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# The impact of political uncertainty on institutional ownership



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## **The impact of political uncertainty on institutional ownership**

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# **The impact of political uncertainty on institutional ownership**

## **Abstract**

This paper provides original evidence from institutional investors that political uncertainty during presidential elections greatly affects investment. Using U.S. institutional ownership data from 1981 to 2010, we find that institutions significantly reduce their holdings of common stock by 0.76 to 2.1 percentage points during election years. More specifically, institutions tend to sell large proportions of their positions when Republicans win presidential elections and then keep their positions at below-average levels through the first year of the new administration. Conversely, when Democrats win presidential elections, institutions tend to keep their positions at above-average levels for the first year of the new administration. The difference in ownership rises to 2.4% by the end of the first year of new administration. Changes in institutional ownership in election years are sensitive to the uncertainty of the outcome. Our results also show that institutions benefit from these holding strategies during the pre-election periods.

**Keywords:** political uncertainty, presidential election, institutional investor, investment

**JEL Classification:** G23 (Non-bank Financial Institutions; Financial Instruments; Institutional Investors), G28 (Government Policy and Regulation), P16 (Political Economy)

## 1. Introduction

“With 10 days to go until the Presidential election, bullishness is down, bearishness is up, and uncertainty is the prevailing sentiment about where the stock market is headed... the election is weighing heavily on nearly all investors, leaving many unable to focus on their long-term goals and unwilling to move money from the sidelines until after the votes are counted. ...”

--- Carolyn T. Geer “Election Brings Out Doubts and Fears” *The Wall Street Journal* (October 28, 2012)

A country’s political climate is one of most important sources of uncertainty and instability. As such, it has a substantial impact on the overall health of the economy (e.g., Alesina and Perotti, 1996; Alesina, Ozler, Roubini, and Swagel, 1996; and Pastor and Veronesi, 2011). Apparently, major shocks, such as the 9/11 attacks, the London metro bombing, or the passage of the Patient Protection and Affordable Care Act (“Obamacare”) can foment overwhelming and long-lasting turbulence. On the other hand, even small rumors related to politics penetrate into every aspect of an economy, the markets, and in turn, investment decisions.

Plenty of works show that the political environment greatly affects the economy.<sup>1</sup> Yet, less is known about that influence from the institutional investor’s perspective. This paper seeks to fill this gap empirically by examining whether and how political uncertainty, especially as it relates to presidential elections and shifting Democratic and Republican control of the White House, influences institutional investors’ holding of common stocks. This question is interesting and important for a number of reasons.

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<sup>1</sup> Alesina and Perotti (1996) and Alesina, Ozler, Roubini, and Swagel (1996) show that country-level investment is negatively related to political instability; Durnev (2010) finds that firms experience declines in the sensitivity of investment to stock prices during a presidential election season. Julio and Yook (2011, 2012) document a reduction in firm-level investments and cross-border capital flows in election years; Belo, Gala, and Li (2013) show that when a Democrat wins the White House, cash flow and stock returns rise for firms with high government exposure; the opposite pattern holds true when a Republican wins. Accordingly, an investment strategy that exploits the presidential cycle can generate abnormal returns. Cohen, Coval, and Malloy (2010) find that election-related increases in government spending lead to decreases in firm investments. Bonaparte, Kumar, and Page (2010) and Hong and Kostovetsky (2012) show that political connections influence decision-making by individuals and by institutional investors, respectively.

First, institutional investors play a significant and important role in the economy. At the end of 2010, institutions held nearly 60% of the common stock in the U.S., which amounts to approximately 70% of U.S. GDP in 2010.<sup>2</sup> Given such a magnitude, and given the documented impact of political uncertainty on the overall economy in general and on firms' decision-making in specific (see, e.g., Alesina and Perotti, 1996; Durnev, 2010; and Julio and Yook, 2012), we believe that it should have a commensurably significant impact on the equity holdings of institutional investors. In fact, anecdotal evidence shows that institutions are deeply concerned with the impact of political uncertainty on future market conditions.<sup>3</sup> Thus, examining the relationship between political uncertainty and institutional trading behavior should advance our understanding of how political uncertainty affects the economy.

Second, institutional investors and industry sectors are interdependent. When political uncertainty affects firms' future cash flows, for example, institutional investors adjust their holdings according to firms' short or long-term prospects and their own investing styles. The situation heats up in election years, when partisan differences between Democrats and Republicans are more prominent (Alesina, 1987; Alesina and Roubini, 1992). Institutional ownership, on the other hand, has a governance role on firms. Institutions with long-term investment horizons often oversee the R&D, CEO compensation, and M&A activities of the firms in which they invest to ensure better long-term performance (see e.g., Hartzell and Starks, 2003; Chen, Harford, and Li, 2007; Aghion, Reenen, and Zingales, 2013). Institutions with short-term horizons exert governance by doing the "Wall Street walk" with their private information (Parrino, Sias and Starks, 2003; Admati and Pfleiderer, 2009; Edmans and Manso, 2011). Therefore, institutional trading/holding behavior with respect to the changes in political climate constitutes an additional mechanism through which political uncertainty affects industry sectors.

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<sup>2</sup> The U.S. GDP was \$14.59 trillion in 2010, and the market capitalization of all listed firms in the U.S. was \$17.14 trillion at the end of 2010.

<sup>3</sup> For example, Adam Shell (*USA TODAY*, November 4, 2011) states that "...A year from now, the White House and Congress will again be up for grabs. Election Day isn't until Nov. 6, 2012. But Wall Street is already bracing for more turmoil caused by Capitol Hill. And the potential for political risk is already on investors' radar. ... Republicans and Democrats are so far apart on key issues, such as taxes, deficit reduction, job creation, health care and business regulation, that investors fear big decisions that need to be made to fix things won't be made."

Third, political uncertainty offers an exogenous setting to study investor behavior. Many researchers believe that institutions have information advantages over individual investors. Yet, it is not clear how institutions acquire and interpret information.<sup>4</sup> Political uncertainty, with its exogenous influence on the economy, provides a desirable setting to investigate how institutions perceive risk and optimize their holdings. In addition, the fact that stock market returns are 9% to 16% higher under Democratic administrations (Santa-Clara and Valkanov, 2003) makes it more relevant to see if informed institutions are aware of the return gap and strategize accordingly.

Using upcoming presidential elections as a proxy for political uncertainty, we examine how political uncertainty affects the holding strategy institutions use for common stocks. Though political uncertainty accompanies any change in economic, monetary, regulatory, or fiscal policies, a U.S. presidential election is one of the most influential political events and generates remarkable uncertainty.

With 30 years of quarterly institutional ownership data from 13F filings, we find that institutions significantly *reduce* their common stock positions in election years. Institutional ownership in pre-election periods also exhibits higher volatility when there is more uncertainty about the election outcome (measured by the population voting margin). Though it is likely that we lose some economic significance by using low-frequency quarterly data, we still find the magnitude to be economically large. For instance, on average, institutional ownership falls by 0.76 to 2.1 percentage points in election years, which is about 2.5% to 7% of average gross institutional ownership (30%) in our sample period. This reduction in institutional ownership is comparable to Julio and Yook (2012), who report a 4.8% reduction in investment at the firm level in election years.

The change in institutional ownership varies between Democratic victories and Republican victories. First, institutional ownership falls *less* if Democrats win than if Republicans win. Second, after elections, institutions *increase* their ownership to *above-*

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<sup>4</sup> Extant literatures attribute this superior information to geographic advantage (Tesar and Werner, 1995; French and Poterba, 1991; Huberman, 2001; Coval and Moskowitz, 2001), business ties (Hong, Kubik, and Stein, 2005; Davis and Kim, 2007), social connections (Hochberg, Ljungqvist, and Lu, 2007; Cohen, Frazzini, and Malloy, 2008 and 2010), etc.

*average* levels if Democrats win, but they remain at *below-average* levels if Republicans win. The difference in ownership between parties rises up to 2.4% during the first year of a new administration (8% in relative form, with respect to the overall institutional ownership of 30%). This corroborates empirical evidence that the stock market generates higher returns during Democratic administrations (Santa-Clara and Valkanov, 2003, Belo, Gala and Li, 2013) and that the economy expands sooner under Democratic presidents and contracts sooner under Republican presidents (Blomberg and Hess, 2003).

More important, it is interesting to see if institutional strategies prior to a presidential election truly reflect an information advantage. To find out, we take three different approaches. First, we examine whether the changes in institutional ownership are beneficial. By looking at the excess returns associated with changes in ownership during the election year, we find that institutions generally benefit from their holding strategies. More specifically, during election years, transient institutions with high turnover ratios and diversified portfolios perform the best. Dedicated institutions with low turnover rates, less diversified portfolios, and quasi-index institutions perform less well and, under some conditions, are worse off. These findings are more significant for Democratic victories than for Republican victories. Because institutions and individual investors often take opposite actions,<sup>5</sup> our results imply that individual investors are in general worse off in election years. This supports the conventional view that institutions have an information advantage and/or act on information more aggressively.

Second, we test whether institutional ownership at the end of election quarters, when election uncertainty is greatly mitigated, predicts firm's future stock return and performance. We find it positively related to both short-term (first year of a new administration) and long-term (annual average for a new administration) stock returns and firm performance (measured by return on assets), which supports the idea that institutions have an information advantage.

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<sup>5</sup> Because institutional ownership and individual ownership sum to total shares outstanding, an increase (decrease) in institutional ownership corresponds to a simultaneous decrease (increase) in individual ownership. Therefore, if a stock is generating a positive return, then an increase in institutional ownership is beneficial, but individual investors are worse off because they have reduced their ownership.

Third, we examine whether institutional ownership during election years displays patterns that incorporate the return anomaly due to the variation in government spending by Democrats and Republicans (Belo, Gala, and Li, 2013). We find consistent evidence that, for firms in the ten industries with the greatest government-spending exposure, institutions hold a significantly larger amount of shares during election years when Democrats won than during election years when Republicans won. This pattern, however, does not hold for firms in the ten industries with the least government-spending exposure, which further supports the idea that changes in institutional ownership during a period of political uncertainty reflect the information advantage.

One weakness of this study is that our sample only spans eight presidential administrations. To address the spuriousness concern, we exclude one election at a time to ensure that incidents do not drive the results. Second, we adopt the monthly *Political Uncertainty Index* by Baker, Bloom, and Davis (2012) as an alternative proxy for the political climate. Our results are robust under both specifications. The results also hold when we control for the political uncertainty generated by a change in controlling parties of the Senate and House of Representatives. And since we focus on the fixed election schedule of the United States, there is little chance of reverse causality.

This paper makes several contributions to the literature. First, it is the first attempt to look directly at institutional holding strategies in the presence of huge political uncertainty. We unveil a new stylized pattern of institutional ownership that is not captured by the business cycle but instead is related to election uncertainty and changes in political control. In an exogenous setting, we show that institutions respond to election outcomes in general, and those with short-term investment horizons tend to process and act on election information better than other institutions and individual investors. A typical individual investor, on the other hand, tends to underreact to political information and makes adverse choices during election years, further supporting the information advantage of institutional investors (see, among others, Odean, 2002; Cohen, Gompers, and Vuolteenaho, 2002; Nagel, 2005; and Barber and Odean, 2008).



Second, this paper contributes to the literature of political uncertainty in general and to the literature specifically on how political uncertainty affects investments. Our results provide consistent evidence of investment reductions prior to an election. More important, we show that institutional holdings move in the *opposite* direction after an election. How much depends on which party wins. Prior studies do not make this connection. Given that institutional ownership is sensitive to firm-level capital allocation and decision-making, our results invite a revisit of some extant works.

Third, this paper opens an avenue for solving the excess-return puzzle regarding Democratic and Republican presidencies. It should not be a coincidence that larger institutional ownership is associated with higher market returns during Democratic administrations. Either the institutions are aware of the return gap between parties and are acting accordingly, or they respond to the economic factors related to party-specific macro-level policies that could affect firm performance and market returns. Without drawing any conclusions on causality, our results suggest that one should look into the partisan-return puzzle from the perspective of institutional ownership.

The paper proceeds as follows: we review related works and develop hypotheses in Section 2. Section 3 describes the sample construction and key variables of ownership. The main tests are presented in Section 4. In Section 5, we provide additional evidence via alternative measures of political uncertainty, further discuss the findings, and perform robustness checks. Section 6 concludes.

## **2. Literature Review and Hypotheses Development**

The literature dealing with how political uncertainty affects the economy and the interaction between institutional ownership and corporate operation is what motivates this study. We review these works and develop the hypotheses.

### *2.1 Political Uncertainty and Its Impact on the Economy*

Political uncertainty poses certain risk to the economy and thus commands a risk premium (Pastor and Veronesi, 2011). In extreme cases, events such as the assassination of

President John F. Kennedy or the attacks of 9/11 generate explosive shocks with long-lasting effects on society. At a more moderate level, politically related policy changes, such as the expiration of a tax code or reduction of federal expenditures also have profound consequences for financial markets and industry sectors.

A large body of evidence shows that economic conditions are closely related to political conditions. For example, cross-sectionally, countries with volatile political environments and less stable election systems experience significantly lower growth (e.g., Alesina, Ozler, Roubini and Swagel, 1996; Barro, 1991) and are more vulnerable to political shocks (Pastor and Veronesi, 2011 and 2012). From a time-series perspective, the variance of a country's specific index return can easily double during the week of an election (Bialkowski, Gottschalk, and Wisniewski, 2008; Boutchkova, Doshi, Durnev, and Molchanov, 2012).

In the U.S., the partisan differences between Democrats and Republicans bring additional uncertainty to the economy. Prior research shows that the two parties differ in views on taxes, government spending, and other social policies, which increases the volatility of interest rates, inflation, and employment, and other economic variables (see, e.g., Alesina, 1987; Alesina and Rodrik, 1994; Blomberg and Hess, 2001; Fowler, 2006; Olters, 2001). These differences may lead to or exacerbate certain business cycles that shape the financial market and industry sectors. Santa-Clara and Valkanov (2003), for example, document the surprising phenomenon that excess market returns are 9% to 16% higher under Democratic than under Republican presidents. This huge difference, however, cannot be explained by inflation, interest rates, or other common risk factors.

The uncertainty about which party will take control of the White House and what subsequent changes in government policies will occur intensifies in presidential election years. This uncertainty affects industry sectors through three channels. First, firms may reconsider or delay investment and capital allocation if the uncertainty would reorder the rankings of individual projects in terms of expected returns—even if future fiscal policies could be beneficial (Julio and Yook, 2012). In election years, firms can reduce investment

expenditures by 4.8% (Julio and Yook, 2012) or experience declines of as much as 40% in their sensitivity of investment to stock prices (Durnev, 2010).

Second, firms' political connections, which are essentially intangible assets, can change after presidential elections. Firms with strong political connections tend to perform better (Faccio, 2006; Cooper, Gulen, and Ovtchinnikov, 2010), receive more government investment (Duchin and Sosyura, 2012; Cohen, Coval, and Malloy, 2010; Goldman, Rocholl, and So, 2009), are more likely to be bailed out (Faccio, Masulis, and McConnell, 2006), and are less likely to be charged with fraud (Yu and Yu, 2011). As such, changes in firm's political intangible assets may affect firms' investment decisions, accounting practices, and other activities that impact the overall level of firm risk and performance.

Third, the partisan variations have implications for industry regulations, even in the absence of political connections. Hong and Kostovetsky (2012) show that Democrats are more apt to support environmental and labor causes and to oppose smoking, guns, and defense. This creates politically related business cycles in certain industries. Belo, Gala, and Li (2013) support this; they find that industries with high government exposure experience higher cash flows and stock returns during Democratic presidencies, while the opposite pattern holds during Republican presidencies.

## *2.2 Potential Influence on Institutional Ownership and the Consequences for Underlying Firms*

Institutional investors are experienced in acquiring and processing information (Michaely and Shaw, 1994; Badrinath, Kale, and Noe, 1995; Odean, 1998; Cohen, Gompers, and Vuolteenaho, 2002; Nagel, 2005; and Barber and Odean, 2008). Thus, when political uncertainty affects the future cash flows of their holdings, institutions rebalance their portfolios to reduce the impact.

Notably, institutional ownership has reciprocal effects on these underlying firms. For example, changes in institutional ownership due to cash flow are positively correlated with stock returns (Lakonishok, Shleifer, and Vishny, 1992; and Cohen, Gompers, and Vuolteenaho, 2002), a result driven mainly by institutions with short-term outlooks (Yan

and Zhang, 2009). By trading actively, these institutions inject private information into the market and cause stock prices to reflect companies' fundamental values (Edmans and Manso, 2011).

On the other hand, large institutions and institutions with long-term outlooks have incentives to monitor their holdings (Shleifer and Vishny, 1986). Thus, when these institutions take large positions in firms, they tend to affect their decision-making—particularly their R&D activity (Bushee, 1998; Aghion, Reenen, and Zingales; 2013), acquisitions (Chen, Harford, and Li, 2007), managerial compensation (Hartzell and Starks, 2003; Almazan, Hartzell, and Starks, 2005), earnings management, etc. Therefore, our paper also helps to uncover an additional channel through which the political uncertainty affects corporate operations.

### *2.3 Hypotheses*

As mentioned, two types of risk affect institutional holding strategies: systematic risk associated with uncertainty about future fiscal policy, and idiosyncratic risk associated with firm-level investment and capital allocation. Together, the turbulence that political uncertainty induces lowers companies' future cash flows and makes stock prices less informative. As a result, we expect institutions to *reduce* their ownership positions in varying degrees prior to elections. Short-term institutional investors that trade on short-term earnings are more sensitive to fluctuations in cash flow, whereas institutions that trade on intrinsic value may exhibit lagged responses to political shocks, choosing instead to take a long-term view.

Based on the evidence in Santa-Clara and Valkanov (2003) that the stock market generates much higher excess returns during Democratic presidencies, we expect institutions to adjust their holdings after elections. More specifically, we expect institutions to *increase* their holdings significantly after Democrats win the White House.

We also expect the degree of election uncertainty to matter. We hypothesize that institutional ownership is more volatile prior to an election when the outcome is more difficult to predict.

### 3. Data, Sample, Measures, and Statistics

#### 3.1 Data and Sample

To investigate institutional holdings, we obtain institutional ownership data from the Thomson Financial 13F database, which contains quarterly institutional ownership positions for all common stocks listed on the NYSE, AMEX, and NASDAQ. Institutions with \$100 million or more under management must disclose equity holdings of 10,000 shares or \$200,000 in value to the Securities and Exchange Commission (SEC) within 45 days of the end of each calendar quarter. Our sample covers the first quarter of 1981 through the fourth quarter of 2010.

We define *institutional ownership (IO)* of a stock as the number of shares held by institutional investors, divided by total shares outstanding at the end of each quarter. Following the literature, we exclude observations with total institutional ownership greater than 100%. We obtain firm-specific accounting information and equity information from COMPUSTAT and the Center for Research in Security Prices (CRSP), respectively. The full sample includes 568,711 observations.<sup>6</sup> Table 1 shows the distribution of the sample by presidential administration.

##### 3.1.1 Classifications of Institutions

In addition to investigating the overall institutional ownership, we further break down the ownership by institutions' investment styles. First, we follow Bushee (1998) and sort the institutions into transient, dedicated, and quasi-index investors.<sup>7</sup> Transient institutions have the highest turnover ratio and are the foremost users of momentum strategies; they are also relatively highly diversified. Dedicated institutions are less diversified, have low turnover ratio, and exhibit almost no trading sensitivity to current earnings. Quasi-index

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<sup>6</sup> However, due to calculation methods for firm risk and other attributes (market capitalization, book-to-market ratio, capital expenditures, and momentum), there are data gaps for some variables. Detailed descriptions of variable calculation are given in the appendix.

<sup>7</sup> We are grateful to Brian Bushee for making the data available. The data on the classification of institutions can be found at: <http://acct3.wharton.upenn.edu/faculty/bushee/>

institutions exhibit high diversification, low turnover, and contrarian trading tendencies, consistent with index-type buy-and-hold behavior.

Following Yan and Zhang (2009), we also sort institutions into short-term and long-term investors on the basis of portfolio turnover in the previous four quarters. More specifically, in each quarter, we sum the purchases and sales for each institution and calculate the monthly moving-average turnover rate for the trailing four quarters. Institutions in the top tertile of quarterly turnover rate are classified as short-term institutional investors, and those in the bottom tertile are classified as long-term institutional investors. In our analysis, *short-term (long-term) institutional ownership* (hereafter SIO and LIO, respectively) is the number of shares held by short-term (long-term) institutional investors, divided by the total number of shares outstanding.<sup>8</sup>

The two classification schemes have some similarities, as one can easily relate transient institutional ownership to SIO and dedicated institutional ownership to LIO. However, Bushee's classification not only captures turnover rate, as does the study by Yan and Zhang (2009), but also portfolio diversification and trading strategies that depend on earnings. Therefore, the transient category represents investors that are more sophisticated and informed than short-term investors. Dedicated investors, in contrast, count on long-term performance and fundamental value, as mentioned in Bushee (1998), Chen, Harford, and Li (2007), as well as Edmans and Manso (2011). Adopting two classifications allows us to test holding strategies in different institutions, beyond turnover rate and diversification. By doing so, we are more informed on how different institutions behave.

### 3.1.2 *Presidential Elections*

A number of works, including cross-border studies, use elections as proxies for political uncertainty (e.g., Julio and Yook, 2011, 2012; Durnev, 2010; Boutchkova, Doshi, Durnev, and Molchanov, 2012). Our sample covers eight presidential administrations, including five

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<sup>8</sup> For a detailed description on how the short- and long-term institutional ownership are generated, please refer to Gaspar, Massa, and Matos (2005) and Yan and Zhang (2009).

presidents and three party changes, from 1981 to 2010. The limitation of the institutional-ownership information prohibits expanding the study to a longer time horizon or cross-country analysis. However, we benefit from the exogenous nature of the fixed schedule of presidential elections in the United States.

Due to the availability of the institutional ownership data, we examine the impact of presidential elections over a quarter-based time horizon. To measure the uncertainty of an election, we obtain population voting results from *Dave Leip's Atlas of U.S. Presidential Election*.<sup>9</sup>

### 3.2 Control Variables

We control for two sets of variables associated with institutional ownership. One is the firm/stock specific attributes, including *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, and *idiosyncratic risk*.<sup>10</sup> To calculate *systematic risk* and *idiosyncratic risk*, we use the Fama-French three-factor model. Using daily stock returns for each quarter, we calculate market beta as the proxy for systematic risk and the standard deviation of the residual as the proxy for idiosyncratic risk.<sup>11</sup> Following the literature, we use firms' stock return over previous four quarters as a momentum factor.

The other set of variables captures the business cycle. The literature shows that the political cycle leads to variations in the business cycle (e.g., Alesina and Rosenthal, 1995). To ensure that the election cycle is not a proxy for the business cycle, we follow Petkova and Zhang (2005) and Belo, Gala, and Li (2013), and control for seven variables to capture fluctuation in the business cycle, namely, *inflation rate*, *unemployment rate*, *industry production*, *dividend yield*, *default spread*, *term spread*, and *risk-free rate*.

*Inflation rate* is the quarterly growth rate of the Consumer Price Index (CPI) for All Urban Consumers. *Unemployment rate* is the quarterly Civilian Unemployment Rate. *Industry production* is the growth rate of the quarterly Industrial Production Index.

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<sup>9</sup> For more information, please see: <http://uselectionatlas.org/>

<sup>10</sup> We also control for leverage and quarterly closing stock price; all the results and findings are unchanged.

<sup>11</sup> The end of quarter is the last trading day of March, June, September, and December. We use the three-month period to match the quarterly disclosure of the institutional ownership information.

*Dividend yield* is the sum of dividends accruing to the CRSP value-weighted market portfolio over the previous 12 months, divided by the level of the market index. *Default spread* is the yield spread between Moody's seasoned Baa and Aaa corporate bonds from Federal Reserve Economic Data. *Term spread* is the yield spread between the ten-year and the one-year government bonds from Ibbotson database. *Risk-free rate* is the one-month nominal Treasury Bill rate from Professor Kenneth French's website.

### 3.3 Descriptive Statistics

[Insert Table 1 here]

Table 1 gives a summary of presidencies over the sample period. The sample covers five presidents and three party changes. Two presidents and three administrations in the sample are from the Democratic Party.<sup>12</sup> Of the eight elections in the sample, two have margins of less than 5 percentage points. The vote margin for the 2000 election of George W. Bush is negative because we use the popular vote rather than the Electoral College vote. Five other elections had margins between 5 and 10 percentage points only the election of Ronald Reagan in 1984 had a margin greater than 10 percentage points.

[Insert Table 2 here]

Table 2 provides a descriptive summary of the main variables. Over the 30-year sample period, average institutional ownership is around 30%. This gradually increases over time: the average ownership in the fourth quarter of 2010 approached 60%. Sorting the institutions by investing style reveals that short-term institutions own about 50% of all institutional positions; long-term institutions own about 16%.<sup>13</sup> Under Bushee's (1998) classification, transient investors own around 25% of all institutional positions, dedicated investors own 15%, and quasi-index investors own the rest.

The average firm in our sample has a market capitalization of \$1.675 billion and a book-to-market ratio of 0.77. The average systematic risk and the idiosyncratic risk are 0.731

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<sup>12</sup> The sample covers the first two years of Barack Obama's administration.

<sup>13</sup> Yan and Zhang (2009)'s classification of the institutions uses the top and bottom tertiles turnover rate to define short-term and long-term institutions. Therefore, the SIO and LIO do not sum to 100%.



and 0.443, respectively. The momentum measure captures the lagged annual return and averages 14.6%.

#### **4. Main Results**

##### *4.1 Do Institutions Shift Ownership Positions in the Presence of Election Uncertainty?*

To answer this question, we first test whether institutional ownership changes in election years and whether these changes depend on which party wins the White House. We construct an eight-quarter window around the election (t-3 to t+4). This covers the election year and the first year of the new administration.

We include the first year of the new administration in order to test the change in institutional ownership after election uncertainty is resolved. However, to prevent interference from Congressional elections in the second year of an administration and other factors that may obscure the correlation between institutional ownership and political cycle, we only include the first year of the new administration. In addition, to ensure that our results are not subject to the choice of window, we perform the test on five alternative windows: [t-6, t+6], [t-5, t+5], [t-4, t+4], [t-3, t+3], and [t-2, t+2]. Also, we also control for industry effect with two-digit SIC code and seasonal patterns.<sup>14</sup> The results are in Table 3.

[Insert Table 3 here]

As shown in Table 3, institutions hold significantly smaller positions during election years, and they start to reduce that ownership five quarters prior to an election. Two to three quarters after the election uncertainty dissolves, ownership levels begin to increase to above-average levels. Pre-election positions are as much as 2.1 percentage points below average (column 3), which is a 7% decrease relative to the average institutional ownership

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<sup>14</sup> The institutional ownership may exhibit seasonal patterns. For example, institutions may sell off losing stocks for tax-reduction purposes before the end of the year and buy them back in the first quarter of the next year. Because the elections are held in November every four years, controlling for seasonal effects eliminates the possibility that our dummies display bias. We control the seasonal pattern with three-quarter dummies: *June*, *September*, and *December*. We also perform a VIF check to ensure that our model does not suffer from multicollinearity concerns. In the latter test, we include only eight quarter indicators for each party; thus, it is unlikely that the quarter dummies are perfectly correlated with seasonal dummies.

of the equity outstanding (30%) over the sample period. The *IO* increases to 1 percentage point above average (3.3% relatively) one year after the election. The economic magnitude of the change in *IO* around an election sums to 10%, indicating the tremendous impact that political uncertainty has on institutional holding strategies for common stocks.

In addition, we examine whether this impact is homogeneous between the Democrats and Republicans. We classify the quarters prior to the election as Democratic quarters if a Democrat wins the election, and vice versa. Following previous procedures, we test the same windows. Our main focus is the eight-quarter window  $[t-3, t+4]$ . The results appear in Table 4, Panel A.

[Insert Table 4 here]

Consistent with the results in Table 3, institutions keep their ownership positions at below-average levels prior to elections. When Democrats win, institutions increase their ownership positions to above-average levels two quarters after the election. However, if Republicans win, *IO* is generally below average for the first year of the new administration and then slightly above average in the fourth quarter after the election (the magnitude is still low compared to Democratic administrations).

To test the differences in *IO* between parties further, we perform F-tests on the difference of the coefficient. The results are in Table 4, Panel B. The F-test shows that in general *IO* is higher during Democratic quarters than Republican quarters. Moreover, though *IO* is below average prior to all elections, institutions keep their ownership positions even smaller if Republicans win the election. Also, institutions increase their ownership positions to above-average levels faster when Democrats win the elections.

The difference between the coefficients is economically significant: it rises up to 2.4 percentage points (or 8%, with respect to the average *IO* of 30%) by the end of the first year of the new administration. If one believes that institutions are informed traders, the higher *IO* during Democratic quarters supports the idea that the stock market generates significantly higher returns during Democratic presidencies. The coefficient difference prior to elections also suggests that institutions gradually incorporate the predicted

outcome in the run up to election. More specifically, if Democrats have a higher chance of winning an election, institutions respond by lowering their ownership positions at less material magnitudes. We plot the coefficients of the quarter indicators in Figure 1. The coefficients represent *IO* relative to the average level.

[Insert Figure 1 here]

Because institutions may time and bet on election outcomes, it is possible that re-elections drive the results or that re-elections display similar patterns. During the years of re-elections, some firms may establish connections with incumbents, as well as enjoy preferable tax treatment, government contracts, or even potential bailouts. Accordingly, the more likely it is that the incumbent president will be re-elected, the lower the uncertainty about the future economy. We thus group elections by incumbent party and winning party. Specifically, we divide quarter dummies into Democrat-to-Republican elections, Republican-to-Democrat elections, Democrat-to-Democrat elections, and Republican-to-Republican elections. To avoid multicollinearity by including too many dummy variables, we only control for five quarter dummies for each type of transition: the two quarters prior to the election, the two quarters after the election, and the election quarter. The results are in Table 5.

[Insert Table 5 here]

The *IO* level is generally below average prior to an election, except when Republicans are re-elected. In those cases, *IO* is above average from the quarter prior to an election. When Democrats win the re-election, *IO* is above average beginning in the election quarter.

The most dramatic change in *IO* happens when the party at large takes control of the White House. For example, in Democrat-to-Republican transitions, *IO* is deeply below average throughout the five-quarter window in the test. For the Republican-to-Democrat transitions, *IO* rises from below average to above average with great economic significance (up to around 4.7 percentage points nominally, or 15.7% with respect to the 30% average ownership level). This is consistent with the conventional view that the inauguration of a new president imposes the greatest political uncertainty to the economy. It is noteworthy

that, our sample only covers eight elections; thus, the results in Table 5 should be interpreted with caution (for example, the sample only has one Democrat re-election and one Democrat-to-Republican transition).

#### 4.2 Do IO Changes Display Heterogeneity Among Firms?

Political uncertainty is clearly a systematic risk that influences institutional ownership. We also want to know, however, if changes in institutional ownership around elections vary with firm attributes, reflecting institutions' reaction to the idiosyncratic political risk.

We select six variables that capture conventional trading strategies. The first three are *size*, *growth*, and *momentum effect*, as explained in Fama and French (1993) and Carhart (1997). The next two are *systematic risk* and *idiosyncratic risk*, measured by market beta and residual variation in the Fama-French three-factor models. In addition, because firms reduce investment during election years, we would like to know if institutions' strategies vary with firms' investment level. Thus, we include *capital expenditure* (scaled by total assets) as the sixth attribute.

We include four quarter dummies for each party: three prior to the election plus the election quarter itself. We include all the firm attributes, as well as the interactions between each firm attribute and the quarter dummies. The results are in Table 6.

[Insert Table 6 here]

Overall, firm attributes do not affect the holding strategies associated with political uncertainty. The *IO* is significantly below average prior to elections, but the interaction terms show that institutions do display some holding patterns with respect to specific firm attributes. For example, positions in large firms and value firms (firms with large book-to-market ratios) are more sensitive to election uncertainty. These patterns, however, are not persistent over time, and vary between Democrats and Republicans. It is thus difficult to draw conclusions from the results, given that institutional ownership in large and value firms are usually diversified. Institutional ownership displays a consistent pattern between Democrats and Republicans with respect to prior performance (momentum). When

election uncertainty is higher in the beginning of election years, institutions reduce the positions in past winners. When the election uncertainty is dissolved by the end of the election years, institutions increase the positions in past winners, indicating the betting on the momentum factor.

The results for *capital expenditure* reveal interesting yet opposite patterns between the two parties. If Republicans win the White House, *IO increases* with respect to firms' *capital expenditure*. The opposite pattern holds when Democrats win. If these relationships truly reflect institutions' expectations about firms' future cash flows and risk, our results imply that firms with high capital expenditure may generate higher returns during Republican presidencies, and lower returns during Democratic presidencies. Since government spending is significantly higher during Democratic presidencies (e.g. Belo, Gala and Li, 2013), our finding supports the argument by Cohen, Coval and Malloy (2010) that government spending may "crowd out" investment in private sectors and lead to lower sales growth. The extant literature provides evidence on how the political cycle affects firm level investment without disentangling the variations between Democrats and Republican. Our results therefore invite further investigation of this issue.

#### 4.3 *Variation among Institutions*

To examine whether the previous findings are consistent over different types of institutions, we group institutions by investing style and repeat the test. The results are in Table 7.

[Insert Table 7 here]

As shown, both short-term investors and long-term investors lower their ownership prior to elections, but after the election uncertainty is resolved, the short- and long-term institutions display different holding strategies. Consistent with the conjecture, short-term institutions hold below-average ownership positions under Republican administrations and above-average ownership positions under Democratic administrations. Long-term institutions do the opposite: they exhibit holding patterns similar to uninformed individual investors who buy when informed institutions sell and sell when informed institutions buy.

With Bushee's classification of institutions, we find that all the institutions hold below-average positions prior to elections. However, dedicated institutions keep above-average ownership positions during the two-year window around Democrat-won elections. After elections, transient institutions surprisingly keep above-average ownership positions under Republican administrations and below-average ownership positions under Democratic administrations—the opposite of our conjecture. The literature argues that transient institutions are the most diversified group and trade on immediate information; hence, though our findings contradict the overall higher returns and higher *IO* in Democratic administrations, transient institutions may benefit from high frequency trading on cash flow information, which the quarterly 13F ownership data does not capture. Dedicated institutions display less volatile ownership positions. They consistently hold below-average positions for Republican-won elections and above-average positions for Democratic-won elections. This is in line with Bushee's argument that dedicated institutions have long-term investment horizons and invest based on fundamentals. Given that stock returns are higher under Democratic presidencies, it is understandable that dedicated institutions start to increase their ownership positions long before an election. Presumably, this is to take advantage of other institutions' selling strategies prior to an election. Quasi-index institutions have holding strategies similar to ordinary institutions in our sample, in line with their index-type buy-and-hold properties.

#### *4.4 How Does Election Uncertainty Affect Institutional Holdings?*

Because institutions respond to the political uncertainty that precedes presidential elections by altering their holdings, it would be interesting and important to know if such changes in holdings are also sensitive to the level of uncertainty as to the election outcome. In particular, if institutional ownership is truly sensitive to political uncertainty, institutions should display wider alterations in their holdings when uncertainty about election outcome is greater.

Due to the low frequency of the *IO* data, it is not feasible to test the correlation between dynamic holdings and uncertainty. Alternatively, we construct the variable *IO\_VAR*, the standard deviation of *IO* in election years using four quarters of *IO* data. The idea is that if

the voting margin is narrow, there is more uncertainty about which party will control the White House, which will lead to greater volatility in the level of institutional holdings.

We construct the same variable for each type of institution, namely, *SIO\_VAR*, *LIO\_VAR*, *TRANS\_VAR*, *DEDIC\_VAR*, and *QUASI\_VAR* for short-term, long-term, transient, dedicated and quasi-index institutional investors, respectively. We then regress the standard deviation of institutional ownership on the population voting margin and control variables. The results are in Table 8.

[Insert Table 8 here]

The results are intuitive: wider voting margins (suggesting less election uncertainty) are related to lower ownership volatilities. However, because dedicated investors trade on fundamentals, their profits should not rely on short-term earnings or incidental information. Thus, it is possible that dedicated investors buy stocks at more favorable prices when other institutions sell, and sell when other institutions buy.

#### *4.5 Do Institutions Benefit from Their Holding Strategies?*

We have shown that institutions take action prior to elections based on their predictions of the election outcomes, and that their ownership positions are more volatile when the election outcomes are more uncertain. Fair (1978, 1982, 1988, 1996) argues that the outcomes of most elections are predictable. Forecasts of election outcomes are widely available from polling agencies and are closely followed by the media. In this regard, institutions and individual investors should have similar information sets about election outcomes, though institutional investors may be better at assessing the potential impact of those outcomes on their underlying firms.

We implement two methods to test the gain/loss associated with changes in institutional holdings. Because institutional ownership and individual ownership are negatively related, if a change in the institutional ownership is beneficial, the simultaneous change in the individual ownership should be unfavorable.

$$\sum_{t=-3}^0 \Delta IO_t \cdot (Qret_t - rf_t) \quad (1)$$

First, equation (1) gives the sum of quarterly excess payoffs associated with quarterly changes in ownership during the election year (four quarters). The quarterly excess payoff is the quarterly change in institutional ownership multiplied by the quarterly excess return on the stock (over the risk-free rate). We further break down ownership by institutional trading styles and perform a t-test to see if institutions are better off under their holding strategies.

$$\sum_{t=-3}^0 IO_{t=-3} \cdot (Qret_t - rf_t) \quad (2)$$

$$\sum_{t=-3}^0 IO_t \cdot (Qret_t - rf_t) \quad (3)$$

Alternatively, equation (2) gives the returns assuming that institutional ownership positions stay unchanged over the election year; we compare these returns with the actual returns from equation (3). We separate the test for two parties. The results are in Table 9.

[Insert Table 9 here]

We find that, in general, institutions benefit from their holding strategies, and they perform even better when Democrats win. However, when Republicans win, long-term and quasi-index institutions are worse off. The results are consistent with previous findings that these institutions do not follow the strategies of other institutions.

Additionally, due to their trading style, long-term and quasi-index institutions suffer from the negative impact of political shocks. Because individual investors' ownership moves in the opposite direction from institutional ownership, individual investors are, in general, worse off than ordinary institutional investors. This supports the notion that



institutions are more experienced in interpreting information,<sup>15</sup> especially institutions with high turnover rates and diversified holdings.

#### *4.6 Does Institutional Ownership Predict Future Returns?*

It is clear that institutions benefit from their reactions to political uncertainty and their own predictions of election outcomes. The question remains, however, as to whether post-election institutional ownership predicts future returns. Because U.S. presidential elections always occur in early November, the uncertainty regarding the outcome is usually resolved by the end of December. Therefore, if institutions have an information advantage, their holdings at the end of the election quarter should reflect that information and the prospects for the underlying firms.

To test this, we first look at the stock returns for the first year of new administrations (short-term stock return) and average annual returns for the four years of new administrations (long-term stock return). Meanwhile, it is possible that institutions may have information about how specific firms will perform under certain election outcomes and that such information has already been incorporated in stock prices by the end of the election month. We thus use the future firm performance as the alternative measure, proxied by return-on-assets (ROA). In a similar fashion, we use ROA of the first fiscal year in the new administration as the short-term performance, and the average ROA of the four fiscal years in the new administration as the long-term performance.<sup>16</sup> Note that because we need ex-post performance and stock returns and financial statements to perform the test, we drop the 2008 election.

We regress the return/ROA on the institutional ownership at the end of the election quarter, a Democratic dummy, and other existing controls. The results are in Table 10.

[Insert Table 10 here]

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<sup>15</sup> It is also possible that institutions have an information advantage about the election outcome, which drives our results.

<sup>16</sup> The ROA for the first fiscal year after an election is the ROA using the first fiscal year-end statement after an election. It is possible that some statements overlap with previous administrations. However, this does not affect our findings because the financial statements are released after the election. The institutional ownership data we use still precedes the information release.

The dependent variables in columns (1)-(4) in Table 10 are, respectively, the average annual return during the new administration, the first-year stock returns, the average ROAs for the new administrations, and the first fiscal year ROA. We find that all the measures are positively and significantly related to institutional ownership at the ends of election quarters and to the Democratic dummy. It is thus very likely that institutions alter their holdings based on their perceptions of future firm performance under the next administration—possibly based on political connections, industry preferences of the elected party, and/or other information. This further confirms the general belief that institutions have information advantages over individual investors, because an increase (decrease) in *IO* is associated with a decrease (increase) in individual ownership. Again, the positive coefficients on Democratic dummy corroborate the findings in Santa-Clara and Valkanov (2003).

#### *4.7 Are Institutional Investors Aware of the Return Anomaly Driven by the Difference in Government Spending between Parties?*

In addition to Santa-Clara and Valkanov (2003), Belo, Gala, and Li (2013) show that firms with higher exposure to government spending drive the return anomaly between Democratic and Republican presidencies. These firms generate higher cash flow and stock returns during Democratic presidencies and lower cash flow and stock returns in Republican presidencies. The abnormal return is also higher in the second and third years of the administrations. In this section, we test whether institutional investors are aware that government spending drives the return anomaly and thus accordingly adjust their ownership with respect to this pattern.

[Insert Table 11 here]

To construct subsamples of firms with high and low government-spending exposure, we simply use the ten industries with the highest government-spending exposure and the ten industries with the lowest government-spending exposure from Belo, Gala, and Li<sup>17</sup> (2013,

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<sup>17</sup> Note that the twenty industries are classified as in the 2002 Benchmark Input-Output Account table from Bureau of Economic Analysis, and our sample spans 1980-2010. However, as Belo, Gala, and Li (2013) argue, the annual transition frequencies across government-exposure portfolios are relatively low; thus, our choice

Table 4). The high-exposure subsample contains 1753 unique firms (8.2% of the entire sample). These firms are highly sensitive to government spending, and they record higher cash flows and stock returns during Democratic presidencies and lower cash flows and stock returns during Republican presidencies.

The low-exposure subsample contains 238 unique firms (1.1% of the entire sample). These firms display the lowest exposure to government spending, and their performance is less sensitive to political cycles.

We first employ a univariate test to compare quarterly institutional ownership in election years and the first years of new presidencies as between Democrats and Republicans. As shown in Table 11, Panel A, institutional ownership of firms in the ten industries with the greatest government-spending exposure is consistently and significantly higher when Democrats win elections during the eight quarters we examine. Without controlling for other factors, the differences range from 4.8% to 8.2%, which is equivalent to 16%-27% of the average institutional ownership for the sample (30%). For firms in the ten industries with the lowest government-spending exposure, however, the ownership is not statistically different.

We further perform multivariate regressions with firm attributes, business cycle variables, and firm fixed-effect controlled. Similar results are in Table 11, Panel B. For firms with higher government-spending exposure, institutional ownership is significantly lower when Republicans win elections. However, when Democrats win, institutional ownership is not significantly different from the average (except for the second quarter prior to the election) and becomes significantly higher by the end of the first year of the new administration. For firms with lower government-spending exposure, none of the coefficients is significant at the conventional level, implying that institutions do not adjust their holdings for these firms during the elections.

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of the top (bottom) ten industries are likely to retain high (low) government-spending exposure in our sample period. For more information regarding government-exposure portfolios, please see Belo, Gala, and Li (2013).

We conduct an additional test on the annual average institutional ownership to see if institutional ownership consistently reflects return anomalies that accumulate in the second and the third years of presidencies. As Table 11, Panel C shows, institutional ownership is significantly higher in the first and second years of Democratic presidencies than Republican presidencies for the firms in the ten industries with greatest government-spending exposure. It is, however, only significantly higher in the first year of Democratic administrations for firms in the ten industries with the lowest government-spending exposure.

Though restricted to 20 industries, our results are, in general, in line with Belo, Gala, and Li (2013), and they support the notion that institutions have an information advantage in periods of political uncertainty.

## **5. Discussion and Robustness Checks**

### *5.1 Additional Evidence*

Though U.S. presidential elections are among the world's largest political events and generate a substantial amount of uncertainty, they occur at a fixed pace. We would like to use other proxies for political conditions that can provide more times-series variation.

The *Political Uncertainty Index* from Baker, Bloom, and Davis (2012) is a monthly index that serves our purpose. The index combines three parts. First, a Google News search captures the month-by-month searches of Google News for terms related to economic and political uncertainty. Second is the Joint Committee on Taxation's scheduled expiration of federal tax code provisions. Third is the difference between the forecast and actual consumer price index (CPI) one year in the future and the difference between the forecast and actual federal purchases of goods and services one year in the future. *Political Uncertainty Index* is then computed using weights of 1/2 for the Google News portion and 1/6 for each of the other measures (tax expirations index, CPI forecast gap, and the federal purchases forecast gap). A larger index number implies a higher level of political uncertainty. The index is available from January 1985 to December 2010.

We use the quarterly percentage change *Political Uncertainty Index* as a proxy for political uncertainty. We cannot completely rule out the possibility that political uncertainty and institutional ownership are endogenously correlated. For example, the changes in institutional ownership may impact the contemporary uncertainty of political conditions. However, it is very unlikely that institutions have the power to influence the political events systematically throughout the entire sample period. And more likely, institutions take the political incidences as exogenous shock.

We simply regress the quarterly change in institutional ownership ( $\Delta IO$ ) on the percentage change in quarterly *Political Uncertainty Index* for the current quarter. Because institutional ownership is reported at the end of each quarter, institutions should be able to act on their perceived uncertainty during the quarter. We also report subsample results by institution type. The results are in Table 12, Panel A.

[Insert Table 12 here]

Panel A shows that the overall  $\Delta IO$  is insignificantly related with changes in political uncertainty; however, ownership changes for short-term, long-term, and transient investors are highly negatively correlated with changes in political uncertainty. Thus, these institutions will reduce their holdings when political uncertainty increases, supporting our previous findings.

The results for dedicated institutions are insignificant, and we find that quasi-index institutions react positively to changes in political uncertainty. One possibility is that it may take some institutions some time to react to the political conditions since it is difficult to shift holdings quickly without greatly affecting stock prices. We thus replace the contemporary change in political uncertainty with a measure that is lagged by one month. Note that the institutional ownership data is quarterly based, so a one-month lag incorporates the political conditions in the last month of the previous quarter and in the first two months of the current quarter. The results are in Table 12, Panel B.

Consistent with our conjecture, the overall  $\Delta IO$  is negatively and significantly related to changes in political uncertainty, indicating that some institutions respond to political

information with inertia. Moreover, this result holds for all types of institutions except quasi-index investors. It is possible that quasi-index investors may take even longer to process information regarding political conditions.

In general, by using the *Political Uncertainty Index* we reinforce our argument that institutional ownership is negatively associated with political uncertainty.

### 5.2 *Endogeneity*

Endogeneity could be a concern if institutional ownership influences the outcomes of the elections. In countries like Japan, national elections can be called early by the national leader or legislative body. This provides the possibility that election timing may be correlated with economic conditions and may cause a bias in the study. However, it is lessened in this paper. The timing of U.S. presidential elections is fixed by constitutional rules and is thus beyond of the control of any individual, corporation or other entities. Though institutions may take sides and contribute to campaigns (e.g., Hong and Kostovetsky, 2012), their influence is limited due to the Federal Election Campaign Act (FECA), the Bipartisan Campaign Reform Act (BCRA), and other regulations.<sup>18</sup> In addition, it is even more unlikely that institutions can influence election outcomes simply by shifting their holdings. Nevertheless, if involvement in political campaigns brings institutions better information with which to predict election outcomes, it only strengthens our argument that institutions change their holdings according to the observation and prediction of election outcomes.

### 5.3 *Indexed Firms*

A potential concern is whether large and renowned firms drive the results. Theoretically, these firms have large market capitalizations and receive wide attention in the market. Also, the market generates more information about these firms. Hence, institutional

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<sup>18</sup> The Bipartisan Campaign Reform Act of 2002 (BCRA, McCain–Feingold Act, Pub.L. 107-155, 116 Stat. 81, enacted March 27, 2002, H.R. 2356) is a United States federal law that amended the Federal Election Campaign Act of 1971, which regulates the financing of political campaigns. The Act was designed to address the increased role of "soft money" and the proliferation of issue-advocacy ads. For more information, please check: [http://www.fec.gov/press/bkgnd/bcra\\_overview.shtml](http://www.fec.gov/press/bkgnd/bcra_overview.shtml)

ownership in these firms should more accurately reflect the impact of political conditions on these firms. To capture the size and influence effects, we use the S&P 500 as a proxy for this type of firms.

We include a dummy variable first to identify a firm as a member of the S&P 500. In addition, we test a subsample that contains only S&P 500 firms. In untabulated results, we find that in both cases our main findings are statistically and economically unchanged.

This implies that political uncertainty is more of a systematic risk that is not confined to firms about which the market has the best set of information. Institutions are more likely to shift their holdings based on their perceptions of the impact of political conditions on the economy as a whole.

#### *5.4 Does One Election Dominate the Results?*

Though the sample only covers eight elections, we test whether a single election dominates the results. It is difficult to test the *IO* pattern associated with parties because the sample only covers three elections won by Democrats. However, this should not affect the general reduction of *IO* in an election.

We exclude one election year at a time. In unreported results, we find that no single election drives the results. This also strengthens our study because our findings are robust for even fewer elections.

#### *5.5 The Influence from Congress*

Political uncertainty intensifies if a new party takes control of Congress. It is therefore possible that institutional holding patterns between presidential administrations reflect uncertainty about Congressional elections. To address this, we create two binary variables. One indicates whether the Senate majority changes and the other indicates whether the House majority changes. We include both variables in our test.

In untabulated results, we find that Congressional party changes impose additional risk on the market. However, we still find the previously documented pattern of institutional

holdings. We plot the coefficients of the results in Figure 2. Except for the fact that the average institutional ownership increases slightly around election quarters for Republican-won elections, the pattern remains similar to Figure 1.

### *5.6 Flexibility of Institutions*

We find that institutions shift their holdings of common stocks significantly in the period of political turbulence. In the mutual fund and pension fund industry, it is unusual for a specific fund (an equity fund, for example) to re-allocate a significant portion of assets to a different category of security. However, our paper focuses on the overall institution ownership of common stocks. According to Gompers and Metrick (2001), banks, insurance companies and other investment advisors (Types 1, 2 and 4 of 13F classification) hold the majority amount of common stocks among all the institutions. Thus it is possible that, in the event of political incidents, these institutions have more flexibility and incentive to shift assets among various security categories.

Due to information shortfalls, we are not able to examine the overall asset allocations of institutions during the period of political uncertainty. But it would be interesting to look at institutional holdings of bond, options and even financial instruments in the event of political turbulence.

## **6. Conclusion**

This paper provides original evidence on how political uncertainty affects institutional ownership of common stocks. Using presidential elections as a proxy for political uncertainty, we find that institutions significantly reduce their holdings prior to presidential elections. When Democrats win elections, the magnitude of the reduction in institutional ownership in election years is smaller than when Republicans win.

The relative holdings after elections depend on the outcomes and are heterogeneous for Democratic and Republican winners. More specifically, institutions start to increase their ownership positions to above-average levels when Democrats win the White House, but they keep their ownership positions at below-average levels when Republicans win. The



difference in ownership positions between the two parties is also economically significant: it rises up to 2.4% (8%, with respect to the average institutional ownership of 30%) by the end of the first year of the new administration. The increase in holdings during Democratic presidencies echoes the higher returns during Democratic administrations (Santa-Clara and Valkanov, 2003). The results are strengthened by the evidence that greater uncertainty about election outcomes leads to greater volatility in overall institutional ownership during election years.

In addition, we find that this holding strategy reflects institutions' information advantage. First, this strategy is beneficial for institutions in general. Second, the institutional ownership at the end of the election quarter predicts both short- and long-term stock returns and firm performance. Third, institutions also display holding patterns that reflect the information advantage associated with the return anomaly driven by the variation in government spending between Democrats and Republicans. Among all the institutions, those with higher diversity and short-term investing horizons perform better during election years.

To strengthen our story, we provide additional evidence with an alternative proxy for political uncertainty, and the results are consistent. Our results are also robust to several additional tests.

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## Appendix A1: Variable calculation

Variable Name	Description	Calculation
Firm Size (Total Assets)	Log of total assets	$\log(\#6)$
Book-to-Market Ratio	Book-to-Market ratio of a firm	$\#60/(\#199*\#25)$
Momentum	Previous four quarter's stock return	
Systematic Risk	Market beta from Fama-French three-factor model	
Idiosyncratic Risk	Standard deviation of residual from Fama-French three-factor model	
Capital Expenditure	Capital expenditure scaled by total assets	$\#128/\#6$
Dividend Yield	Sum of dividends accruing to the CRSP value-weighted market portfolio over the previous 12 months, divided by the level of the market index	
Default Spread	Yield spread between Moody's seasoned Baa and Aaa corporate bonds	Federal Reserve Economic Data
Term Spread	Yield spread between the ten-year and the one-year government bond	Ibbotson database
Risk-Free Rate	One-month nominal Treasury bill rate	Prof. Kenneth French's website
CPI	Quarterly growth rate of Consumer Price Index for All Urban Consumers	Federal Reserve Economic Data
Unemployment Rate	Quarterly Civilian Unemployment Rate	Federal Reserve Economic Data
Industry Production	Quarterly growth rate of monthly Industrial Production Index	Federal Reserve Economic Data

# stands for the number of items in Compustat

Table 1: Descriptive statistic of the presidential election from 1981-2010

This table presents presidential information for administrations between 1981 and 2010. *Number of Observations* is the firm-quarter observations of institutional ownership from Thomas Financial 13F. *Percentage* is the percentage of observations of the entire sample. *Winning Margin* is the election margin of population votes from Dave Leip's Atlas of U.S. Presidential Elections.

President	Period	Number of Observations	Percentage	Winning Margin
Ronald Reagan	1981-1984	40,731	7.16	9.74%
Ronald Reagan	1985-1988	51,302	9.02	18.21%
George H.W. Bush	1989-1992	58,638	10.31	7.72%
Bill Clinton	1993-1996	81,408	14.31	5.56%
Bill Clinton	1997-2000	96,270	16.93	8.51%
George W. Bush	2001-2004	92,782	16.31	-0.51%
George W. Bush	2005-2008	101,476	17.84	2.46%
Barack Obama	2009-2010	46,164	8.12	7.27%
Total		568,771	100	



Table 2: Descriptive statistics of the key variables

This table presents the descriptive statistics for the key variables in this paper. Institutional ownership and firm attributes are described at firm-quarter level; business-cycle variables are described at quarter level. The definitions of all variables are in Appendix A1.

Variable	N	Mean	sd	p5	p25	p50	p75	p95
<b>Institutional Ownership</b>								
IO	568771	0.297	0.275	0.00216	0.0527	0.212	0.495	0.875
SIO	523574	0.148	0.167	0	0.016	0.0836	0.23	0.507
LIO	523574	0.0476	0.0597	0	0.00444	0.0244	0.0693	0.171
Transient	568771	0.0748	0.0991	0	0.00226	0.0333	0.11	0.29
Dedicated	568771	0.046	0.0751	0	0	0.0037	0.0661	0.212
Quasi-Index	568771	0.168	0.19	3.44E-05	0.0203	0.0961	0.254	0.594
<b>Firm Attributes</b>								
Size	420907	1675	10434	6.731	34.82	130.1	580.1	5510
b/m	397818	0.769	0.689	0.119	0.341	0.593	0.956	2.017
Momentum	463237	0.146	0.586	-0.674	-0.138	0.11	0.372	1.045
Systematic Risk	421622	0.731	0.823	-0.46	0.197	0.658	1.195	2.21
Idiosyncratic Risk	379150	0.443	0.642	0.0289	0.0953	0.221	0.506	1.617
Capex	446988	0.064	0.0875	3.23E-05	0.0153	0.0395	0.0798	0.213
<b>Business-Cycle Variables</b>								
Dividend Yield	120	0.026	0.0108	0.0124	0.0174	0.0243	0.0346	0.0446
Default Spread	120	1.097	0.483	0.61	0.75	0.95	1.29	2.27
Term Spread	120	0.00685	0.0382	-0.0518	-0.0199	0.00103	0.0355	0.0773
Risk-Free Rate	120	0.42	0.255	0.01	0.26	0.42	0.55	0.87
CPI	120	0.773	0.63	-0.0674	0.47	0.756	1.075	1.727
Unemployment Rate	120	6.26	1.656	4.2	5.1	5.7	7.2	9.8
Industry Production	120	0.505	1.358	-2.043	0.139	0.716	1.307	2.355

Table 3: Influence of political uncertainty on institutional ownership

This table presents the results of political uncertainty's impact on institutional ownership. The dependent variable is the institutional ownership of common stocks. The key independent variables are the quarterly indicators for six quarters prior to an election quarter, six quarters after the election, and the election quarter. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business-cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. Columns (1)-(6) represent the window of [t-2,t+2], [t-3,t+3], [t-3,t+4], [t-4,t+4], [t-5,t+5] and [t-6,t+6], respectively. Our main interest is the [t-3, t+4] window in column (3). All the tests include industry fixed effect and quarter fixed effect. The definitions of all the variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

VARIABLES	(1) IO	(2) IO	(3) IO	(4) IO	(5) IO	(6) IO
Election (t-6)						0.01658*** (0.001)
Election (t-5)					-0.00698*** (0.001)	-0.00687*** (0.001)
Election (t-4)				-0.00311** (0.001)	-0.00308** (0.001)	-0.00312** (0.001)
Election (t-3)		-0.00723*** (0.001)	-0.00757*** (0.001)	-0.00762*** (0.001)	-0.01229*** (0.001)	-0.01242*** (0.001)
Election (t-2)	-0.02099*** (0.001)	-0.02096*** (0.001)	-0.02131*** (0.001)	-0.02135*** (0.001)	-0.02146*** (0.001)	-0.01026*** (0.001)
Election (t-1)	-0.01260*** (0.001)	-0.01131*** (0.001)	-0.01120*** (0.001)	-0.01120*** (0.001)	-0.01465*** (0.001)	-0.01456*** (0.001)
Election	-0.00315*** (0.001)	-0.00314*** (0.001)	0.00063 (0.001)	-0.00096 (0.001)	-0.00072 (0.001)	-0.00075 (0.001)
Election (t+1)	-0.00327** (0.001)	-0.00552*** (0.001)	-0.00574*** (0.001)	-0.00577*** (0.001)	-0.01041*** (0.001)	-0.01044*** (0.001)
Election (t+2)	-0.00662*** (0.001)	-0.00659*** (0.001)	-0.00662*** (0.001)	-0.00667*** (0.001)	-0.00650*** (0.001)	0.00470*** (0.001)
Election (t+3)		0.00328** (0.001)	0.00363*** (0.001)	0.00361*** (0.001)	0.00005 (0.001)	0.00018 (0.001)
Election (t+4)			0.01095*** (0.001)	0.00941*** (0.001)	0.00925*** (0.001)	0.00937*** (0.001)
Election (t+5)					-0.00963*** (0.001)	-0.00958*** (0.001)
Election (t+6)						0.00580*** (0.001)
Constant	-0.00154 (0.043)	0.00180 (0.043)	0.00440 (0.043)	0.00461 (0.043)	0.00914 (0.043)	0.00917 (0.043)
Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Effect	Yes	Yes	Yes	Yes	Yes	Yes
Observations	284,647	284,647	284,647	284,647	284,647	284,647
Adj. R-squared	0.57972	0.57975	0.57981	0.57982	0.57987	0.57991

Table 4: Influence of political uncertainty on institutional ownership between parties

Panel A presents the results of political uncertainty's impact on institutional ownership, differentiating between Democratic and Republican parties. The dependent variable is the institutional ownership of common stocks. The key independent variables are the interactions of party indicator (*Rep* or *Dem*) and the quarterly indicators (six quarters prior to an election quarter, six quarters after an election quarter, and the election quarter). We classify the quarters prior to the election as Democrat quarters if a Democrat wins an election; the same applies to Republican quarters. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business-cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. Columns (1)-(6) represent the windows of [t-2,t+2], [t-3,t+3], [t-3,t+4], [t-4,t+4], [t-5,t+5] and [t-6,t+6], respectively. Our main interest is the two-year window of [t-3, t+4] in column (3). All the tests include industry fixed effect and quarter fixed effect. The definitions of all the variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

Panel B presents the F-test of the differences of coefficients of the election quarter indicators between two parties. The coefficients are from column (3) of the Panel A regressions.

Panel A: Regression results

VARIABLES	(1) IO	(2) IO	(3) IO	(4) IO	(5) IO	(6) IO
Rep * (t-6)						0.02212*** (0.001)
Rep * (t-5)					0.00072 (0.001)	0.00088 (0.001)
Rep * (t-4)				-0.00047 (0.001)	-0.00031 (0.001)	-0.00042 (0.001)
Rep * (t-3)		-0.01775*** (0.001)	-0.01931*** (0.001)	-0.01919*** (0.001)	-0.02317*** (0.002)	-0.02303*** (0.002)
Rep * (t-2)	-0.03189*** (0.001)	-0.03276*** (0.001)	-0.03371*** (0.001)	-0.03365*** (0.001)	-0.03420*** (0.001)	-0.02367*** (0.002)
Rep * (t-1)	-0.00923*** (0.001)	-0.00834*** (0.001)	-0.00899*** (0.001)	-0.00908*** (0.001)	-0.01172*** (0.001)	-0.01208*** (0.001)
Rep * Election	-0.00014 (0.002)	-0.00133 (0.002)	0.00262 (0.002)	0.00122 (0.002)	0.00075 (0.002)	-0.00006 (0.002)
Rep * (t+1)	-0.00549*** (0.002)	-0.00862*** (0.002)	-0.00984*** (0.002)	-0.00989*** (0.002)	-0.01447*** (0.002)	-0.01478*** (0.002)
Rep * (t+2)	-0.01959*** (0.001)	-0.02072*** (0.002)	-0.02177*** (0.002)	-0.02176*** (0.002)	-0.02164*** (0.002)	-0.01134*** (0.002)
Rep * (t+3)		-0.00339* (0.001)	-0.00338* (0.001)	-0.00344* (0.001)	-0.00625*** (0.001)	-0.00642*** (0.001)
Rep * (t+4)			0.00320** (0.001)	0.00190 (0.001)	0.00223 (0.001)	0.00260* (0.001)
Rep * (t+5)					-0.00101 (0.001)	-0.00049 (0.001)
Rep * (t+6)						0.01327*** (0.001)
Dem * (t-6)						0.00704*** (0.001)
Dem * (t-5)					-0.01523***	-0.01557***

					(0.002)	(0.002)
Dem * (t-4)				-0.00639***	-0.00694***	-0.00760***
				(0.001)	(0.001)	(0.001)
Dem * (t-3)		0.00361*	0.00339*	0.00346*	-0.00082	-0.00048
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t-2)	-0.01086***	-0.01060***	-0.01017***	-0.01022***	-0.01045***	0.00009
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t-1)	-0.01778***	-0.01578***	-0.01458***	-0.01450***	-0.01715***	-0.01678***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * Election	-0.00809***	-0.00797***	-0.00250	-0.00377*	-0.00315	-0.00298
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t+1)	-0.00174	-0.00320	-0.00203	-0.00190	-0.00643***	-0.00619**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t+2)	0.00882***	0.01060***	0.01314***	0.01323***	0.01297***	0.02394***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t+3)		0.01500***	0.01846***	0.01833***	0.01558***	0.01560***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t+4)			0.02710***	0.02559***	0.02445***	0.02401***
			(0.002)	(0.002)	(0.002)	(0.002)
Dem * (t+5)					-0.02431***	-0.02496***
					(0.002)	(0.002)
Dem * (t+6)						-0.00858***
						(0.002)
Constant	0.00374	0.01295	0.01927	0.01869	0.02744	0.03084
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)
Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Effect	Yes	Yes	Yes	Yes	Yes	Yes
Observations	284,647	284,647	284,647	284,647	284,647	284,647
Adj. R-squared	0.57999	0.58018	0.58038	0.58039	0.58056	0.58073

## Panel B: Comparison of the IO between parties

	Rep (1)	Dem (2)	Diff (2)-(1)	Difference in IO relative to the average IO over the sample period (30%)	P-value [(1)=(2)]	F-stat
Election (t-3)	-0.01931	0.00339	0.0227	7.57%	(0.000)	103.9
Election (t-2)	-0.03371	-0.01017	0.02354	7.85%	(0.000)	120.7
Election (t-1)	-0.00899	-0.01458	-0.00559	-1.86%	(0.000)	4.497
Election	0.00262	-0.0025	-0.00512	-1.71%	(0.065)	3.389
Election (t+1)	-0.00984	-0.00203	0.00781	2.60%	(0.003)	8.769
Election (t+2)	-0.02177	0.01314	0.03491	11.64%	(0.000)	178.2
Election (t+3)	-0.00338	0.01846	0.02184	7.28%	(0.000)	71.63
Election (t+4)	0.0032	0.0271	0.0239	7.97%	(0.000)	109.3

Table 5: Further differentiating the change in political regimes

This table presents the results of political uncertainty's impact on institutional ownership, differentiating changes in parties. The dependent variable is the institutional ownership of common stocks. The key independent variables are the interactions of party indicator (e.g., *Dem->Dem* represents the re-election of Democrats) and quarterly indicators (two quarters prior to an election, two quarters after an election quarter, and the election quarter). Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business-cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. All the tests include industry fixed effect and quarter fixed effect. The definitions of all the variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

VARIABLES	IO	std
Dem->Dem * (t-2)	-0.01751***	(0.002)
Dem->Dem * (t-1)	-0.02948***	(0.002)
Dem->Dem * Election	0.01474***	(0.002)
Dem->Dem * (t+1)	0.01144***	(0.002)
Dem->Dem * (t+2)	0.0016	(0.002)
Dem->Rep * (t-2)	-0.05509***	(0.002)
Dem->Rep * (t-1)	-0.03984***	(0.003)
Dem->Rep * Election	-0.04863***	(0.003)
Dem->Rep * (t+1)	-0.03906***	(0.003)
Dem->Rep * (t+2)	-0.06898***	(0.003)
Rep->Dem * (t-2)	-0.01767***	(0.002)
Rep->Dem * (t-1)	-0.01564***	(0.003)
Rep->Dem * Election	-0.02760***	(0.002)
Rep->Dem * (t+1)	-0.01273***	(0.002)
Rep->Dem * (t+2)	0.01966***	(0.002)
Rep->Rep * (t-2)	-0.02102***	(0.002)
Rep->Rep * (t-1)	0.00454**	(0.002)
Rep->Rep * Election	0.02346***	(0.002)
Rep->Rep * (t+1)	0.00094	(0.002)
Rep->Rep * (t+2)	-0.00463**	(0.002)
Constant	-0.00515	(0.043)
Firm-Attributes Control		Yes
Business-Cycle Control		Yes
Industry Control		Yes
Quarter Effect		Yes
Observations		284,647
Adj. R-squared		0.58102

Table 6: Interaction with firm-specific attributes (Control variables hidden)

This table presents the results of political uncertainty's impact on institutional ownership, controlling for the interaction of firm-specific attributes and election-quarter indicators. The dependent variable is the institutional ownership of common stocks. The key independent variables are the interactions of party indicator (*Rep* or *Dem*) and quarterly indicators (three quarters prior to an election quarter, and the election quarter). We deem the quarters prior to the election as Democrat quarters if Democrats win the election; the same is true for Republican quarters. Columns (1)-(6) represent the interaction of party-quarter indicators with *firm size*, *book-to-market ratio*, *momentum*, *capital expenditure*, *systematic risk*, and *idiosyncratic risk*, respectively. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. All the tests include industry fixed effect and quarter fixed effect. The definitions of all the variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

VARIABLES	(1) Size	(2) b/m	(3) Momentum	(4) Capex	(5) Systematic Risk	(6) Idiosyncratic Risk
Rep * (t-3)	0.00905* (0.004)	-0.01711*** (0.002)	-0.00979*** (0.002)	-0.00734*** (0.002)	-0.01408*** (0.002)	-0.02016*** (0.002)
Rep * (t-2)	-0.03162*** (0.004)	-0.02219*** (0.002)	-0.02699*** (0.001)	-0.02495*** (0.002)	-0.02352*** (0.002)	-0.03015*** (0.002)
Rep * (t-1)	-0.00970** (0.003)	-0.00243 (0.002)	-0.00827*** (0.001)	-0.01189*** (0.002)	-0.00628*** (0.002)	-0.00972*** (0.002)
Rep * Election	-0.01500*** (0.003)	0.01355*** (0.002)	-0.00239 (0.002)	-0.00183 (0.002)	0.00209 (0.002)	-0.00083 (0.002)
Dem * (t-3)	0.02087*** (0.004)	0.00498* (0.002)	0.01005*** (0.002)	0.00959*** (0.002)	0.00450* (0.002)	0.00365 (0.002)
Dem * (t-2)	0.00093 (0.004)	-0.00609* (0.002)	-0.00454** (0.002)	-0.00461* (0.002)	-0.00635** (0.002)	-0.01081*** (0.002)
Dem * (t-1)	-0.01797*** (0.004)	-0.01835*** (0.002)	-0.01817*** (0.002)	-0.00581** (0.002)	-0.01644*** (0.002)	-0.02431*** (0.002)
Dem * Election	-0.00597 (0.004)	-0.00207 (0.002)	-0.00742*** (0.002)	0.00340 (0.002)	-0.00791*** (0.002)	-0.01805*** (0.002)
Attributes * Rep * (t-3)	-0.00468*** (0.001)	0.00151 (0.001)	-0.01668*** (0.003)	-0.01144*** (0.002)	-0.00371 (0.002)	0.09197*** (0.026)
Attributes * Rep * (t-2)	0.00059 (0.001)	-0.00794*** (0.002)	-0.00515 (0.003)	-0.00468* (0.002)	-0.00925*** (0.002)	0.03577 (0.025)
Attributes * Rep * (t-1)	0.00021 (0.001)	-0.00792*** (0.002)	0.00124 (0.004)	0.00450* (0.002)	-0.00424 (0.002)	0.05103* (0.024)
Attributes * Rep * Election	0.00311*** (0.001)	-0.01560*** (0.002)	0.02798*** (0.004)	0.00472* (0.002)	-0.00110 (0.002)	0.05943* (0.025)
Attributes * Dem * (t-3)	-0.00296*** (0.001)	-0.00015 (0.001)	-0.03232*** (0.004)	-0.00612** (0.002)	0.00119 (0.003)	-0.00490 (0.024)
Attributes * Dem * (t-2)	-0.00140* (0.001)	-0.00074 (0.002)	-0.01790*** (0.004)	-0.00277 (0.002)	-0.00005 (0.003)	0.01882 (0.025)
Attributes * Dem * (t-1)	0.00018 (0.001)	0.00107 (0.002)	0.00280 (0.004)	-0.01461*** (0.002)	-0.00171 (0.003)	0.03538 (0.025)
Attributes * Dem * Election	-0.00025 (0.001)	-0.00623** (0.002)	0.01470*** (0.004)	-0.01592*** (0.002)	0.00188 (0.003)	0.10320*** (0.025)
Constant	0.00094 (0.043)	0.00029 (0.043)	0.00066 (0.043)	0.00119 (0.043)	0.00079 (0.043)	0.02004 (0.044)

Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Effect	Yes	Yes	Yes	Yes	Yes	Yes
Observations	284,647	284,647	284,647	284,647	284,647	256,755
Adj. R-squared	0.57997	0.57998	0.58020	0.58007	0.57992	0.57301

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**Table 7: Variation among institutions**

This table presents the results of political uncertainty's impact on institutional ownership, classifying institutional ownership by investment style. The dependent variable is the ownership of common stocks among different institutions. *SIO* and *LIO* are short-term and long-term institutional investors, respectively, defined in Yan and Zhang (2009). *Transient*, *Dedicated*, and *Quasi-Index* reflect the institutional ownership of transient, dedicated, and quasi-index institutions, respectively, as defined in Bushee (1998). The key independent variables are the interactions of party indicator (*Rep* or *Dem*) and the quarterly indicators (three quarters prior to an election, four quarters after the election quarter, and the election quarter). We deem the quarters prior to the election as Democrat quarters if Democrats won the election; the same is true for Republican quarters. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business-cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. All the tests include industry fixed effect and quarter fixed effect. The definitions of all the variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

VARIABLES	(1) IO	(2) SIO	(3) LIO	(4) Transient	(5) Dedicated	(6) Quasi-index
Rep * (t-3)	-0.01931*** (0.001)	-0.00713*** (0.001)	0.00139** (0.000)	-0.01893*** (0.001)	-0.01201*** (0.001)	0.01074*** (0.001)
Rep * (t-2)	-0.03371*** (0.001)	-0.02909*** (0.001)	-0.00832*** (0.000)	-0.01892*** (0.001)	-0.01252*** (0.001)	-0.00118 (0.001)
Rep * (t-1)	-0.00899*** (0.001)	-0.00749*** (0.001)	0.00497*** (0.000)	-0.01633*** (0.001)	-0.02164*** (0.001)	0.02692*** (0.001)
Rep * Election	0.00262 (0.002)	0.01068*** (0.001)	0.00153** (0.000)	-0.00289*** (0.001)	-0.02886*** (0.001)	0.03494*** (0.001)
Rep * (t+1)	-0.00984*** (0.002)	-0.00035 (0.001)	0.00665*** (0.001)	0.01062*** (0.001)	-0.01460*** (0.001)	-0.01096*** (0.001)
Rep * (t+2)	-0.02177*** (0.002)	-0.01099*** (0.001)	0.00378*** (0.000)	0.01009*** (0.001)	-0.01317*** (0.001)	-0.02400*** (0.001)
Rep * (t+3)	-0.00338* (0.001)	0.00499*** (0.001)	-0.00304*** (0.000)	0.00518*** (0.001)	-0.01328*** (0.001)	0.00117 (0.001)
Rep * (t+4)	0.00320** (0.001)	0.00421*** (0.001)	0.00163*** (0.000)	-0.00195** (0.001)	-0.00662*** (0.001)	0.01394*** (0.001)
Dem * (t-3)	0.00339* (0.002)	0.00674*** (0.001)	-0.00101* (0.001)	-0.02671*** (0.001)	0.02523*** (0.001)	0.00524*** (0.001)
Dem * (t-2)	-0.01017*** (0.002)	-0.00079 (0.001)	-0.00269*** (0.000)	-0.03133*** (0.001)	0.02928*** (0.001)	-0.01184*** (0.001)
Dem * (t-1)	-0.01458*** (0.002)	-0.01306*** (0.001)	-0.00641*** (0.001)	-0.05265*** (0.001)	0.04422*** (0.001)	-0.00811*** (0.001)
Dem * Election	-0.00250 (0.002)	0.00022 (0.001)	-0.00125* (0.001)	-0.04474*** (0.001)	0.04070*** (0.001)	-0.00119 (0.001)
Dem * (t+1)	-0.00203 (0.002)	0.00753*** (0.001)	-0.00875*** (0.001)	-0.01445*** (0.001)	0.04387*** (0.001)	-0.03201*** (0.001)
Dem * (t+2)	0.01314*** (0.002)	0.02116*** (0.001)	-0.00598*** (0.001)	-0.01301*** (0.001)	0.02659*** (0.001)	-0.00086 (0.001)
Dem * (t+3)	0.01846*** (0.002)	0.02400*** (0.001)	0.00358*** (0.001)	-0.02334*** (0.001)	0.02292*** (0.001)	0.01743*** (0.001)
Dem * (t+4)	0.02710*** (0.002)	0.03156*** (0.001)	0.00195*** (0.001)	-0.02204*** (0.001)	0.02068*** (0.001)	0.02902*** (0.001)
Constant	0.01927 (0.043)	0.02884 (0.031)	0.01580 (0.014)	-0.08028*** (0.017)	0.05140*** (0.010)	0.01935 (0.026)
Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Effect	Yes	Yes	Yes	Yes	Yes	Yes
Observations	284,647	284,437	284,437	284,647	284,647	284,647
Adj. R-squared	0.58038	0.38552	0.29969	0.35458	0.18181	0.52173



Table 8: The volatility of IO with response to election uncertainty

This table presents the results of how the level of election uncertainty influences the volatility of institutional ownership. The dependent variable is the standard deviation of quarterly institutional ownership of common stock during the election year  $[t-3, t]$ . *SIO* and *LIO* are the institutional ownership of short-term and long-term institutional investors, respectively, as defined in Yan and Zhang (2009). *Transient*, *Dedicated*, and *Quasi-Index* are the institutional ownership of transient, dedicated, and quasi-index institutions, respectively, as defined in Bushee (1998). The key independent variable is *voting margin of the population*, for which a greater margin indicates less uncertainty. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, and *idiosyncratic risk*. The control variables are untabulated for space. All the tests include industry fixed effect and quarter fixed effect. The definitions of all the variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

VARIABLES	(1) IO_VAR	(2) SIO_VAR	(3) LIO_VAR	(4) Trans_VAR	(5) Dedic_VAR	(6) Quasi_VAR
Margin	-0.01498** (0.005)	-0.06822*** (0.004)	-0.03326*** (0.002)	-0.02275*** (0.002)	0.04035*** (0.002)	-0.04958*** (0.003)
Constant	0.00348 (0.006)	0.00676 (0.005)	0.01473** (0.005)	-0.00499* (0.002)	0.00191 (0.003)	-0.00375 (0.003)
Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Quarter Effect	Yes	Yes	Yes	Yes	Yes	Yes
Observations	17,783	17,779	17,779	17,783	17,783	17,783
Adj. R-squared	0.07343	0.11714	0.07695	0.15010	0.06130	0.11535

Table 9: The outcome of holding strategies

This table presents the results of the gain/loss associated with changes in institutional ownership during election years and for institutions with different investing styles. *SIO* and *LIO* represent ownership by short-term and long-term institutional investors, respectively, defined in Yan and Zhang (2009). The *Transient*, *Dedicated*, and *Quasi-Index* variables are the institutional ownership of transient, dedicated, and quasi-index institutions, respectively, defined in Bushee (1998).

Panel A shows the results for equation (1). We calculate the sum of quarterly excess payoffs associated with quarterly changes in ownership during election years (four quarters). The quarterly excess payoff equals the quarterly change in institutional ownership multiplied by the excess return of the stock over the risk-free rate. The t-stat tests if the gain/loss equals zero.

$$\sum_{t=-3}^0 \Delta IO_t \cdot (Qret_t - rf_t) \quad (1)$$

Panel B shows the results of equations (2) and (3). Equation (2) constructs a mock-up return that holds institutional ownership constant over the election year. Equation (3) is the aggregated excess return during the election year. The t-stat tests if the difference between the real return and the mock-up return equals zero.

$$\sum_{t=-3}^0 IO_{t=-3} \cdot (Qret_t - rf_t) \quad (2)$$

$$\sum_{t=-3}^0 IO_t \cdot (Qret_t - rf_t) \quad (3)$$

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	IO	SIO	LIO	Transient	Dedicated	Quasi-Index
<b>Panel A The sum of quarterly gain/loss for the election year (four quarters)</b>						
Rep Change (1)	0.01	0.00809	-0.00116	0.00724	0.000744	0.00294
t-stat [(1)=0]	27.74	26.15	-9.413	26.46	5.095	11.78
Dem Chang (2)	0.0155	0.0126	0.000887	0.00785	0.00149	0.00761
t-stat [(2)=0]	24.44	23.32	5.538	20.88	6.798	19.34
<b>Panel B Comparison of mock-up (buy-and-hold) returns and real returns for the election year</b>						
Rep(mocked) (1)	0.027	0.006	0.005	0.002	0.001	0.025
Rep (2)	0.026	0.007	0.001	0.012	0.003	0.014
t-stat [(2)-(1)=0]	-1.458	2.000	-13.720	19.940	4.513	-14.960
Dem(mocked) (3)	-0.043	-0.033	-0.007	-0.011	0.006	-0.036
Dem (4)	0.008	0.002	-0.001	0.011	0.012	-0.009
t-stat [(4)-(3)=0]	28.360	27.730	17.460	28.050	14.200	24.460

**Table 10: Does institutional ownership predict future returns and future firm performance?**

This table illustrates how post-election institutional ownership predicts future firm performance and stock returns. The dependent variables for columns (1)-(4) are the average annual stock returns during the new administration (four years), first-year stock returns, average ROA during the new administration, and first-year ROA. The key independent variable is the institutional ownership of the firm at the end of the election quarter. We also include a party indicator (*Dem*) to control for differences between the two political parties. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business-cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. All the tests include industry fixed effect. The definitions of all variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

VARIABLES	(1) Average Annual Ret (Regime)	(2) Ret (first year)	(3) Average ROA (Regime)	(4) ROA (first year)
IO	0.09299*** (0.016)	0.14517*** (0.024)	0.04500*** (0.008)	0.04898*** (0.008)
Dem	0.38572*** (0.017)	0.20092*** (0.023)	0.03384*** (0.009)	0.03985*** (0.008)
Constant	-0.50139*** (0.056)	-0.04814 (0.073)	-0.08900** (0.028)	-0.10559*** (0.025)
Firm-Attributes Control	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes
Observations	19,270	19,270	17,879	19,216
Adj. R-squared	0.17736	0.22585	0.22412	0.23013

**Table 11: Are institutional investors aware of the government spending driven return anomaly between parties?**

This table tests whether institutional investors are aware of the return anomaly between Democrats and Republicans for firms exposed to high government spending. Panel A shows the univariate results for the quarterly institutional ownership in the election years and the first year of the new presidencies between Democrats and Republicans. Panel B shows the results for multivariate regressions. Column (1) is for the firms in the ten industries with highest government-spending exposure; Column (2) is for the firms in the ten industries with lowest government spending exposure. The industry classification with respect to government-spending exposure is from Belo, Gala, and Li (2013). The key independent variables are the interactions of party indicator (*Rep* or *Dem*) and the quarterly indicators (three quarters prior to an election, four quarters after the election quarter, and the election quarter). We deem the quarters prior to the election as Democrat quarters if Democrats won the election; the same is true for Republican quarters. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business-cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). Firm-fixed effect is also controlled. The control variables are untabulated for space. Panel C shows the univariate results between Democrats and Republicans for the annual average institutional ownership for firms with high and low exposures to government spending.

The definitions of all variables are in Appendix A1. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively

Panel A: Quarterly Comparison						
High Government-Spending Exposure						
	N(rep)	N(Dem)	Mean(Rep)	Mean(Dem)	Diff Mean (Rep)-Mean (Dem)	P-value
Election (t-3)	880	670	0.263	0.346	-0.082	0.000
Election (t-2)	921	691	0.270	0.350	-0.079	0.000
Election (t-1)	941	701	0.277	0.352	-0.075	0.000
Election	934	723	0.293	0.346	-0.054	0.000
Election (t+1)	976	677	0.270	0.330	-0.061	0.000
Election (t+2)	987	704	0.279	0.327	-0.048	0.000
Election (t+3)	1025	735	0.280	0.333	-0.053	0.000
Election (t+4)	1053	767	0.285	0.343	-0.058	0.000
Low Government-Spending Exposure						
	N(rep)	N(Dem)	Mean(Rep)	Mean(Dem)	Diff Mean (Rep)-Mean (Dem)	P-value
Election (t-3)	114	86	0.267	0.306	-0.038	0.290
Election (t-2)	117	93	0.259	0.317	-0.058	0.103
Election (t-1)	121	96	0.260	0.313	-0.054	0.122
Election	112	100	0.281	0.305	-0.024	0.499
Election (t+1)	124	94	0.263	0.290	-0.027	0.444
Election (t+2)	121	97	0.277	0.304	-0.026	0.455
Election (t+3)	134	100	0.266	0.308	-0.042	0.238
Election (t+4)	136	107	0.275	0.320	-0.045	0.197

Panel B: Multivariate Test

VARIABLES	(1) High	(2) Low
Rep * (t-3)	-0.01518** (0.006)	-0.00988 (0.016)
Rep * (t-2)	-0.02930*** (0.006)	-0.01906 (0.015)
Rep * (t-1)	-0.00983 (0.006)	-0.00791 (0.015)
Rep * Election	0.00077 (0.006)	-0.00407 (0.015)
Rep * (t+1)	-0.01668** (0.005)	-0.02238 (0.014)
Rep * (t+2)	-0.02786*** (0.005)	-0.02280 (0.014)
Rep * (t+3)	-0.01080* (0.005)	-0.01801 (0.013)
Rep * (t+4)	-0.00718 (0.005)	0.01029 (0.013)
Dem * (t-3)	-0.00166 (0.006)	0.00169 (0.015)
Dem * (t-2)	-0.01516** (0.006)	-0.01643 (0.016)
Dem * (t-1)	-0.01148 (0.006)	-0.02095 (0.016)
Dem * Election	0.00169 (0.006)	-0.01229 (0.016)
Dem * (t+1)	0.01000 (0.006)	-0.00905 (0.016)
Dem * (t+2)	0.00920 (0.006)	0.01369 (0.016)
Dem * (t+3)	0.00963 (0.006)	0.00998 (0.016)
Dem * (t+4)	0.02145*** (0.006)	0.02906 (0.016)
Constant	-0.09387*** (0.014)	-0.13110** (0.048)
Firm-Attributes Control	Yes	Yes
Business-Cycle Control	Yes	Yes
Firm-Fixed Effect	Yes	Yes
Observations	14,376	1,837
Adj. R-squared	0.87326	0.84797

Panel C: Annual Comparison

High Government-Spending Exposure						
	N(rep)	N(Dem)	Mean(Rep)	Mean(Dem)	Diff Mean (Rep)-Mean (Dem)	P-value
Year 1	1099	774	0.260	0.320	-0.060	0.000
Year 2	1130	789	0.277	0.331	-0.054	0.000
Year 3	1135	531	0.289	0.286	0.003	0.823
Year 4	1159	567	0.296	0.291	0.005	0.741

Low Government-Spending Exposure						
	N(rep)	N(Dem)	Mean(Rep)	Mean(Dem)	Diff Mean (Rep)-Mean (Dem)	P-value
Year 1	142	111	0.250	0.296	-0.046	0.160
Year 2	131	113	0.291	0.262	0.029	0.383
Year 3	144	80	0.288	0.249	0.039	0.267
Year 4	146	78	0.299	0.236	0.063	0.075

Table 12: Additional evidence with Political Uncertainty Index from Baker, Bloom & Davis (2012)

This table presents the results using a political uncertainty index from Baker, Bloom, and Davis (2012). Panel A uses the current percentage change in political index. The dependent variables are the change in quarterly institutional ownership, categorized by institutional investing styles. *SIO* and *LIO* represent ownership by short-term and long-term institutional investors, respectively, defined in Yan and Zhang (2009). The *Transient*, *Dedicated*, and *Quasi-Index* variables are the institutional ownership of transient, dedicated, and quasi-index institutions, respectively, defined in Bushee (1998). The key independent variable is the percentage change in the political uncertainty index. Control variables include *firm size*, *book-to-market ratio*, *momentum*, *systematic risk*, *idiosyncratic risk*, and seven business cycle variables (*dividend yield*, *default spread*, *term spread*, *risk-free rate*, *CPI*, *unemployment rate*, and *industry production*). The control variables are untabulated for space. All the tests include industry fixed effect. The definitions of all the variables are in Appendix A1. Panel B reports the results using the percentage change in political index, lagged by one month. The institutional ownership data is quarterly, so a one-month lag in the quarterly political uncertainty change incorporates political conditions in the first two months of the current quarter and the last month of the previous quarter. \*, \*\*, and \*\*\* denote the p-value less than 5%, 1%, and 0.1%, respectively.

Panel A: Using contemporary percentage changes in political index

VARIABLES	(1) $\Delta IO$	(2) $\Delta SIO$	(3) $\Delta LIO$	(4) $\Delta Transient$	(5) $\Delta Dedicated$	(6) $\Delta Quasi-Index$
$\Delta$ Political Uncertainty Index %	0.00207 (0.002)	-0.01567*** (0.001)	-0.01758*** (0.001)	-0.02647*** (0.001)	-0.00069 (0.001)	0.02665*** (0.001)
Constant	0.00234 (0.006)	-0.02897*** (0.005)	0.02683*** (0.003)	-0.04978*** (0.004)	-0.07941*** (0.003)	0.10716*** (0.005)
Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Observations	281,623	281,323	281,323	281,623	281,623	281,623
Adj. R-squared	0.05574	0.03698	0.01948	0.08687	0.08546	0.08647

Panel B: Using percentage changes in political index, lagged by one month

VARIABLES	(1) $\Delta IO$	(2) $\Delta SIO$	(3) $\Delta LIO$	(4) $\Delta Transient$	(5) $\Delta Dedicated$	(6) $\Delta Quasi-Index$
$\Delta$ Political Uncertainty Index % (lagged one month)	-0.00522** (0.002)	-0.00271* (0.001)	-0.01111*** (0.001)	-0.00831*** (0.001)	-0.01553*** (0.001)	0.02410*** (0.001)
Constant	0.00062 (0.006)	-0.02845*** (0.005)	0.02503*** (0.003)	-0.05000*** (0.004)	-0.08394*** (0.003)	0.11204*** (0.005)
Firm-Attributes Control	Yes	Yes	Yes	Yes	Yes	Yes
Business-Cycle Control	Yes	Yes	Yes	Yes	Yes	Yes
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Observations	281,623	281,323	281,323	281,623	281,623	281,623
Adj. R-squared	0.05576	0.03652	0.01834	0.08532	0.08629	0.08615

Figure I: IO levels during elections

This figure presents the differences in coefficients of the election-quarter indicators between two parties. The coefficients are from column (3) of the Panel A regressions.

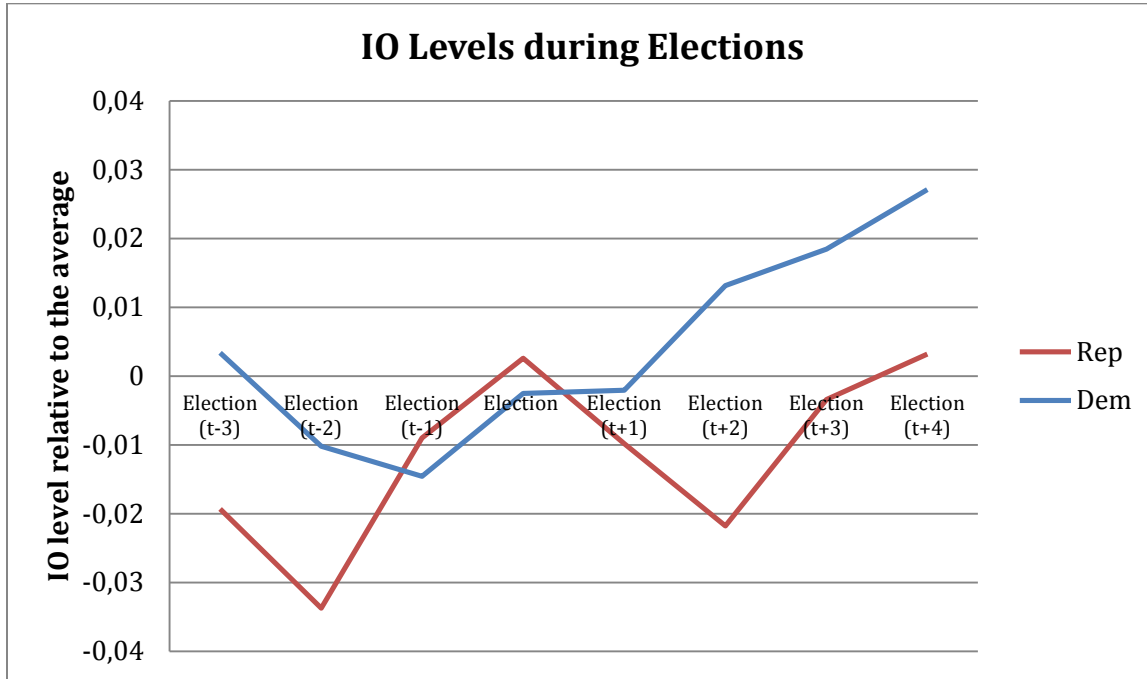
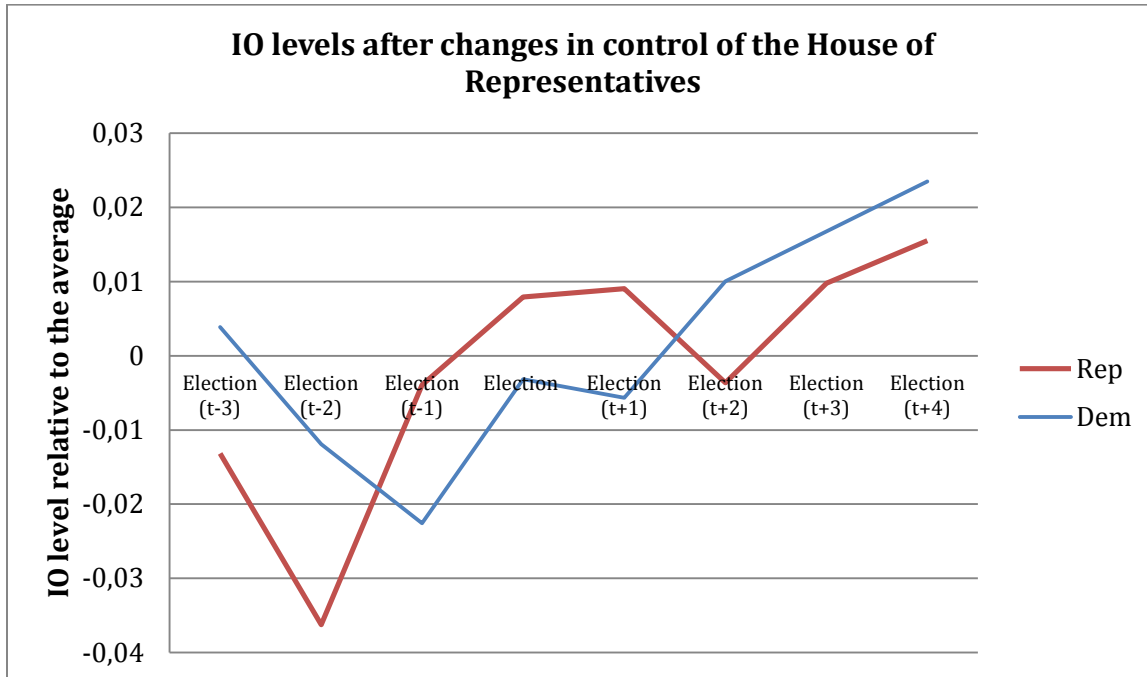


Figure 2: IO levels after changes in control of the House of Representatives

This figure presents the differences in coefficients of the election-quarter indicators between two parties.





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