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Political Connections and Abnormal Stock Returns: An Analysis of the Trump Nominations

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Abstract:
Shortly after winning the 2016 Presidential Election, Donald Trump began announcing his Cabinet nominations. I examine cumulative abnormal returns (CARs) for firms with political connections to Cabinet and some non-Cabinet level appointments. Nominee and stock characteristics are aggregated, and I find positive and significant CARs surrounding the announcement dates. Additionally, the traits of being a Cabinet nominee, being a board member, and having a narrow confirmation margin all significantly explain the CARs for various event windows and subgroups. The annualized CARs around the announcement date for these firms are often greater than 100% in excess of the market, providing strong evidence that political connections are highly sought after and rewarded by the market.

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1. INTRODUCTION

On October 18, 2016, just a few weeks before the Presidential Election, Donald Trump tweeted, “I will Make Our Government Honest Again -- believe me. But first, I’m going to have to #DrainTheSwamp in DC” (Trump 2016). Since then, he has tweeted #DrainTheSwamp an additional 83 times, almost all of which were before the general election (Brown 2020). In this paper, I test the validity of this campaign promise and set out to determine, based on Cabinet and other high-level government positions, the breadth and depth of ties to companies for those nominated for these positions. While it is rare to find someone that has never worked in industry who is also qualified for a distinguished, government position, it seems reasonable that politicians would rank prior corporate ties as being less important than doing what is best for the people they represent.

It is not difficult to find evidence that politics and stock returns have a significant relationship. The STOCK Act was passed in 2012 to prevent congressmen and congresswomen from trading on material, nonpublic information that they acquired through their public service. Despite this bill preventing—or at least limiting—insider trading amongst America’s civil servants, it was amended around a year later to prevent trading disclosures to the general public. (Fernando 2020). There is also abundant literature highlighting the ties between political connections and various benefits, whether directly or indirectly related to government. Duchin and Sosyura (2012) show that firms who lobbied were not only more likely to receive assistance during the 2008 Troubled Asset Relief Program (TARP) but that they also received more assistance than those who had not lobbied. These finding are further confirmed by Blau, Brough, and Thomas (2013). Blau (2017) also shows that firms that lobbied were more likely to receive emergency funding from the Federal Reserve during the financial crisis. Yu and Yu (2010) find that firms who lobby avoid detection for longer and are investigated less often by auditors.

Politically connected firms also have a lower cost of equity capital than those that are less connected, according to research by Boubakri, Guedhami, Mishra, Saffar (2012). Richter, Samphantharak, Timmons (2009) examine the relationship between effective tax rates and lobbying, finding that those who lobby more face a lower effective tax rate. Faccio (2006) shows that, “the announcement of a new political connection results in a significant increase in (firm) value”. This last statement motivates the tests in this study. In particular, I examine the stock price reaction of politically connected firms surrounding the Trump administration’s nominations. Given the existing literature, I expect that there will be statistically significant, abnormal stock returns for those companies who have political connections surrounding the day that the appointment is announced.

In testing this hypothesis, I attempt to identify the best ways to determine a corporate tie, how to measure the degree of a corporate tie, and how these ties show up in data. My first assumption is that the best metric for measuring a corporate tie is years worked for a company. In addition, some companies were bought out by larger firms or rebranded. I assume that these ties show up in the data of companies that made acquisitions, were rebranded, or were the parent company. It also seems valuable to determine how many years it has been since the nominees worked for these large companies. Surely working at Company A several decades ago would have a lesser impact than working at Company B within the last year. Finally, I make the assumption that the impact of these ties shows up in cumulative abnormal returns (CARs) surrounding the day that the nomination is announced for those firms that are publicly traded.

To calculate CARs, I utilized Eventus, a software program I accessed through Wharton Research Data Services. Eventus uses CRSP data (The Center for Research in Security Prices) to quickly run regressions calculating parameters from a daily market model for each company in question. I can then examine discrepancies between the predicted and actual returns to see if they are statistically different from zero. In running preliminary regressions on a handful of companies, I procured results that were both economically and statistically significant. I then applied this method to the sample of available firms (with available data) that were connected to President Trump's political appointments.

Results show that for Cabinet and non-Cabinet nominations, the average CAR for the five-day window surrounding the nomination announcement is 1.44%, with a p-value of .0030 {4.2A}[1]. Even more surprising, there is statistically significant evidence that for Cabinet positions exclusively, news of the nominations leaked into the market prior to the official announcement. For these nominations, the average CAR for the two days prior to the announcement was .62% {4.3B}. This is evidence of strong form efficient markets, or markets that incorporate both public and non-public information into asset prices. It is also surprising to see just how much the market values having political connections, with some firms surging 5% or more when politically connected nominations are announced.

Taken together, the findings in this study have widespread and meaningful implications. First, it is useful to have a numeric value for how valuable political connections are. Second, it is noteworthy that many nominees spend significant time working for the same corporations and that these corporations have abnormal stock returns after the announcement *and* in the days leading up to it; evidence that individuals are trading on material, non-public information is disturbing but not surprising. While this behavior is good for markets from a price efficiency standpoint, it makes larger, more politically connected investors better off than their

[1] Throughout this paper, the locations of data presented will be reported as two numbers and a letter corresponding to the table, column, and panel, surrounded by curly brackets {}. For example, data found in Table 4, Column 2, Panel A is reported as {4.2A}. If data is found in all of column 2 or all of Panel A, it is presented as {4.2} or {4.A}.

counterparts. Third, it is alarming how many nominations went to individuals that had spent prior years—or decades—working for firms that were under the jurisdiction of the agency they would soon regulate[2].

2. DATA

The most useful sources of data in my research are Wikipedia and Twitter (specifically, http://www.trumptwitterarchive.com). Wikipedia has aggregated every Cabinet nomination by listing the name of the individual, the position of appointment, the announcement date, the Senate committee vote date, the Senate committee vote, the full Senate vote date, and the full Senate vote. In the case that a nomination was withdrawn or that an individual withdrew himself or herself from consideration, this information is also provided. Wikipedia also lists some of this information for non-Cabinet members, particularly the more prominent nominees and those nominated for the more important roles. To validate most of this data, Wikipedia provides linked, external sources. When citing sources, I cite the original source of information, but highlight here the usefulness of Wikipedia.

A few changes have been necessary for the data to be useable. First, in instances where the announcement date falls on a weekend, holiday, or is announced after market close, the announcement date has been changed to the next available trading day, as that is likely when the market incorporates this new information. Twitter is particularly useful for determining exactly when announcements are made, as each tweet has a timestamp. Many announcements are also made via whitehouse.gov, but these webpages typically aren't still available when I attempt to retrieve the information. Again, Wikipedia has been incredibly helpful by providing archived

[2] For an in-depth review and analysis of regulatory capture, revolving doors, informational lobbying, and other empirical work on related topics, please see Dal Bó (2006).

webpages. I also utilize news articles when unable to find another source of information. In these instances, I attempt to find at least two articles and use the time stamp of the earliest one.

There is also substantial information on Wikipedia regarding most nominees' work history, again including multiple links to outside sources verifying the information. It makes for an excellent starting point to find the corporations most closely tied to nominees. My search has also led me to The Center for Responsive Politics, a group that is "the nation's premier research group tracking money in U.S. politics and its effect on elections and public policy" ("About Open Secrets"). Prominent members of Congress, lobbyists, and other government officials have their employment histories listed on opensecrets.org, and distinctions are made whether this time was spent in the private sector, a federal, state, or local government position, or working for a lobbying firm. Their so called "revolving door" details timelines for these individuals as they move in and out of public office and the private sector—though that distinction is becoming more blurred. One potential issue with using data from this site is that there are relatively few citations. Furthermore, the dates regarding employment only specify the year started and the year ended, so there may be variations as great as 1 year in either direction with regards to actual tenure in these positions[3]. I believe that this difference will be negligible on average.

I follow a much less rigid set of rules for determining which nominees to include in the non-Cabinet positions. There have been roughly 591[4] nominations done since President Trump took office, and not all of these are particularly notable ("Trump Nominations Tracker" 2020). For example, considering that I have never heard of the United States Fish and Wildlife Service, I exclude this non-Cabinet position. The nominees that I include are those of whom I have heard

[3] For example, working from December 31, 2010 to January 1, 2011 would show 2010-2011 (1 year), whereas working January 1, 2010 to December 31, 2010 would show 2010-2010 (0 years), even though the latter instance is a full year and the first instance is only one day.
[4] As of March 31, 2020

and are nominated for a position of which I have heard or those that were confirmed by a small margin (less than 10 votes). The reasoning behind the second qualifier is that a small vote margin signals that the position is important enough to require a Senate vote and that enough people think either 1) he or she is unqualified, or 2) there is a conflict of interest. I concede that this isn't the most rigorous methodology, but I believe that it is acceptable given the potential volume of meaningless data.

3. UNIVARIATE RESULTS

a. CARs and Cabinet Level

I find that for all nominees, there is a statistically and economically significant abnormal stock returns for multiple time windows before and after the announcement date. The most statistically significant interval is the window two days prior to the announcement up through two days post-announcement. The CAR for this window is 1.44% and has a p-value of .0030 {4.3A}. While 1.44% may not seem like a lot, this equates to an annualized return of 72.6% in excess of the market (or 106% if compounded every 5-day period). The CARs for the windows of (0,1) and (0,2) are also statistically significant at the 5% level {4.4A, 4.5A}, and the CAR for the (0,5) window is significant at the 10% level {4.6A}. These returns, annualized, equate to 94.5%, 98.3%, and 35%, respectively.

The abnormal returns are even more pronounced when examining just those who are nominated for Cabinet positions. Again, the most statistically significant time window is from two days prior to the announcement up through two days after the announcement. This window's CAR is 2.35% (118% annualized, 222% compounded annualized), and the p-value is .0002 {4.2B}. While there are only 21 degrees of freedom for this dataset, the p-value is sufficiently small. The windows (0,1) and (0,2) were again significant at the 5% level and have annualized CARs of 164% and 145% {4.4B, 4.5B}.

Interestingly, the CAR for the period beginning two days *before* the announcement up through one day *before* the announcement is also statistically significant at the 10% level {4.3B}. While a 10% significance level is typically not rigorous enough to reject the null hypothesis, I believe that this provides enough evidence that there was trading on material, non-public information in the days leading up to Cabinet announcements given that this information would have been privy to only a few individuals. Perhaps not enough people—that is, traders with sufficient capital to make a pronounced swing in the market price of these stocks—knew about the information in advance to cause a more statistically significant price shift. Given the limitations of the dataset, I believe that a 10% significance level is sufficient for this claim.

Abnormal stock returns for non-Cabinet nominations are not statistically significant for any time window, nor would they be economically significant {4.C}. Again, the lack of a larger dataset may be the cause for not having more pronounced results, or it may just be that not all of these positions are influential enough for the market to price in a firm-specific benefit. It may also be the case that not all of the nominees are as recognized, distinguished in their prior careers, or specifically tied to one firm.

b. CARs and Seniority

I also explore various CARs for nominee subgroups based on their positions within past firms. Specifically, I consider if they were a C-level executive at any point, if they served on the board of directors, if they meet either one of these criteria, if they meet both of these criteria, or if they meet neither. The results are quite varied. The only group that doesn't have any windows that are significant is those that were neither a C-level executive nor a board member {5.E}. This is not surprising.

The most statistically significant group is those who were either a C-level executive or a board member in their time with the firm {5.C}. This may be partially due to the relatively higher degrees of freedom (28 compared to 14, 13, 7, and 5 in the other subgroups). Regardless, the (-2,-1) and (0,5) windows {5.3C, 5.6C} are significant at the 10% level (with annualized returns of 62% and 43%, respectively), the (0,1) window {5.4C} is significant at the 5% level (annualized return of 129%), and the (-2,2) and (0,2) windows {5.2C, 5.5C} are significant at the 1% level (returns of 104% and 129%). Between those two qualifiers, it seems that the market values being a former board member more than having been an executive. The p-values for 5 of the 6 windows are smaller for board members, and the CARs are larger for 4 of the 6 windows. Board member CARs are statistically significant at the 1% level for two windows, (-2,2) and (0,2), and at the 10% level for one window, (0,5); C-level CARs are significant at the 5% level for two windows, (-2,2) and (0,2), and the 10% level for one window, (0,1).

Finally, those that were both formerly an executive and a board member at some point for the same firm have the largest CARs in almost every window compared to other groups. Unfortunately, as there are only 8 of these individuals, it is difficult to obtain statistical significance. Only two windows are statistically significant, the (-2,2) window and the (0,2) window (at the 1% and the 5% level, respectively) {5.2D, 5.5D}. The CAR for the (0,2) window is the largest of the entire group, having a 3-day return of 2.20%, or an annualized return of 185% in excess of the market {5.5D}. The (-2,2) window was also economically meaningful, with a 5-day excess return of 3.03%, or 153% annualized {5.2D}. Clearly, there is strong evidence that the market values firms where a former board member and/or executive is nominated for a position in government.

c. CARs and Tenure at the Firm

The results related to the tenure of nominees at former companies are unintuitive. For almost every window (all but [-5,5]) in Table 6, the CAR is greater for those who spent 5 or fewer years at the firm compared to those who were there for more than 5 years. While the difference between the two means is not statistically significant, it is interesting that the market doesn't value how long nominees spent at prior firms. There is also no statistically significant difference in means between the subgroup of those who spent 10 or fewer years at their respective firms and those who spent more than 10 years with them. One potential explanation is that there are increasing marginal returns for each additional year spent at a firm but that the minimum for this phenomenon is past the 10-year mark. If this is the case, we could see evidence of increasing returns for each additional year after reaching the minimum, meaning that we wouldn't see the effect in either of our testing groups. However, in the regressions testing this hypothesis, the sign of $Tenure^2$ is negative, not positive, showing decreasing marginal returns as tenure increases[5].

d. CARs and Time Away from the Firm

The trend in CARs related to how long it has been since nominees were associated with a firm is also surprising. In almost every case, there is a larger CAR for the subgroup of those that left their firm longer ago than those that left more recently {Table 7}. The only exception to this is a slight, not-statistically-significant difference in the (-2,-1) window {7.3C, 7.6C}. Intuition suggests that the market rewards companies whose former employees have left more recently to

[5] Throughout all of the multivariate tests that I ran, neither of these variables was statistically or economically significant. Therefore, the models referenced here are not included in any of the tables.

fill political vacancies, but the data do not support this idea. One hypothesis may be that those who left more than 5 years ago were in those positions for a longer time, on average, than those that had left more recently. However, I do not find that this is the case either: the mean tenure for those who left less than 5 years ago is 15.6 years, compared to 9 years for those who left more than 5 years ago. Further research could be done in this area.

e. CARs and Vote Margin

The initial research question in this study is: Is there evidence that firms are perceived to benefit from having former employees, executives, and/or board members appointed to positions within the government? An underlying question that motivates my tests is whether firms benefit because of favorable legislation. This, in turn, begs the question: if legislation is passed, is it done so to benefit the American people, or the firm? This topic of "corruption" and being able to measure it is a major factor I want to isolate and analyze. One proxy for corruption that I test is the vote margin, or the difference between the number of Senate votes in favor of a nominee being confirmed and against the confirmation. During the Trump presidency, there have been 53 Republican senators, 45 Democratic senators, and 2 Independents, though it is worth noting that both Independents caucus with the Democratic Party ("List of Current United States Senators" 2020). Because of this, any vote that is 55-45 or closer can be considered mostly along party lines (both Independents siding with the majority, Republicans), and a vote of 53-47 is strictly along party lines (Republican majority vs. all others). I create a dummy variable for having a 10 vote or smaller confirmation margin to test for "corruptness". The inherent assumption is that any nominee that has full opposition of the minority party is viewed as incompetent, having a conflict of interest, or otherwise unfit for the position. It seems reasonable that if such an individual is pushed through and nominated regardless, there are other factors involved in their confirmation, such as corporate ties.

One limitation is that there are only 6 individuals who were confirmed by 10 votes or fewer. Despite the lack of data, there are significant differences between the CARs of those who were narrowly confirmed and the rest. For the (-2,2) window for those who were narrowly confirmed {8.2A}, the CAR is an astonishing 4.20% in excess of the market (212% annualized), greater than any other window or subgroup examined thus far. The p-value for this window is a strongly significant .0003. The results for other windows are even more extreme. For narrow confirmations for the (0,1) and (0,2) windows {8.4A, 8.5A}, the CARs are 3.30% and 3.95%, respectively. These are annualized excess returns of 416% and 332% (not including compounding). Furthermore, I test for a difference between means and find statistically significant results. The (-2,2) window is significant at the 1% level, and the (0,1) and (0,2) windows are significant at the 5% level. I conclude that there is strong evidence that the market rewards firms with ties to controversial nominations. I also check for differences in the CARs when there is a 20 vote or smaller margin. However, I do not find any statistically significant differences {8.F}. It is also worth noting that over half (14 of 26) of the nominees requiring a Senate vote were confirmed by a margin of 20 votes or fewer.

4. MULTIVARIATE REGRESSION MODEL

In this section, I discuss a series of tests where I estimate various multifactor models using both nominee information and firm characteristics. Using the Center for Research in Security Prices (CRSP), I obtain data of share code price (*Price*), trade volume (in number of shares traded daily) (*Volume*), the highest asking price during the announcement date (*AskHi*), the lowest bid price during the announcement date (*BidLo*), closing bid price (*Bid*), closing ask price (*Ask*), and shares outstanding (*SharesOut*). I then calculate market capitalization (*MktCap*), the logarithm of market cap (*LogMktCap*), daily volatility (*Volatility*) (ln(*AskHi) -* ln(*BidLo))*, and percent spread (*Spread*) (*Ask - Bid*)/((*Ask* + *Bid*) / 2). In order to have the results of *Spread* and *Volatility* make more sense, I take the percent spread and multiply it by 1000; a one unit increase in spread corresponds to a 1000% increase in spread, and a measurement of 1 for spread means that the difference between the bid and ask price is $1/1000^{th}$ of a percent. Volatility is multiplied by 100. The nominee-specific information includes the number of years since they have worked for a firm (*YearsSince*), if the margin of confirmation is 10 votes or fewer (*VoteDifLessThan10*), if they served on a board (*Board*), if they were formerly a C-level executive (*C_Level*), and if they were nominated to a Cabinet position (*Cabinet*).

To begin testing my hypothesis in a multivariate framework, I included all of the variables that I thought would be relevant, examined the results, and iterated; if a variable was extremely insignificant, I ran another regression without it and compared the adjusted R^2s. However, if I believed that a variable was still important to have in the model (for example, to show that stock price doesn't affect predicted CARs), I elected to keep it in the model. Since the (-2,2) CAR window generally had the largest value and greatest statistical significance, this was the window I used to estimate all of my models. I also experimented with different interaction terms after settling on the variables of interest. Additionally, due to the small size of the data set, I was concerned about heteroskedasticity. I ran a White test for each model and found that there was not significant enough evidence (p = ~0.2) to reject the null hypothesis that the data is homoskedastic. However, for the sake of thoroughness, heteroskedasticity-robust standard errors for my multivariate models are reported in Table 10[6]. After extensive trial and error, the model that best explains the abnormal stock returns is as follows and in column [3] of the Table 9:

$$CAR_{-2,2} = ß_0 + ß_1(Volume) + ß_2(LogMktCap) + ß_3(Board) + ß_4(Cabinet) + ß_5(YearsSince) + ß_6(Board * Cabinet) + ß_7(C\_Level) + ß_8(VoteDifLessThan10) + \varepsilon \quad [1]$$

The variable of strongest significance throughout every multifactor model I test is *Cabinet*; *Cabinet* is significant at even the 1% level in every regression. It also is very economically significant, having an estimated CAR between 3.3% and 4.2% for the (-2,2) window. This makes intuitive sense, as Cabinet positions are the most senior within each division of the federal government and will naturally be able to exert the most influence in policy decisions.

Having a vote margin of 10 or less is also significant at the 5% level in two of the three models {9.3, 9.4}. The CAR for this variable ranges from 2.1% to 2.3%. This, also, makes intuitive sense: if nominees are viewed as more likely to favor firms they have worked for, we expect to see a narrower confirmation margin. It seems like political opposition by the minority party is an indicator for "playing favorites" in the private sector—or, at least, the market rewards firms as such. *Board* is also significant at the 5% level, and it has an even larger estimated coefficient: 3.7% of the predicted CAR can be attributed to *Board* {9.3}. While this is more significant in columns [1] and [2] of Table 9, it becomes less significant as additional variables are added to the model in columns [4] and [5].

Volume and *LogMktCap* are also significant, though only at the 10% level in column [3] of Table 9. For each additional million shares traded, the CAR is predicted to increase by .038%. Intuitively, when more trading is done surrounding the announcement as the market rushes to

[6] For clarity, the conclusions drawn from the p-values throughout the multivariate model discussion all come from the non-robust standard errors.

incorporate the new information, the more the expected CAR should deviate. *Volume* is significant at the 10% level in four of the five multifactor models in Table 9. Future papers examining this topic could explore the relationship between dollar-volume and CARs instead of share volume.

The relationship between CARs and the logarithm of the stocks' market capitalization varies greatly. When I only include a few other variables, as in columns [1] and [2] of Table 9, *LogMktCap* is significant at even the 1% level. It also has a reasonable impact on the predicted CAR, decreasing by about 1.5% for each unit increase in *LogMktCap*. As the values for *LogMktCap* vary from 8.5 to 11.5, there is a potential difference of 4.5% between the smallest and largest firm. However, by the time all variables of interest have been added, it is no longer significant at any level. This is likely indicative of *LogMktCap* being a proxy for the other variables when they are excluded from the model (i.e. the actual effects of the other variables are correlated with *LogMktCap*, so when they are excluded, their effects "show up" in *LogMktCap*. This issue of multicollinearity is discussed later).

Finally, *YearsSince*, (*Board* * *Cabinet*), *C_Level*, *Price*, *Spread*, and *Volatility* are all statistically insignificant individually and jointly. I run an F test to test for joint insignificance and the p-value is .555. This means that I fail to reject the null that they are all jointly equal to zero. It is surprising that being a former executive in a company is not a good predictor of abnormal stock returns surrounding the nomination announcement. In fact, in none of the regressions that I run is *C_Level* statistically significant, and even if it were, the effect would be less than .2%. Additionally, I initially believed that the less time a nominee had been away from the firm, the more significant the CAR would be. The data, however, show that this does not seem to make a difference. In fact, in only one of the models {9.2} is there a level of significance

(10%), and it indicates the opposite relationship, that the gains to a firm are increased the longer a nominee has been absent from the firm. If this is the case, though, it only makes a difference of .1% for every 10 years they have been gone.

One issue particularly prevalent in finance is multicollinearity. In order to ensure that my results are robust and consistent, I create two additional multivariate models where I intentionally omit important variables. This allows me to see if the remaining variables of interest are still significant or if they were just highly correlated with the omitted variables. In short, I attempt to find a balance between issues with multicollinearity and omitted variable bias. I make two additional tables (Tables 11 and 12), one where none of the models has *VoteDifLessThan10*, and one where none of the models has *Board*, *Cabinet*, or the interaction term between the two. The model that best explains the data without having *VoteDifLessThan10* is the following:

$$CAR_{-2,2} = ß_0 + ß_1(Board) + ß_2(Cabinet) + ß_3(Board * Cabinet) + ß_4(YearsSince) + ß_5(C\_Level) + ß_6(Volume) + ß_7(LogMktCap) + \varepsilon \quad [2]$$

For these regressions, I observe similar results to those mentioned above with a few small differences. Like in prior regressions, *Cabinet* is the most statistically and economically significant variable across all models tested. *LogMktCap* and *Board* are also still statistically significant, but both are even more so than in previous models {11.5}. In fact, *Board* becomes more and more significant as variables are added to the model, increasing from the 10% level to the 5% level. *LogMktCap* has a p-value less than .01 in the model with the most predictive power {11.4}. The interaction term is again insignificant. Generally speaking, the R^2s are smaller than the first set of models, but this is expected as I am intentionally omitting an important variable.

Lastly, I estimate models that exclude *Cabinet*, *Board*, and the interaction term between them to see how *VoteDifLessThan10* and the other remaining variables are affected. The most predictive model of those I test is:

$$CAR_{-2,2} = ß_0 + ß_1(VoteDifLessThan10) + ß_2(Volume) + ß_3(LogMktCap) + ß_4(YearsSince) + ß_5(Price) + ß_6(Spread) + ß_7(Volatility) + \varepsilon \quad [3]$$

The coefficient on *VoteDifLessThan10* is larger than in the previous models that I have estimated by a significant margin: the most predictive model has a coefficient of 2.81 vs. 2.36 in earlier models {12.4}. *Volume* is also significant at the 5% level instead of the 10% level (or not at all, as in most earlier models), and *Spread* is significant at the 5% level {12.4}. The coefficient on *Spread* indicates that for every 1 unit increase in the percent spread (which is actually every 1000% increase in the percent spread), there is a predicted decrease in the CAR of 3.2%. Perhaps in extreme cases where the spread is so wide, market participants conclude that the liquidity and transaction costs aren't worth trading the security, and thus we see a predicted decrease in the CAR. Again, since I am knowingly omitting important variables for these models, it is difficult to say exactly why this result is showing up.

What remains consistent across all models, omitted variables or not, robust standard errors or not, is that *Cabinet* is statistically significant at the 1% level and has an estimated coefficient ranging from 2.74 to 4.37. *Board* is generally significant at the 5% or 1% level, with estimated values between 1.62 and 4.10. *Volume* also is generally significant at the 5% or 1% level, but at the mean value of 11.7 million shares, the predicted effect on the CAR is only 0.43. I conclude that trade volume isn't a large predictor of CARs. *VoteDifLessThan10* is almost always significant at the 5% level whenever included in the model and adds an estimated 2.18 to 3.24 to the CAR. *LogMktCap* ranges from being significant at the 1% level to not being significant at all, so I am unable to draw definite conclusions. Perhaps there is a lack of data, or perhaps multicollinearity is at play.

5. CONCLUDING REMARKS

Consistent with my hypothesis and the empirical work of others, I find that having political connections is a trait highly valued by the market. Firms that have a former board member and/or are nominated for a Cabinet position exhibit statistically and economically significant cumulative abnormal returns surrounding the day of the announcement. Furthermore, firms with connections to nominees for Cabinet positions exhibit statistically significant abnormal returns for the 2-day period in advance of the announcement, providing curious evidence of insider trading. Across multiple time horizons and subgroups of nominees, former board membership and/or having a narrow vote confirmation margin were also determining factors. Interestingly, prior tenure with a firm and time away from the firm do not provide predictive power of a firm's CAR. The multifactor models that I test generally show *Cabinet* and *VoteDifLessThan10* are strongly significant and *Volume* and *LogMktCap* are weakly significant (10% significance level).

The results in this study are important for a myriad of reasons. First, they reiterate findings that that the market values political connections. The results serve as a backdrop for analyzing if politicians are working for the good of the people they serve or others, such as former employers or friends. These results also provide evidence of insider trading, an illegal and unethical practice. Further questions that I would like to examine are:

(i) Would I find similar results for individuals that were nominated for government positions and had worked for lobbying firms in the past?

(ii) If so, are these results dependent on the firms and/or market sectors that they lobbied for?

(iii) Would I find similar results during the presidencies of Obama, Bush, or Clinton? If not, is this the result of less efficient markets, less corruption, or less value associated with political connectedness?

(iv) Are advance movements in stock prices limited to political appointments, or is there evidence for CARs surrounding tweets about major news, such as trade deals, executive orders, military actions, etc.?

In short, having political connections is, for better or worse, a trait highly valued by the market. There are a variety of ways to examine and measure this, and I have shown evidence of this via one metric of connectedness. As for the promise to #DrainTheSwamp, I have yet to find evidence for that claim.

REFERENCES

"About OpenSecrets.org." OpenSecrets.org, The Center for Responsive Politics, www.opensecrets.org/about/.

Blau, Benjamin M. "Lobbying, political connections and emergency lending by the Federal Reserve." Public Choice172.3-4 (2017): 333-358.

Blau, Benjamin M., Tyler J. Brough, and Diana W. Thomas. "Corporate lobbying, political connections, and the bailout of banks." Journal of Banking & Finance 37.8 (2013): 3007-3017.

Boubakri, Narjess, et al. "Political connections and the cost of equity capital." Journal of corporate finance 18.3 (2012): 541-559.

Brown, Brendan. "Trump Twitter Archive." Trump Twitter Archive, www.trumptwitterarchive.com/archive.

Dal Bó, Ernesto. "Regulatory capture: A review." Oxford Review of Economic Policy 22.2 (2006): 203-225.

Duchin, Ran, and Denis Sosyura. "The politics of government investment." Journal of Financial Economics 106.1 (2012): 24-48.

Faccio, Mara. "Politically connected firms." American economic review 96.1 (2006): 369-386.

Fernando, Jason. "What Does 'STOCK Act' Mean?" Investopedia, Investopedia, 29 Jan. 2020, www.investopedia.com/terms/s/stop-trading-on-congressional-knowledge-act.asp.

"List of Current United States Senators." Wikipedia, Wikimedia Foundation, 15 Mar. 2020, en.wikipedia.org/wiki/List_of_current_United_States_senators#cite_note-KingSanders-1.

Richter, Brian Kelleher, Krislert Samphantharak, and Jeffrey F. Timmons. "Lobbying and taxes." American Journal of Political Science 53.4 (2009): 893-909.

The Center for Research in Security Prices, University of Chicago Booth School of Business, crsp.org/.

Trump, Donald J. "I Will Make Our Government Honest Again -- Believe Me. But First, I'm Going to Have to #DrainTheSwamp in DC. Https://T.co/m1lMAQPnIb." Twitter, Twitter, 18 Oct. 2016, twitter.com/realdonaldtrump/status/788402585816276992?lang=en.

"Trump Nominations Tracker: See Which Key Positions Have Been Filled so Far." The Washington Post, WP Company, 23 Mar. 2020, www.washingtonpost.com/graphics/politics/trump-administration-appointee-tracker/database/.

"Wharton Research Data Services." WRDS, University of Pennsylvania, wrds-www.wharton.upenn.edu/.

Yu, Frank, and Xiaoyun Yu. "Corporate lobbying and fraud detection." Journal of Financial and Quantitative Analysis 46.6 (2011): 1865-1891.

Table 1 – Stock Summary Statistics
This table reports statistics that summarize my data for stock-related characteristics. *Price* is the closing price of the stock on the announcement date or, if the announcement date didn't fall on a trading day, the closing price on the next market trading day. *AskHi* is the highest asking price throughout the day of the announcement. *BidLo* is the lowest bid price throughout the announcement date. *Bid* is the closing bid price, and *Ask* is the closing ask price. *Volume* is the trade volume, in millions of shares, on the announcement date. *SharesOut* is the number of shares outstanding for each stock, in thousands. *MktCap* is the market capitalization of each firm, in USD. *LogMktCap* is the natural logarithm of the market capitalization for each firm. *Volatility* is calculated as the natural log of *AskHi* minus the natural log of *BidLo*. *Spread* is (*Ask* – *Bid*) / ((*Ask* + *Bid*) / 2).

	Mean	Std. Deviation	Min	Median	Max
	[1]	[2]	[3]	[4]	[5]
Price	76.57	81.31	4.64	49.62	354.13
AskHi	77.17	81.92	4.77	49.69	355.65
BidLo	75.92	80.49	4.58	49.15	347.47
Bid	76.57	81.31	4.63	49.61	354.04
Ask	76.58	81.31	4.64	49.62	354.05
Volume	11.686	22.581	0.144	3.075	114.216
SharesOut	1,716,576	2,560,856	38,455	439,343	10,123,845
MktCap	84,898,878,950	96,614,319,313	424,089,285	52,066,488,206	383,900,845,533
LogMktCap	10.465	0.811	8.627	10.717	11.584
Volatility	0.01836	0.00974	0.00668	0.01622	0.04515
Spread	0.40751	0.51549	0.02819	0.20303	2.22466

Table 2 - Nominee Summary Statistics

This table reports statistics that summarize my data for nominee-specific characteristics. For all dummy variables, 1 corresponds to "yes" and 0 corresponds to "no". *C_Level* is a dummy variable for whether or not the nominee was a former c-level executive, such as CEO, CFO, CIO, COO, CTO, etc. Note that a "yes" doesn't necessarily mean that all of their time was spent as a c-level executive, just that they were, at some point in their time with the firm, a c-level executive. *Board* is a dummy variable indicating if the nominee served on the board of directors for the company. *Cabinet* is a dummy variable for if the individual was nominated for a Cabinet-level position or not. *Tenure* is the total amount of time, in years, that each nominee spent working for the firm. *YearsSince* is the number of years since they have worked for the firm. *LessThan5Since* and *LessThan10Since* are both dummy variables for if they worked for the firm more recently than 5 or fewer years or 10 or fewer years, respectively. *MoreThan5At* and *MoreThan10At* are dummy variables for if they worked at the company for more than 5 years or more than 10 years, respectively. *VotesFor* and *VotesAgainst* are the number of Senate votes in favor of their confirmation and opposed to their confirmation, respectively. On average, this number is out of 97. *VoteDif* is the number of votes against their confirmation subtracted off of the number of votes for their confirmation. This is, at a theoretical minimum, equal to 1 or greater. *VoteDifLessThan10* is a dummy variable corresponding to having a majority of 10 votes or fewer.

	Mean	Std. Deviation	Min	Median	Max
	[1]	[2]	[3]	[4]	[5]
C_Level	0.4	0.497	0	0	1
Board	0.429	0.502	0	0	1
Cabinet	0.629	0.49	0	1	1
Tenure	12.6	10.852	2	8	42
YearsSince	10.657	10.178	0	5	37
LessThan5Since	0.543	0.505	0	1	1
LessThan10Since	0.571	0.502	0	1	1
MoreThan5At	0.829	0.382	0	1	1
MoreThan10At	0.429	0.502	0	0	1
VotesFor	68.071	17.418	50	58	98
VotesAgainst	29	17.116	1	41	47
VoteDif	39.071	34.374	6	17	97
VoteDifLessThan10	0.214	0.418	0	0	1

Table 3 - Correlation Coefficients
Here are listed the correlation coefficients, bounded between -1 and 1, of the important variables of interest. Certain dummy variables were excluded because of space and relevance.

	Price	*Volume*	*SharesOut*	*MktCap*	*LogMktCap*	*Volatility*	*Spread*	*C_Level*	*Board*	*Cabinet*	*Tenure*	*YearsSince*	*VoteDif*
Price	1.00												
Volume	-0.22	1.00											
SharesOut	-0.23	0.89	1.00										
MktCap	0.26	0.45	0.68	1.00									
LogMktCap	0.43	0.37	0.57	0.81	1.00								
Volatility	-0.21	-0.07	-0.22	-0.27	-0.61	1.00							
Spread	-0.45	0.10	-0.04	-0.34	-0.55	0.76	1.00						
C_Level	-0.21	-0.15	-0.25	-0.24	-0.38	0.34	0.34	1.00					
Board	-0.10	-0.19	-0.17	0.00	-0.11	0.07	-0.05	0.47	1.00				
Cabinet	0.05	0.06	0.01	0.15	0.13	-0.05	-0.21	-0.34	-0.17	1.00			
Tenure	0.26	-0.25	-0.24	0.11	-0.05	0.03	-0.20	0.01	0.06	0.31	1.00		
YearsSince	-0.35	0.56	0.62	0.22	0.15	-0.12	0.13	-0.25	-0.43	-0.10	-0.36	1.00	
VoteDif	0.18	0.15	0.14	0.04	0.16	0.04	0.08	-0.46	-0.39	0.41	0.04	0.21	1.00

Table 4 - Cumulative Abnormal Returns, Cabinet Dummy

Table 4 lists the cumulative abnormal returns (CARs) for various times windows and is subdivided by whether the individual was appointed to a Cabinet position or not. A CAR window of (-5,5) corresponds to the cumulative abnormal return for the period 5 trading days prior to the nomination announcement up through 5 trading days after the announcement. An abnormal return is computed by running regressions calculating parameters from a daily market model for each company in question, and the difference between the actual return and the model return for the time period is the cumulative abnormal return. I then test for statistical significance of these abnormal returns. Panel A lists the CARs and p-values for all nominees, Panel B shows the CARs and p-values for those strictly appointed to Cabinet positions, and Panel C is for those strictly appointed to non-Cabinet positions. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	CAR(-5,5)	CAR(-2,2)	CAR(-2,-1)	CAR(0,1)	CAR(0,2)	CAR(0,5)
	[1]	[2]	[3]	[4]	[5]	[6]
Panel A. All Nominations						
Mean	0.0022	0.0144***	0.0027	0.0074**	0.0117**	0.0083*
t-statistic (df = 34)	(0.33)	(2.93)	(0.93)	(1.79)	(2.43)	(1.46)
Panel B. Cabinet Members						
Mean	0.0050	0.0235***	0.0062*	0.0130**	0.0173***	0.0085
t-statistic (df = 21)	(0.71)	(4.20)	(1.54)	(2.47)	(2.84)	(1.28)
Panel C. Non-Cabinet Members						
Mean	-0.0027	-0.0011	-0.0032	-0.0021	0.0021	0.0080
t-statistic (df = 12)	(-0.20)	(-0.14)	(-0.92)	(-0.35)	(0.29)	(0.74)

Table 5 - Cumulative Abnormal Returns, Seniority

Table 5 lists the CARs for various time windows and is subdivided by the nominees' roles during their time with their respective firms. For clarification on interpreting the windows or the CARs, please see the description for Table 4.

Panel A lists the CARs and p-values for those who worked in a c-level position while with the firm. Panel B lists those who were a board member. Panel C lists those who were either a c-level executive, a board member, or both during their time with the company. Panel D lists only those who were both a c-level executive and a member of the board. Finally, Panel E lists those who worked in neither of these capacities. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	CAR(-5,5)	CAR(-2,2)	CAR(-2,-1)	CAR(0,1)	CAR(0,2)	CAR(0,5)
	[1]	[2]	[3]	[4]	[5]	[6]
Panel A. C-Level Executive						
Mean	0.0018	0.0170**	-0.0002	0.0128*	0.0172**	0.0052
t-stat (df = 13)	(0.15)	(2.13)	(-0.04)	(1.74)	(2.35)	(0.58)
Panel B. Board Member						
Mean	0.0098	0.0210***	0.0049	0.0061	0.0162***	0.0149*
t-statistic (df = 14)	(0.93)	(3.02)	(1.23)	(1.13)	(2.77)	(1.64)
Panel C. Either C-Level Executive or Board Member						
Mean	0.0084	0.0204***	0.0049*	0.0102**	0.0154***	0.0102*
t-statistic (df = 28)	(1.20)	(4.12)	(1.51)	(2.29)	(3.10)	(1.68)
Panel D. Both C-Level Executive and Board Member						
Mean	0.0020	0.0303***	0.0083	0.0104	0.0220**	0.0144
t-statistic (df = 7)	(0.18)	(3.45)	(1.36)	(1.33)	(2.62)	(1.19)
Panel E. Neither C-Level Executive nor Board Member						
Mean	-0.0277	-0.0146	-0.0081	-0.0060	-0.0064	-0.0001
t-statistic (df = 5)	(-1.96)	(-1.51)	(-1.89)	(-0.59)	(-0.51)	(-0.04)

Table 6 - Cumulative Abnormal Returns, Tenure with Firm

Table 6 lists the CARs for various time windows and is subdivided by dummy variables for how long the nominees worked for their respective firms. For clarification on interpreting the windows or the CARs, please see the description for Table 4.

Panel A lists the CARs and p-values for those who worked 5 years or fewer for the firm. Panel B lists the same information but for those who spent more than 5 years with the firm. Panel C tests the difference between the means in Panels A and B to see if it is statistically significant using Welch's t-test. Panel D lists the means for those who worked 10 years or fewer for the firm, and Panel E for those who spent more than 10 years. Panel F tests the difference in the means of Panels D and E using Welch's t-test. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	CAR(-5,5)	CAR(-2,2)	CAR(-2,-1)	CAR(0,1)	CAR(0,2)	CAR(0,5)
	[1]	[2]	[3]	[4]	[5]	[6]
Panel A. Less Than 5 Years at Company						
Mean	0.0095	0.0188	0.0053	0.0044	0.0135	0.0031
t-statistic (df = 5)	(0.46)	(1.13)	(0.84)	(0.33)	(0.72)	(0.14)
Panel B. More Than 5 Years at Company						
Mean	0.0007	0.0135***	0.0022	0.0080**	0.0113***	0.0094**
t-statistic (df = 28)	(0.09)	(2.70)	(0.66)	(1.86)	(2.48)	(1.73)
Panel C. Difference Between Panels A and B						
Mean	0.0088	0.0053	0.0032	-0.0036	0.0022	-0.0063
t-statistic (5.6 < df < 8.0)	(0.41)	(0.31)	(0.44)	(-0.26)	(0.11)	(-0.28)
Panel D. Less Than 10 Years at Company						
Mean	0.0080	0.0135**	0.0010	0.0046	0.0125**	0.0142*
t-statistic (df = 19)	(0.78)	(2.01)	(0.24)	(0.88)	(1.87)	(1.60)
Panel E. More Than 10 Years at Company						
Mean	-0.0057	0.0155**	0.0050	0.0111*	0.0105*	0.0005
t-statistic (df = 14)	(-0.82)	(2.11)	(1.19)	(1.64)	(1.50)	(0.09)
Panel F. Difference Between Panels D and E						
Mean	0.0137	-0.0020	-0.0040	-0.0065	0.0020	0.0137
t-statistic (28.4 < df < 32.0)	(1.10)	(-0.20)	(-0.68)	(0.76)	(-0.20)	(1.28)

Table 7- Cumulative Abnormal Returns, Time Away from Firm

Table 7 lists the CARs for various time windows and is subdivided by dummy variables for how long it has been since the nominees worked for their respective firms. For clarification on interpreting the windows or the CARs, please see the description for Table 4.

Panel A lists the CARs and p-values for those for whom it has been 5 years or fewer that they have been away from the firm. Panel B lists CARs and p-values for those who have been gone for more than 5 years. Panel C tests the difference between the means in Panels A and B to see if it is statistically significant using Welch's t-test. Panels D, E, and F correspond to A, B, and C, respectively, except that the groups are divided by 10 years instead of 5. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	CAR(-5,5)	CAR(-2,2)	CAR(-2,-1)	CAR(0,1)	CAR(0,2)	CAR(0,5)
	[1]	[2]	[3]	[4]	[5]	[6]
Panel A. Less Than 5 Years Since Left Company						
Mean	0.0001	0.0099**	0.0033	0.0028	0.0066*	0.0048
t-statistic (df = 18)	(0.01)	(1.87)	(1.00)	(0.63)	(1.35)	(0.78)
Panel B. More Than 5 Years Since Left Company						
Mean	0.0047	0.0197**	0.0020	0.0129**	0.0177**	0.0125
t-statistic (df = 15)	(0.39)	(2.26)	(0.39)	(1.76)	(2.04)	(1.22)
Panel C. Difference Between Panels A and B						
Mean	-0.0046	-0.0098	0.0013	-0.0100	-0.0110	-0.0076
t-statistic (24.0 < df < 26.0)	(-0.33)	(-0.96)	(0.21)	(-1.18)	(-1.11)	(-0.64)
Panel D. Less Than 10 Years Since Left Company						
Mean	0.0007	0.0095**	0.0028	0.0025	0.0067*	0.0058
t-statistic (df = 19)	(0.09)	(1.88)	(0.89)	(0.60)	(1.44)	(0.98)
Panel E. More Than 10 Years Since Left Company						
Mean	0.0042	0.0209**	0.0026	0.0139**	0.0183**	0.0117
t-statistic (df = 14)	(0.33)	(2.27)	(0.47)	(1.80)	(1.98)	(1.07)
Panel F. Difference Between Panels D and E						
Mean	-0.0035	-0.0114	0.0002	-0.0113	-0.0116	-0.0058
t-statistic (21.0 < df < 22.9)	(-0.25)	(-1.08)	(0.04)	(-1.29)	(-1.12)	(-0.47)

Table 8 - Cumulative Abnormal Returns, Vote Margin

Table 8 lists the CARs for various time windows and is subdivided by dummy variables corresponding to the vote margin in the Senate confirmation vote. Please note that not every non-Cabinet nominee requires a Senate note in order to be confirmed. Those nominees were excluded. For clarification on interpreting the windows or the CARs, please see the description for Table 4.

Panel A lists the CARs and p-values for those who were confirmed by a margin of 10 votes or fewer. Panel B lists the opposite, and Panel C tests for a statistically significant difference between Panels A and B using Welch's t-test. Panel D lists the mean CARs and corresponding p-values for those confirmed by a margin of 20 or fewer votes. Panel E lists the opposite, and Panel F tests for a difference between these means using Welch's t-test. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	CAR(-5,5)	CAR(-2,2)	CAR(-2,-1)	CAR(0,1)	CAR(0,2)	CAR(0,5)
	[1]	[2]	[3]	[4]	[5]	[6]
Panel A. Vote Margin of 10 or Fewer Votes						
Mean	0.0231	0.0420***	0.0025	0.0330**	0.0395***	0.0218
t-statistic (df = 5)	(1.06)	(7.68)	(0.30)	(2.88)	(4.02)	(1.42)
Panel B. Vote Margin of More Than 10 Votes						
Mean	-0.0026	0.0096*	-0.0002	0.0028	0.0098*	0.0087
t-statistic (df = 21)	(-0.33)	(1.62)	(-0.08)	(0.61)	(1.64)	(1.10)
Panel C. Difference Between Panels A and B						
Mean	0.0257	0.0324***	0.0027	0.0302**	0.0297**	0.0132
t-statistic (6.3 < df < 17.7)	(1.10)	(4.03)	(0.31)	(2.45)	(2.58)	(0.76)
Panel D. Vote Margin of 20 or Fewer Votes						
Mean	0.0100	0.0158**	0.0007	0.0087	0.0151**	0.0171**
t-statistic (df = 14)	(0.94)	(2.10)	(0.17)	(1.13)	(1.86)	(1.86)
Panel E. Vote Margin of More Than 20 Votes						
Mean	-0.0052	0.0173**	-0.0001	0.0099*	0.0173**	0.0050
t-statistic (df = 12)	(-0.46)	(2.16)	(-0.02)	(1.67)	(2.21)	(0.47)
Panel F. Difference Between Panels D and E						
Mean	0.0062	-0.0015	0.0008	-0.0012	-0.0022	0.0122
t-statistic (24.9 < df < 26.0)	(0.98)	(-0.13)	(0.14)	(-0.12)	(-0.20)	(0.87)

Table 9 – Multivariate Test: All Variables of Interest

This table (continued on the next page) reports the results from estimating the following equation using all observations and all variables of interest that were found to increase predictive power of the model. Variables were added, a few at a time, from the base model, which contained those variables most predictive of CARs.

$$CAR_{-2,2} = ß_0 + ß_1(Volume) + ß_2(LogMktCap) + ß_3(Board) + ß_4(Cabinet) + ß_5(YearsSince) + ß_6(Board * Cabinet) + ß_7(C\_Level) + ß_8(VoteDifLessThan10) + \varepsilon$$

The dependent variable is the cumulative abnormal return for the most statistically significant window across all samples, the 5-day window commencing 2 days prior to the announcement up through 2 days after the announcement. The independent variables of interest include: *Volume*, the trade volume in millions of shares on the announcement date; *LogMktCap*, the natural logarithm of total market capitalization; *Board*, a dummy variable equal to 1 if the nominee served on the board of directors for the firm in question; *Cabinet*, a dummy variable equal to 1 if the nomination was for a Cabinet position; *YearsSince*, an integer measure of how many years have passed since they worked for the firm in question up through the announcement date; *Board * Cabinet*, an interaction term between being a board member and a Cabinet member; *C_Level*, a dummy variable equal to 1 if the nominee worked as a c-suite executive at some point in their time with the firm; *VoteDifLessThan10*, a dummy variable equal to 1 if the margin of confirmation (votes for minus votes against in the Senate confirmation vote) was 10 votes or fewer; *Price*, which is the price of one share of the firm's stock at the close of the announcement date; *Spread*, which is equal to (*Ask* – *Bid*) / ((*Ask* + *Bid*) / 2) [*Ask* and *Bid* are defined in Table 1]; and *Volatility*, which is calculated as the natural log of *AskHi* minus the natural log of *BidLo* [*AskHi* and *BidLo* are also defined in Table 1]. T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table 9 - cont.

	[1]	[2]	[3]	[4]	[5]
Volume	.041*	.037*	.037*	.045*	.039
	(1.97)	(1.79)	(1.84)	(1.96)	(1.67)
LogMktCap	-1.602***	-1.552***	-1.067*	-1.419*	-1.051
	(-3.33)	(-3.25)	(-1.97)	(-2.02)	(-1.37)
Board	2.479***	3.779***	3.726**	3.421*	3.554*
	(3.02)	(2.88)	(2.31)	(1.93)	(2.02)
Cabinet	3.286***	4.247***	4.163***	3.789***	3.905***
	(4.26)	(3.94)	(3.52)	(2.90)	(3.01)
YearsSince	.079	.094*	.089	.098	.102
	(1.64)	(1.92)	(1.63)	(1.57)	(1.64)
*Board*Cabinet*		-1.928	-1.958	-1.487	-2.038
		(-1.26)	(-1.16)	(-0.81)	(-1.08)
C_Level			-0.209	.082	-.154
			(-0.22)	(.08)	(-0.14)
VoteDifLessThan10			2.349**	2.356**	2.180*
			(2.29)	(2.21)	(2.04)
Price				.006	.000
				(0.50)	(0.22)
Spread				-.510	-1.679
				(-0.53)	(-1.19)
Volatility					.928
					(1.13)
Intercept	13.755**	12.388**	6.987	10.445	5.864
	(2.72)	(2.42)	(1.21)	(1.40)	(0.70)
Adjusted R^2	.480	.491	.562	.529	.537

Table 10 - Multivariate Test: All Variables of Interest, Robust Standard Errors
This table reports the results from Table 9 but with heteroskedasticity-robust standard errors.
T-statistics are reported in parentheses. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	[1]	[2]	[3]	[4]	[5]
Volume	.041***	.037***	.037***	.045***	.039**
	(4.08)	(3.41)	(3.65)	(3.67)	(2.65)
LogMktCap	-1.602***	-1.552***	-1.067*	1.419*	-1.051
	(-3.67)	(-3.59)	(-1.85)	(-1.82)	(-1.34)
Board	2.479***	3.779***	3.726**	3.421**	3.554**
	(2.94)	(2.86)	(2.76)	(2.15)	(2.20)
Cabinet	3.286***	4.247***	4.163***	3.789***	3.905***
	(4.06)	(4.08)	(3.79)	(3.31)	(3.12)
YearsSince	.079**	.094**	.089**	.098	.102
	(2.43)	(2.42)	(2.11)	(1.69)	(1.63)
*Board*Cabinet*		-1.928	-1.958	-1.487	-2.038
		(-1.19)	(-1.25)	(-0.87)	(-1.16)
C_Level			-0.209	.082	-.154
			(-0.23)	(0.07)	(-0.13)
VoteDifLessThan10			2.349**	2.356**	2.180**
			(2.47)	(2.40)	(2.42)
Price				.006	.000
				(0.52)	(0.21)
Spread				-.510	-1.679
				(-0.78)	(-1.48)
Volatility					.928
					(1.00)
Intercept	13.755***	12.388***	6.987	10.445	5.864
	(3.09)	(2.85)		(1.45)	(0.78)
Adjusted R^2	.480	.491	.562	.529	.537

Table 11 - Multivariate Test: All Variables of Interest Except *VoteDifLessThan10*

This table reports the results from estimating the following equation using all observations and all variables of interest in Table 9 **except** *VoteDifLessThan10*.

$$CAR_{-2,2} = ß_0 + ß_1(Board) + ß_2(Cabinet) + ß_3(Board * Cabinet) + ß_4(YearsSince) + ß_5(C\_Level) + ß_6(Volume) + ß_7(LogMktCap) + \varepsilon$$

The dependent variable and all independent variables have the same interpretations and definitions as listed in Table 9. T-statistics are reported in parentheses and do not use heteroskedasticity-robust standard errors. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	[1]	[2]	[3]	[4]	[5]
Board	1.622* (1.80)	2.506* (1.73)	3.763** (2.20)	4.102** (2.66)	3.485** (2.10)
Cabinet	2.742*** (2.98)	3.422** (2.69)	4.365*** (3.59)	4.266*** (3.90)	3.825*** (3.26)
*Board*Cabinet*		-1.446 (-0.78)	-2.002 (-1.07)	-2.188 (-1.31)	-2.012 (-1.15)
YearsSince			.130*** (2.79)	.094* (1.87)	.077 (1.38)
C_Level			.713 (0.67)	-.420 (-0.42)	-.278 (-0.26)
Volume				.038* (1.79)	.037 (1.59)
LogMktCap				-1.632*** (-3.13)	-1.419* (-1.82)
Price					-.007 (-1.03)
Spread					-1.579 (-1.16)
Volatility					.560 (0.80)
Intercept	-0.980 (-1.13)	-1.457 (-1.37)	-4.132*** (-3.05)	13.306** (2.36)	11.845 (1.40)
Adjusted R^2	.202	.192	.3244	.475	.451

Table 12 - Multivariate Test: All Variables of Interest Except *Cabinet, Board,* and Interaction Between Them
This table reports the results from estimating the following equation using all observations and all variables of interest in Table 9 **except** *Cabinet*, *Board*, and the interaction term between *Board* and *Cabinet*.

$$CAR_{-2,2} = ß_0 + ß_1(VoteDifLessThan10) + ß_2(Volume) + ß_3(LogMktCap) + ß_4(YearsSince) + ß_5(Price) + ß_6(Spread) + ß_7(Volatility) + \varepsilon$$

The dependent variable and all independent variables have the same interpretations and definitions as listed in Table 9. T-statistics are reported in parentheses and do not use heteroskedasticity-robust standard errors. *, **, and *** denote statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

	[1]	[2]	[3]	[4]
VoteDifLessThan10	3.240**	3.182**	3.171**	2.814**
	(2.75)	(2.67)	(2.59)	(2.36)
Volume		.045*	.059*	.059**
		(2.20)	(2.22)	(2.22)
LogMktCap		-.603	-.907	-.955
		(-0.94)	(-1.17)	(-1.06)
YearsSince			-.019	-.000
			(-0.33)	(-0.02)
Price			.009	.002
			(0.68)	(0.16)
Spread				-3.215*
				(2.02)
Volatility				1.362
				(1.45)
Intercept	.956*	6.642	9.350	9.113
	(1.76)	(1.00)	(1.23)	(0.93)
Adjusted R^2	.196	.276	.2375	.304