a novel approach to create a proxy for CEO ability that potentially captures CEO decision-making, albeit in a different context. Second, my analysis highlights the differential impact of high ability CEOs in small and large firms. CEOs have a greater percentage impact in small firms but a larger dollar impact in large firms. Third, my analysis brings to light the notion that CEO compensation substantively differ among CEOs based on their underlying ability. CEO pay reflects these ability differences. In sum, the evidence seems to suggest that hiring a high ability CEO may indeed be worth all of the concern and attention that is paid to it in the business press.

II. THE ROLE OF CEO

Chief executive ability is commonly perceived as an important component of firm success. Gabaix and Landier (2008) suggest that high ability CEOs are matched with more complex firm operations. Others emphasize that poorly performing firms often seek to replace the CEO with an external hire to effect strategic change and improve growth opportunities (Wasserman, 2003). Consistent with this notion, board of director training modules habitually emphasize that hiring the most able CEO will likely be the biggest challenge facing board members during their tenure. Similarly, compensation consultants observe that managerial talent represents a scarce and important commodity; when it runs out the firm must pay a premium to acquire it (Andelman, 2004). The business press routinely highlights the notion that effective corporate decision making depends on the talent or ability of the CEO (Deutsch, 2008). Overall, anecdotal accounts and prior literature suggest that CEO ability is a key element of corporate growth and prosperity.

Yet, the notion that CEO ability represents an important and scarce product is not a universal view. Paredes (2005) emphasizes that CEOs are overconfident and corporate structure is too CEO centric. Warren Buffett suggests that the difference between mediocre and great CEOs is relatively unimportant, while the key issue centers on the greatness of the business (Elson, 2003). Others go even further and contend that the particular CEO is irrelevant and only serves as a decorative scapegoat or champion for public relations (Gamson & Scotch, 1964). Consistent

with this notion, Huson, Malatesta, and Parrino (2004) imply that the pool of potential managers is substantial with limited differences in managerial ability. Cannella and Lubatkin (1993) suggest that the hiring and firing of managers is more about marketing the firm to external stakeholders than about changing firm operations. Ultimately, the question of whether CEO ability is an important component of firm success becomes an empirical issue.

Unfortunately, it is difficult to test the notion that CEO ability improves firm value or even matters to investors. Empirical studies often use firm performance itself to measure CEO ability under the assumption that CEO performance is a key determinant of firm performance (Rajgopal, Shevlin, & Zamora, 2006). Other research has used different observable CEO characteristics to proxy for or measure managerial ability, including education, tenure, reputation, and age (e.g., Bertrand & Schoar, 2003; Milbourn, 2003; Murphy, 1986). More recently, Falato, Li, and Milbourn (2015) use a collection of these observable characteristics to capture and CEO ability.

Both the inattentive manager hypothesis and the notion that CEO prediction ability captures CEO ability, rely on the notion that the CEO actually matters to the firm. In this context, my hypotheses represent a joint test of whether CEOs matter and my central question of whether CEO personal donations capture managerial inattentiveness or talent.

III. CEO PREDICTIVE ABILITY

The Idea Behind the Predictive Ability

The Predictive Ability measure is constructed based on the argument that CEOs use their decision-making ability while making a presidential contribution, since I believe that such an action is far beyond being a simple decision. It requires an extensive degree of evaluation, foresight and decision making abilities. In order to make such a decision, a CEO should evaluate the candidate's current status in the presidential race, foresee the candidate's future performance, and present an extra effort to analyze all information about the candidate available during the election. Specifically, I create a measure that attempts to capture the CEO's assessment, foreseeing and decision-making ability. I call this measure as "Adjusted Presidential Predictive Ability." If certain abilities are crucial for a CEO in managing a firm, I expect this measure to capture such a hard-to-measure content.

Details about the Data Selection for the Predictive Ability

While examining a CEO's Predictive Ability to a presidential candidate and evaluating the success of such a decision, there is one important issue that

should be taken into account. Political campaign contributions are typically associated with attempts to seek political connection. Recent literature on political connections examines relatively more substantial evidence, such as connections with kings, presidents, parliament members (Faccio, Masulis, & McConnell, 2006; Fisman, 2001) or prior politicians as board members (Agrawal & Knoeber, 2001), than personal campaign contributions. The legal limits on personal contributions make it even less likely to initiate such connections, especially when those limits are compared to the PAC contribution limits.¹ Moreover, the fact that I use contributions to presidential elections, rather than any local elections like those for governors or mayors, allows me to believe that the Predictive Ability evaluates the accuracy and success of CEOs' decisions but not the CEOs' attempts to promote their firms' political connections.²

The following additional steps are included as further efforts to ensure that the Predictive Ability evaluates the CEOs' choices and decision-making ability. First of all, I use the data from presidential elections in 2008 and 2000, to make sure that there are no incumbent candidates with potential to alter the degree of competition in a presidential race and affect the importance of prediction while making a decision to contribution.³ Secondly, the Predictive Ability considers only the CEO contribution data till the first primary election, which is the Iowa primary, in both elections. Considering the Iowa primary as an early indication of presidential election results, I suggest that any contribution made before the Iowa primary results is likely based on the CEO's own analysis of the candidates, degree of competition in the election and his/her decision making ability since there are no actual results available yet. However any contribution made after some election results are provided is less likely to be based on prediction and analysis but more likely to be based on the revealed results.⁴ In addition, my proxy evaluates the CEOs who contributed only to a single candidate and excludes the CEOs contributed to multiple candidates and/or parties. Such a contribution is presumably an effort to hedge from an unsuccessful decision but not a prediction. Overall, the Predictive Ability presents an extra effort to capture the forecasting and decision making content of CEO contributions.

Creating the Predictive Ability

In order to measure the accuracy and success of a CEO's decision on choosing a candidate in presidential primaries, I create the "Adjusted Presidential Predictive Ability" by comparing the expected performance of the presidential candidates before and after the first primaries. In other words, I evaluate the candidates' expected performances after the New Hampshire primaries and adjust that by the expected performance levels they had before the Iowa primaries.⁵ The specification for the index is as follows:

$$\text{Adjusted Presidential Predictive Ability} = \frac{\text{Expected Candidate Performance}_{EX\,POST}}{\text{Expected Candidate Performance}_{EX\,ANTE}}$$

Ex ante expected candidate performance (before the Iowa primaries) provides the information of the relative positions of the candidates in the presidential race, such as who is leading the race and who is a possible front-runner. In other words, ex ante expected performance reveals the possible ranking of the candidates before initial results are out in the primary elections. I suppose that a CEO considers the current situation in the presidential race while making a contribution and utilizing his/her predictive ability to any presidential candidate; therefore I include “ex ante expected performance” as one of the factors affecting our ability proxy. The ex ante expected performance probability values belong the day before the Iowa primary for both elections, and they are gathered from the “Iowa Political Markets,” one of best known markets in the Iowa Electronic Markets (IEM), which is a real-money futures market in which the contract prices are designed to predict the election outcomes, and intended to be used as a research and education tool.

The second component of the Predictive Ability is the ex post expected candidate performance (after the New Hampshire primaries). The ex post expected performance probability values belong the day after the New Hampshire primary for both elections, and they are also gathered from the Iowa Political Markets.

Creating an index that compares the candidates’ expected performance figures before and after the first primaries provides many advantages in terms of capturing the CEOs’ decision making, analyzing and forecasting ability. First of all, the ex post expected performance acts as a benchmark for the ex ante expectations and it allows us to realize if a candidate fulfilled, exceeded or stayed below the expected performance level. In other words, it allows me to evaluate any change in the public view regarding the presidential race. At the end, contributing to a candidate that was very likely to perform well does not require much ability. The ability might be hidden in a contribution made to a candidate who exceeded the expectations on him/her. For example, in the presidential election in 2008, Hillary Clinton was expected to perform well; therefore a CEO contribution to Hillary Clinton would not necessarily be as a result of that CEO’s prediction ability. However, the key point was to predict if she would perform better than her expected level (which did not happen) or to predict that Barack Obama was going to exceed his expected level of performance.

A numerical example might help demonstrate how the index is calculated and what the index value actually means. Before the Iowa Primary, the probability of Barack Obama’s winning the race was 0.345 (*ex ante probability*), while that number increases to 0.391 after the New Hampshire primary (*ex post probability*).

The ability index value for a CEO donated to Barack Obama would then be calculated as $0.391/0.345$, and would equal 1.13. Since Barack Obama exceeded the expectations and increased his winning changes after the two primaries, the index considers donating to him as great forecasting and great decision-making. On the other hand, the ex ante and ex post probabilities for Hillary Clinton were 0.637 and 0.594, respectively. The ability index value for a CEO donated to Hillary Clinton would be calculated as $0.594/0.637$, and would equal 0.93. Since Hillary Clinton could not perform well and stayed below the expected performance level, the index considers donating to her not as a great decision. In this manner, as the value of the index increases (decreases), the forecasting and decision making ability level increases (decreases). Table 1 displays the descriptive statistics of the ability index.

IV. DATA

I construct the sample basically by two major steps. First, I identify the CEOs of public companies who made individual contributions to presidential candidates in 2008 and 2000 presidential elections. Afterwards, I collect the financial information of the companies of those contributing CEOs.

The data for individual contributions to presidential candidates come from the Federal Election Committee's (FEC) website, where they provide public disclosure of campaign finance information.⁶ I start the sample construction by getting the individual contribution data for the 2008 and 2000 presidential elections. FEC provides campaign finance information such as the full name, employer and occupation of the contributor, to whom he/she contributed to, contribution amount and date. I also get a list of all CEOs listed in the Standard and Poor's COMPUSTAT database over the period of 2004 ~ 2008 and 1996 ~ 2000 and match those with the names of the contributed CEOs. For a CEO to be included in the sample, the contributor first and last name should match with the CEO, the company name provided as the employer information in the contribution data should also match with the CEO's company name. By using the contribution

Table 1. Descriptive Statistics for the Ability Index

Variables	Mean	Median	Std. Dev.	Minimum	Maximum
Full Sample	0.7916	0.9252	0.4419	0.0134	0.7248
2000 Election	0.9505	0.9252	0.2639	0.1429	1.7248
2008 Election	0.6264	0.4545	0.5219	0.0134	1.6429

Source: This study.

This table displays the descriptive statistics of the ability index.

receipt date information, I specify the timing of CEO contributions. This creates the list of CEOs made individual contributions to presidential candidates in 2008 presidential election⁷ and that in 2000 presidential election,⁸ along with the CEOs' contribution information. The list consists of 428 unique CEOs for 2008 presidential election and 475 CEOs for 2000 presidential election.

I obtain the company and industry data from COMPUSTAT database and CRSP database, executive characteristic data from ExecuComp database. I have 1,718 CEO-years observations for the period of 2004 ~ 2008 and 1,713 CEO-years observations for the period of 1996 ~ 2000, after keeping only the contributions made before the Iowa Primary. Among these observations, I eliminated the CEOs who made contributions to multiple parties or candidates, since those CEOs are simply protecting themselves from a wrong decision or at least trying to guarantee that one of their contributions go to the winner candidate. I do not consider such contributions as a prediction; therefore I do not include those to my sample. I had 88 CEOs making contributions to multiple candidates or parties in 2008 presidential election, and this number was 91 in 2000 presidential election. After excluding such CEOs, I have 1,341 and 1,394 observations for the elections in 2008 and 2000 respectively. Overall, the final sample consists of 724 unique CEOs and 2,735 observations. Panel A in Table 2 displays the number of observations by each step in the data collection process.

Panel B in Table 2 displays the descriptive statistics for the variables of the entire sample, such as mean, median, standard deviation. The sample consists of 2,735 observations, with a mean natural logarithm of total assets size of \$7.93 million and less than 1% growth rate, scaled by firm size. These firms have R&D expenses of 4.43% of their firm size and capital expenses of close to 6% of their firm size, on average. In terms of leverage, the firms in our sample finance 20% of their assets by long-term debt. These firms have an average of 25% standard deviation in their stock returns.

Variable Measures

In this study, the main purpose is to investigate the impact of CEO ability on the firm performance, therefore performance measures are used as the dependent variable in the empirical model. Tobin's Q is the performance proxy used as the dependent variable, following Lee, Lev, and Yeo (2008). Tobin's Q is calculated as the ratio of the market value of the firm to its replacement value. Relevant data values are gathered from COMPUSTAT database.

The control variables included in the models basically represent firm characteristics and listed as following: Firm size is measured by total assets, and included to multivariate framework as natural logarithm of total assets, similar

Table 2. Sample Information**Panel A: Data Collection Process and Number of Observations**

	Number of CEOs		Number of Observations	
	Election 2008	Election 2000	Election 2008	Election 2000
CEOs Made Contribution before Iowa Primary	428 CEOs	475 CEOs	1,718 obs	1,713 obs
CEOs Made Contribution to Multiple Candidates or Parties	88 CEOs	91 CEOs	377 obs	319 obs
CEOs Contributed to Only a Single Candidate	340 CEOs	384 CEOs	1,341 obs	1,394 obs
Full Sample	724 CEOs		2,735 observations	

Panel B: Descriptive Statistics for the Entire Sample

Variables	Mean	Median	Std. Dev.	10th Percentile	90th Percentile
Log (Total Assets)	7.93	7.79	1.78	5.78	10.23
R&D Expense / Total Assets (%)	4.43	1.82	9.67	0	11.45
Capital Expense / Total Assets (%)	5.81	4.21	6.05	0.21	13.13
Sales Growth / Total Assets (%)	0.25	0.002	6.81	-0.002	0.05
Debt Ratio	20.05	17.45	17.21	0	43.18
Risk (%)	24.99	5.51	440.21	2.09	14.09
CEO Age	56.03	56	7.71	47	65
CEO Tenure	8.62	6.46	7.73	1.50	19.01
Tobin's Q	1.98	1.48	1.69	1.02	3.30
Return on Assets	0.04	0.05	0.16	-0.01	0.13

Source: This study.

Panel A presents the data collection steps. The number of unique CEOs and the number of observations at each step are displayed. Panel B reports the descriptive statistics for the entire sample. The financial statement values are represented in million dollars.

to Lee and Lee (2009). R&D and capital expenditure values are gathered directly from firm's financial statement values, and adjusted for firm size while using in the regression models. Growth rate is the percentage change in the sales values of the firms compared to prior year's figures, and similarly it is adjusted for the firm size while using in the regression models. The debt ratio, i.e., firm leverage is measured by dividing long-term debt by total assets. I calculate the firm risk by taking the standard deviation of monthly stock returns for the prior 36 months. While measuring prior period performance, I calculated return on assets (ROA) by scaling net income by the total assets values that belong to the prior year. Finally, I include dummy variables for each 2-digit Standard Industry Classification (SIC)

code and for each year in the sample. The data for these variables are collected from COMPUSTAT database, except for the firm risk, which uses data from CRSP database.

For descriptive results only, we include CEO characteristics, such as CEO age and tenure. Age is the CEO's age for the relevant year. Tenure is the number of years a CEO holds the title. The relevant data are gathered from ExecuCOMP database.

Additional Data

Regarding the compensation contract components, salary, bonus, stock grants and option grants⁹ are the major components of use, while I also evaluate the total direct compensation, which is the sum of salary, bonus, stock and option grants, long-term incentive plans payouts and other compensation items. Following Blackwell, Dudney, and Farrell (2007), cash compensation is calculated as the sum of salary and bonus components, and stock based incentives is equal to the sum of option awards, stock awards and long-term incentive plans payouts.

V. THE INATTENTIVE MANAGER HYPOTHESIS

The analysis of the inattentive manager hypothesis, i.e., the association between CEO's decision to make contribution and firm performance, may answer the question of whether CEOs are dissipating their precious time which otherwise could have been used for the sake of the company. If such contributions have no impact on the firm, there will be no association between donations and firm performance. This association may even be negative if it is argued that CEOs are in fact spending time and energy on activities which are not included in their job description.

In order to test this hypothesis, I start with a univariate analysis in which I compare firms with contributing CEOs with those have a CEO who did not make a contribution. To serve this purpose, I use a matched sample which uses a matching process based on the 2-digit SIC codes and firm size. For each firm I have in the original sample, I include two firms with a non-contributing CEO, from the same industry and with a similar size.

I start the analysis with univariate tests, in which I separate the matched sample into two groups based on the CEO's decision of contributing. Panel A in Table 3 displays the results of the mean difference tests for firm characteristics, most importantly performance measures, and CEO characteristics. Tobin's Q and ROA are the performance measures included in the analysis. The most important result is that the firms with donated CEOs are significantly performing better than firms

with non-donated CEOs. This result is consistent with the market-value based and book value based measures. This finding suggests that the CEO's decision of making a contribution is not harming the firm's performance, in fact they are performing better.

To provide further evidence, I present the multivariate analysis results in Panel B in Table 3. Performance measures are used as the dependent variable. Along with the variables that have been used widely in the literature to explain firm performance, I also include a dummy variable (DONATED) to the regression model to indicate if the firm's CEO made a contribution or not. The DONATED dummy is positive and significant for both measures of firm performance. This result provides additional support on the above finding, and implies that donating CEOs are not necessarily mispending their time.

This finding promotes the argument that the contributing CEOs may in fact provide other information through those contributions. If the CEOs contributions are examined in more detail, such contributions may be evaluated as signals of their decision-making ability and the quality of their prediction. The decision of donating to which particular candidate requires CEOs to use their judgment, forecasting and decision making abilities. Furthermore, they present a strong commitment to that candidate by putting their names next to the candidates'. Therefore, I suggest that such decision requires a more detailed examination.

VI. AN INITIAL LOOK AT CEO ABILITY

Univariate Statistics

Table 4 presents a comparison of the mean values of firms with high-ability CEOs and firms with low-ability CEOs. The distinction in the ability levels are set by ranking the CEOs based on their ability index scores and comparing the top and bottom halves of the sample. The final column in the table gives the *t*-statistics for the mean difference tests.

Table 4 provides valuable information about the comparison of CEOs in terms of ability. Firms managed by a greater ability CEO, i.e., a CEO with higher ability proxy score, seem to be smaller. Although they have significantly lower levels of capital expenses, firms with talented CEOs spend more in R&D expenses. Firms with high-ability CEOs also present higher risk. The most important difference is in firm performance. Firms with high-ability CEOs perform significantly better than those firms with lower ability CEOs. Although not significant, the change in performance is greater in firms managed by high-ability CEOs compared to those managed by low-ability CEOs. Besides, more skilled CEOs have longer tenure than

Table 3. Univariate and Multivariate Results Using Firms with Donated and Non-Donated CEOs

Panel A: Mean Differences between Firms with Donated CEOs and Non-Donated CEOs

Variables	Mean Value			<i>t</i> value
	Firms with Donated CEOs	Firms with Non-Donated CEOs	Donated vs. Non-Donated	
Log (Total Assets)	8.08	8.03	0.05	1.11
R&D Expense / Total Assets (%)	4.52	4.08	0.44	1.55
Capital Expense / Total Assets (%)	5.75	5.94	-0.19	-1.21
Sales Growth / Total Assets (%)	0.21	0.23	-0.02	-0.10
Debt Ratio	20.35	23.62	-3.27	-7.29***
CEO Age	56.13	54.39	1.74	7.91***
CEO Tenure	8.76	7.08	1.68	7.08***
Tobin's <i>Q</i>	1.97	1.84	0.13	2.41***
Return on Assets	0.05	0.03	0.02	1.72*
Number of Observations	2,735	5,470		

Panel B: Regression Results for Firms with Donated CEOs and Non-Donated CEOs

Variables	Dependent Variable			
	Tobin's <i>Q</i>		Return on Assets	
	(1)	(2)	(3)	(4)
Intercept	1.204*** (4.14)	1.888*** (5.72)	0.016 (0.21)	0.151* (1.72)
Donated	0.188*** (3.41)	0.132*** (2.51)	0.031** (2.25)	0.028** (2.04)
Log (Total Assets)		-0.058*** (-3.94)		-0.006 (-1.56)
R&D Expense		5.273*** (12.16)		-1.251*** (-10.79)
Capital Expense		0.493 (1.19)		-0.051 (-0.46)
Sales Growth		1.551*** (6.68)		-0.276*** (-4.45)
Debt Ratio		-1.376*** (-11.36)		-0.165*** (-5.11)
Performance (<i>t</i> -1)		0.665*** (4.93)		0.107*** (2.98)
Dummies for industries and years	yes	yes	yes	yes
Adj. R2	0.0485	0.0984	0.0003	0.0284
Sample Size	8,205	8,205	8,205	8,205

Source: This study.

Panel A: mean differences of firm and CEO characteristics of firms with Donated CEOs and firms with Non-Donated CEOs are provided, along with the *t*-statistics for the difference in mean test. *, **, *** denote significance at a 10% level, 5% level and 1% level, respectively.

Panel B:

$$Performance = \alpha_0 + \alpha_1(Donated) + \alpha_2(Lag_TA) + \alpha_3(R\&D) + \alpha_4(Growth) + \alpha_5(CAPX) + \alpha_6(Debt\ Ratio) + \alpha_7(Performance_{t-1}) + \sum \alpha_i(Industry\ Dummy) + \sum \alpha_j(Year\ Dummy) + \varepsilon$$

*, **, *** denote significance at a 10% level, 5% level and 1% level, respectively. The *t*-statistics are given in parenthesis below each estimate.

Table 4. Mean Differences between Firms with High-Ability CEOs and Low-Ability CEOs

Variables	Mean Value			<i>t</i> value
	Firms with High-Ability CEOs	Firms with Low-Ability CEOs	High- vs. Low-Ability CEOs	
Log (Total Assets)	7.63	8.23	-0.60	-8.99***
R&D Expense / Total Assets (%)	4.97	3.91	1.01	1.99**
Capital Expense / Total Assets (%)	5.44	6.18	-0.74	-3.13***
Sales Growth / Total Assets (%)	0.17	0.35	-0.18	-0.68
Debt Ratio	19.83	20.27	-0.44	0.66
Risk (%)	43.40	7.10	36.30	2.13**
CEO Age	55.92	56.13	-0.20	-0.69
CEO Tenure	9.17	8.06	1.11	3.63***
Tobin's <i>Q</i>	2.13	1.82	0.31	4.73***
Change in Tobin's <i>Q</i>	1.92%	0.44%	1.48%	1.10
Number of Observations	1,366	1,367		

Source: This study.

"High Ability" and "Low Ability" CEOs are based on ability score ranking and getting top and bottom halves of the entire sample. Mean differences of firm and CEO characteristics of firms with High-Ability CEOs and firms with Low-Ability CEOs are also provided, along with the *t*-statistics for the difference in mean test. *, **, *** denote significance at a 10% level, 5% level and 1% level, respectively.

their less skilled peers and they are younger, although the difference in age is not significant.

The Firm Size and Performance

In this section, I examine the relation between ability and performance in firms with different firm sizes. Prior literature often focuses on the CEO ability in the context of compensation contracts. Rosen (1982) and Rose and Shepard (1997) suggest that CEOs with superior talent are rewarded more since they are assigned to firms that are hard to manage, which have larger size and higher degrees of diversification, therefore they are rewarded more. By the use of a similar ability-matching framework, I investigate the differences in firm performance and incremental effects on firm value.

For the matching process, I first rank the firms based on the firm size, and I call the top and bottom half as small firms and large firms, respectively. Within each size group, I rank the firms by their CEO's Predictive Ability score. This method provides me with four groups, namely (1) high-ability CEOs in large firms, (2) high-ability CEOs in small firms, (3) low-ability CEOs in large firms

and (4) low-ability CEOs in large firms. After this classification, I measure the firm performances for each group, by Tobin's Q .

Secondly, I evaluate the difference between the incremental dollar effects of high- and low-ability CEOs on the firm value. In order to provide more detailed assessment of the effect of firm size on the relation between ability and firm performance, the sample is divided into five subsamples based on firm size. Then, the firms are ranked within each firm size group based on the Ability Index Score of their CEOs. This process generates "High Ability" and "Low Ability" CEOs within every firm size group. For every size category, I calculate the average Tobin's Q value for firms with high- and low-ability CEOs, and get the difference of each group's Tobin's Q value from the sample mean. Then, I multiply that incremental Tobin's Q value by the sample median total asset size value. This gives me the average incremental dollar effect of a CEO on firm value, for every size category. The difference between the incremental dollar effects of high- and low-ability CEOs on the firm value is then evaluated.

The first table in Table 5 presents the ability matching model results based on total asset size. The t -statistics evaluating the difference between the performance values are also included next to each pair of Tobin's Q value evaluated. Talented CEOs present significantly better performance within larger firms ($Q = 1.80 > Q = 1.63$), and there is no significant difference in small firms ($Q = 2.20 \sim Q = 2.27$). However, the lowest level belongs to the low-ability CEOs in larger firms ($Q = 1.65$). These results suggest that high-ability CEOs have the greatest impact on Tobin's Q in smaller firms.

On the other hand, incremental effect on firm value displays a different but interesting pattern. CEOs with high ability have the greatest value effects in larger firms (\$3.6 billion), while the greatest detrimental effects on firm value occur when a low-ability CEO manages a large firm. These results are displayed in the second table in Table 5. Figure 1 displays additional results. First of all, the chart suggests that, regardless of the firm size, high-ability CEOs add more value to their firms compared to low-ability CEOs. More importantly, talented CEOs have the greatest value effects in larger firms. For the first quantile of firms based on firm size (smallest firms in our sample), high-ability CEOs add \$107 million more to firm value, compared to their low-ability peers. However, this difference increases as the average firm value increases. For the middle-sized firms, this difference is around \$1.67 billion, and for the largest firms in our sample, it is around \$2.47 billion. This finding suggests that CEO pay-performance analysis should not only consider Tobin's Q , but also include the evaluation of the dollar impact on shareholder value. These results could also suggest that larger firms should be willing to pay a larger premium to hire talented CEOs relative to smaller firms. Overall, these

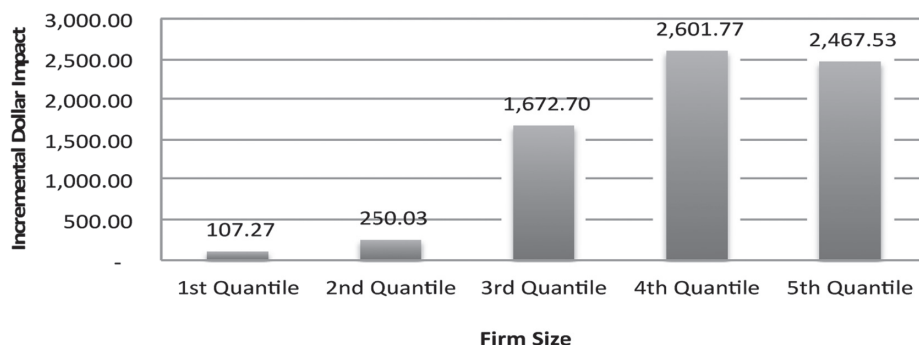
Table 5. Ability-Matching Model Results: Firm Performance and Incremental Dollar Impact

Mean value of Tobin's Q					Incremental \$ Effect on Firm Value		
CEO Ability		Small Firms	Large Firms	t -stat		Small Firms	Large Firms
	High	2.20	1.80	3.97***	High	-\$38.84	\$3,603.01
	Low	2.27	1.63	7.90***	Low	\$30.95	-\$2,195.15
	t -stat	0.70	2.29**				

Source: This study.

First, the firms are ranked based on the firm size and categorized as "Small" and "Large" group. Afterwards, the firms are ranked within each firm size group based on the Ability Index Score of their CEOs. This process generates "High Ability" and "Low Ability" CEOs within "Small" and "Large" firm size groups, and creates the ability matching model table. The first table provides mean values of Tobin's Q for the relevant groups, and t statistics of the differences between each group. *, **, *** denote significance at a 10% level, 5% level and 1% level, respectively. The second table presents the incremental dollar effect on the firm value. The values are in million dollars and calculated as following:

$$[\text{Tobin's } Q - \text{Mean Tobin's } Q \text{ for Small / Large Firms}] \times \text{Mean TA.}$$

**Figure 1. Ability-Matching Model Results: Difference in the Incremental Dollar Effect on Firm Value**

Source: This study.

The table presents the difference between the incremental dollar effects of high- and low-ability CEOs on the firm value, expressed in million dollars. The sample is divided into five equal subsamples based on firm size. Then, the firms are ranked within each firm size group based on the Ability Index Score of their CEOs. This process generates "High Ability" and "Low Ability" CEOs within every firm size group. For each subsample, the following calculations are done:

Incremental Dollar Effect of High-Ability CEOs:

$$[\text{Tobin's } Q - \text{Tobin's } Q_{(\text{Sample Min})}] \times \text{TA}_{\text{Median}}$$

Incremental Dollar Effect of Low-Ability CEOs:

$$[\text{Tobin's } Q - \text{Tobin's } Q_{(\text{Sample Min})}] \times \text{TA}_{\text{Median}}$$

Difference between the Incremental Dollar Effects of High- and Low- Ability CEOs.

results support the fact that certain decisions require talented CEOs and firm size may alter the effect of a CEO on the firm performance.

VII. EVIDENCE ON THE IMPACT OF CEO ABILITY ON FIRM PERFORMANCE

The first set of regressions examines the impact of CEO ability on the firm performance. In order to measure CEO ability, I use the Predictive Ability that is based on the quality of the prediction of a CEO while picking a candidate to make commitment during presidential elections. If such a decision requires ability to evaluate the available information, foresee the future outcome and present efforts supporting their commitment, I expect firms managed by greater ability CEOs, i.e., CEOs with higher Predictive Ability scores, to perform better than those with lower-ability CEOs. In order to test the proposition, I use the following specification:

$$\text{Tobin's } q = \alpha_0 + \alpha_1(\text{Ability}) + \alpha_2(\text{Lag_TA}) + \alpha_3(R\&D) + \alpha_4(\text{Growth}) + \alpha_5(\text{CAPX}) + \alpha_6(\text{Debt Ratio}) + \alpha_7(\text{Risk}) + \alpha_8(\text{Performance}_{t-1}) + \sum \alpha_i(\text{Year Dummy}) + \varepsilon$$

where

Tobin's Q = ratio of the market value of the firm to its replacement value;

Ability = predictive ability;

Log_TA = natural log of total assets;

R&D = research and development expense, as a ratio to total assets;

Growth = growth rate for sales, as a ratio to total assets;

CAPX = capital expenditure, as a ratio to total assets;

Debt Ratio = long-term debt, as a ratio to total assets;

Risk = standard deviation of monthly stock returns for the prior 36 months;

Performance_{t-1} = return on assets, prior year.

Column 1 of Table 6 presents the regression results with only the Predictive Ability as the explanatory variable. Consistent with my expectations, the coefficient estimate of the Predictive Ability is positive and significant at a 5% level. This result implies that CEO ability is positively related to firm performance, i.e., firms managed by a CEO with superior talent perform better than firms with a lower-ability CEO. Next, I include the control variables to the model in Column 2 of Table 6. The control variables are orthogonalized to the Predictive Ability, in order to avoid any possible association between those variables and the ability proxy. The

Table 6. Multivariate Results -- Effect of Ability on Firm Performance

Variables	Dependent Variable = Tobin's Q				VIF	VIF
	(1)	(2)	(3)	(4)		
Intercept	1.556*** (2.99)	2.061*** (3.34)	2.643*** (14.47)	2.075*** (3.37)		
Ability Index	0.146** (1.94)	0.117* (1.71)	0.172*** (2.50)	0.116* (1.68)*	1.21	1.21
Log (Total Assets)		-0.017 (-0.90)	-0.168*** (-9.60)	-0.025 (-1.31)	1.40	1.43
R&D Expense		6.389*** (11.70)	6.550*** (11.64)	6.320*** (11.58)	1.74	1.74
Capital Expense		0.455 (0.81)	1.697*** (3.29)	0.427 (0.45)	1.42	1.42
Sales Growth		-0.054 (-0.11)	0.660 (1.16)	0.001 (0.00)	1.58	1.58
Debt Ratio		-1.272*** (-7.35)	-1.962*** (-10.38)	-1.308*** (-7.54)	1.14	1.14
Risk (%)		-0.001 (-0.92)	-0.000 (0.00)	-0.000 (-0.66)	1.77	1.78
Performance (<i>t</i> -1)		0.526*** (14.81)	0.685*** (5.26)	0.530*** (14.92)	1.38	1.39
Tenure				-0.011*** (-2.82)		1.09
Mill's Lambda			0.869*** (4.28)			
Dummies for Industries and Years	yes	yes	yes	yes		
Adj. R2	0.0857	0.2551	0.1673	0.2570		
Sample Size	2,735	2,735	8,205	2,735		

Source: This study.

This table reports the regression results. Model (1) includes only the Ability Index, whereas Model (2) includes the Ability Index and the orthogonalized control variables. Model (3) reports the results of Heckman 2-step procedure for sample selection bias. Model (4) includes the Tenure variable to the model. Variance inflation factors (VIFs) are also reported. *, **, *** denote significance at a 10% level, 5% level and 1% level, respectively. The t-statistics are given in parenthesis below each estimate.

$$\text{Tobin's } q = \alpha_0 + \alpha_1 (\text{Ability}) + \alpha_2 (\text{Lag_TA}) + \alpha_3 (\text{R\&D}) + \alpha_4 (\text{Growth}) + \alpha_5 (\text{CAPX}) + \alpha_6 (\text{Debt Ratio}) + \alpha_7 (\text{Risk}) + \alpha_8 (\text{Performance}_{t-1}) + \sum \alpha_i (\text{Year Dummy}) + \varepsilon$$

Predictive Ability is still positively related to Tobin's *Q*, at a 10% significance level. This evidence can be interpreted to point out that the Predictive Ability captures essential abilities required for a CEO during decision making and managing their firms.

It could also be argued that sales growth and CEO ability are expected to be highly correlated, as well as R&D expenses with risk, creating a potential multi-collinearity issue. To ensure that multi-collinearity is not a problem, I compute variance inflation factors (VIF) in the model as suggested by Kennedy (1992, p. 183). The results are presented in Column 2 of Table 6. The VIF is higher when the linear dependence among the independent variables is greater, with $VIF > 10$ indicating harmful collinearity. I find that VIFs for all variables are below 2 so that a multi-collinearity problem is unlikely.

Column 3 of Table 6 uses Heckman's 2-step procedure (1979) for sample selection bias. Since the sample consists of only the firms with donating CEOs, this may lead to sample selection problem and provide misleading results. For this correction, I use the matched sample explained in previous sections, which includes firms with and without donating CEOs. After the process, I still have the ability proxy's coefficient significant and positive, which suggests after correcting for a possible sample selection process, the results are robust.

CEO tenure is expected to be highly correlated with CEO ability, and therefore with the ability index. This may cause the explanatory variable, the ability index, correlate with the error term in the above model. Considering such a possible problem, I expand the model by including the tenure variable as an additional control variable. Then the possible high correlation between the ability index and the tenure variable may cause multi-collinearity issues. To control for this potential multi-collinearity problem, VIF values are reported in Column 4 of Table 6. VIFs below 2 suggest that a multi-collinearity problem does not exist.

Overall, the regression results suggest that the firms managed by the CEOs with higher Predictive Ability scores, i.e., those who make commitment to better performing candidate, present higher levels of performance. This result does not change when the control variables are included to the regression model. If the Predictive Ability is successful to capture the abilities required to manage a firm, I provide evidence that talented CEOs provide better firm performance, when compared to their less-skilled peers. This finding is supported with correction of a possible sample selection problem, and by including the CEOs who did not contribute at all to the evaluations.

CEO Ability and Compensation Contracts

As further analysis, I evaluate the impact of CEO ability on compensation contracts. I find that compensation level differ significantly between high-ability and low-ability CEOs. The results are displayed in Table 7. Panel A presents the univariate results. Regarding the level of CEO pay, I find that high-ability CEOs have, on average, significantly higher levels of cash compensation and higher levels

Table 7. CEO Ability and Compensation Contracts

Panel A: Mean Differences of Compensation Variables				
Variables	Mean Value		Difference	t value
	Firms with High-Ability CEOs	Firms with Low-Ability CEOs		
Full Sample				
Cash Based Comp.	1,610.2	1,370.1	240.1	1.86*
Stock Based Incentives	6,473.6	4,650.9	1,822.7	1.63*
Total Compensation	8,074.3	6,014.2	2,060.1	1.80*
Panel B: Mean Differences of Compensation Level and Structure Variables in Small and Large Firms				
Variables	Mean Value		Difference	t value
	Firms with High-Ability CEOs	Firms with Low-Ability CEOs		
Small Firms				
Cash Based Comp.	970.5	870.7	99.8	2.71***
Stock Based Incentives	2,072.7	2,375.1	-302.4	-0.83
Total Compensation	3,043.2	3,242.3	-199.14	-0.54
Large Firms				
Cash Based Comp.	2,253.4	1,850.4	403.0	2.56***
Stock Based Incentives	9,677.6	6,258.8	3,419.8	2.33***
Total Compensation	11,917.2	8,109.2	3,808	2.55***

Table 7. CEO Ability and Compensation Contracts (continued)

Variables	Dependent Variable		
	Total Compensation (1)	Cash Based Compensation (2)	Stock Based Incentives (3)
Intercept	35,101*** (3.72)	-1,925.05** (-2.00)	37,001*** (3.99)
Ability	1,903.8** (2.06)	367.08*** (3.88)	1,544.0* (1.70)
Firm Size	3,078.0*** (12.37)	455.0*** (17.89)	2,625.2*** (10.73)
R&D Intensity	8,497.8 (1.14)	1,010.1 (1.32)	7,489.4 (1.02)
Capital Expenditure	-9,981.3 (-1.33)	128.4 (0.17)	-10,114 (-1.36)
Growth	-409.9 (-0.06)	389.8 (0.55)	-805.2 (-0.12)
Debt Ratio	-1,815.3 (-0.77)	-147.1 (-0.61)	-1,692.1 (-0.73)
Risk	-7.06*** (-6.20)	-0.346*** (-2.98)	-6.719*** (-5.99)
Performance (<i>t</i> -1)	1,333.1*** (5.67)	10.876 (0.45)	1,324.4*** (5.72)
Dummies for Industries and Years	yes	yes	yes
Adj. R ²	0.0857	0.1673	0.0730
Sample Size	2,712	2,712	2,712

Source: This study.
Panel A displays the results of the mean difference tests between firms with high- and low-ability CEOs. CEOs with ability index score above the 75th percentile are considered as high-ability, and those below the 25th percentile are called as low-ability CEOs. Panel B present the results of the mean difference tests in small and large firms, by splitting the sample into two equal groups from median firm size value. Panel C presents the regression results. Total direct compensation is the sum of salary, bonus, stock and option grants, long-term incentive plans payouts and other compensation items. Cash compensation is calculated as the sum of salary and bonus components, and stock based incentives is equal to the sum of option awards, stock awards and long-term incentive plans payouts. *, **, *** denote significance at a 10% level, 5% level and 1% level, respectively. In Panel C, the *t*-statistics are given in parenthesis below each estimate.

of stock based incentives. Overall, the more skilled CEOs receive significantly higher levels of total compensation. While high-ability CEOs have total compensation level around to \$8 million on average, their low-ability peers receive \$6 million.

Since firm size is apparently an important factor for the relation between ability and compensation, I further evaluate the relation by dividing the sample into two equal groups based on firm size. I have small firms and large firms separated and within each group, I examine the differences in compensation variables. As displayed in Panel B in Table 7, the results support the previous findings. In small firms, high-ability CEOs get significantly more cash-based compensation. However, the effect on stock based compensation, and therefore on total compensation disappears. The results in large firms replicate the full sample findings. High-ability CEOs in large firms receive more compensation, both in the form of cash-based and incentive based compensation.

Panel C in Table 7 displays the results from multivariate analysis. Column 1, Column 2 and Column 3 presents the results for total compensation, cash based compensation, and stock based incentives, respectively. CEO ability is significantly and positively associated to total compensation level and stock based incentives level. The results provide evidence towards the argument that CEO ability is taken into account while determining the CEO pay contracts, and as a result high-ability CEOs are awarded with higher levels of compensation. Overall, these results support the main findings about the impact of CEO ability on firm performance, and imply that high-ability CEOs perform better and firms use compensation contracts to attract them and also reward them for such high performance.

VIII. ROBUSTNESS TESTS FOR POLITICAL INFLUENCE

As an additional robustness check, I explore the idea that political influence leads to the findings of this study. As argued above in the text, if my ability proxy based on predictive ability captures managerial talent, then firm performance should not differ before and after the donation. On the other hand, if CEO political donations provide political influence, then Tobin's Q should increase after the donation.

Table 8 evaluates such possible impact of political influence. In order to test this proposition, I compare average firm performance values of the firms before and after the 2000 and 2008 elections, by using a 1 year and 2 year window. Tobin's Q is utilized to measure firm performance. I find no evidence of a change in Tobin's Q with the managerial donation. The results show that there is no significant

Table 8. Firm Performance Before and After the Election

Variables	Mean Value of Tobin's Q			
	After the Election	Before the Election	After vs. Before	t value
<i>-2,+2 Years Average Tobin's Q</i>				
2008 and 2000 Election	1.92	2.03	-0.11	-1.58
2008 Election	1.60	1.93	-0.33	-4.78***
2000 Election	2.18	2.13	0.05	0.40
<i>-1,+1 Years Average Tobin's Q</i>				
2008 and 2000 Election	2.05	2.04	0.01	0.09
2008 Election	1.83	1.94	-0.11	-1.06
2000 Election	2.26	2.15	0.11	0.55

Source: This study.

The table compares average firm performance values of the firms before and after the 2000 and 2008 elections, by using a 1 year and 2 year window. Tobin's *Q* is utilized to measure firm performance.

difference between two periods, except the lower performance figures after the 2008 election, which could be attributable to the approaching financial crisis. The findings can be considered as an additional support to deny the impact of political influence to the ability measure used in this study.

IX. CONCLUSIONS

Using the Predictive Ability measure, I provide evidence to suggest that firms managed by higher-ability CEOs perform better than those managed by lower-ability CEOs. The ability-matching model results suggest that high-ability CEOs have the highest impact on Tobin's *Q* in smaller firms; on the other hand they provide the greatest value effects in larger firms. I suggest that this result may have implications on CEO pay-performance evaluations, since the findings suggest that not only Tobin's *Q* but also the dollar effect on shareholder value should be taken into consideration. The multivariate framework results imply that there is a positive and significant association with CEO ability and firm performance. The argument that highly-skilled CEOs provide better firm performance is further supported by the industry and time controls and additional tests that attempt to consider political influence impact, which is possibly captured by our ability proxy.

I also examine the effect of CEO ability on compensation contracts. I provide evidence that there are significant differences between high-ability and low-ability CEOs, regarding their compensation level. High-ability CEOs receive higher levels of cash compensation and stock based incentives, which leads to higher levels of

total compensation. The findings imply that CEO ability is an important factor for CEO compensation contracts.

ACKNOWLEDGEMENTS

I would like to extend my gratitude to my doctoral advisor, Dr. David M. Reeb, as this work is based on my PhD studies at Temple University.

NOTES

- ¹ While individual campaign contribution limit is \$2,400, the limits for PACs range from \$2,400 to \$30,400.
- ² If there is any election contribution that helps the CEO to build such political connections, a local election will be more likely to serve that purpose. Claessens, Feijen, and Laeven (2008) support this idea by providing evidence that contributions to local elections ensure better firm performance through preferential financial access.
- ³ 2004 election was not included in the sample, since there was an incumbent candidate in the presidential race.
- ⁴ Moreover, as the presidential race moves forward to the next primaries, the results become obvious or some candidates drop out of the race by endorsing others. Therefore, the longer one waits to make a contribution, the less prediction and analysis he/she needs.
- ⁵ The reason why I also included New Hampshire primary results is that some of the major candidates did not campaign in Iowa Primary, especially in 2000. The fact that there are only couple of days between these two primaries still allow us to present their results as the first results that came out about the performance of candidates.
- ⁶ FEC provides disclosure for individual contributions larger than \$200.
- ⁷ The list for 2008 presidential election includes the following major candidates: Democratic candidates: Joe Biden, Hillary Clinton, Christopher Dodd, John Edwards, Barack Obama, and Bill Richardson; Republican candidates: Sam Brownback, Jim Gilmore, Rudy Giuliani, Mike Huckabee, Duncan Hunter, John McCain, Mitt Romney, and Fred Thomson.
- ⁸ The list for 2000 presidential election includes the following major candidates: Democratic candidates: Bill Bradley and Al Gore; Republican candidates: Lamar Alexander, Gary Bauer, George W. Bush, Elizabeth Dole, Steve Forbes, Orrin Hatch, John Kasich, Alan Keyes, John McCain, and Dan Quayle.
- ⁹ The reason why I am using the award values of options and stocks is that I am only interested in how the company evaluates the ability of the CEOs and rewards them by awarding them such compensation components. The CEO's decision of whether or when to exercise the options or sell the stocks is beyond the purposes of this

study, although that may be an additional aspect for the assessment of CEO ability. Accordingly, I am interested in the award values of the stocks and options, not the values at the time of exercise.

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