Political Uncertainty and Financial Market Quality

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Abstract

We examine the effects of political uncertainty surrounding the outcome of U.S. presidential elections on financial market quality. We postulate those effects to depend on a positive relation between political uncertainty and information asymmetry among investors, ambiguity about the quality of their information, or dispersion of their beliefs. We find that market quality deteriorates (trading volume and various measures of liquidity decrease) in the months leading up to those elections (when political uncertainty is likely highest), but it improves (trading volume and liquidity increase) in the months afterwards. These effects are more pronounced for more uncertain elections and more speculative, difficult to value stocks (small, high book-to-market, low beta, traded on NASDAQ, or in *less* politically sensitive industries), but not for direct proxies of the market-wide extent of information asymmetry and heterogeneity among market participants (accruals, analysts' forecast dispersion, and forecast error). These findings provide the strongest support for the predictions of the ambiguity hypothesis.

JEL Classification: D80; G0; G12; G14

Keywords: Political Uncertainty; Market Quality; Trading Volume; Liquidity; Price Impact

Long before the appointed day [of a Presidential election]
arrives, the election becomes the greatest, and one might say
the only, affair occupying men's minds...
– *Alexis de Tocqueville,* Democracy in America, 1848

1 Introduction

Political uncertainty matters. Many recent studies conjecture that uncertainty about political outcomes has important effects on asset returns and corporate decisions.[1] In this paper, we provide novel evidence that political uncertainty significantly affects the quality of the process of price formation in financial markets.

We study the uncertainty regarding the outcome of the U.S. Presidential elections. We assume that political uncertainty is greater in the months prior to those elections (relative to non-election periods) but is resolved once the outcome of the elections is determined. Financial market quality refers to the ability of a market to price assets correctly, which in turn crucially depends on efficient price discovery and liquidity. Both dimensions of market quality, while difficult to measure, are typically related to transaction costs, speed of execution, and price impact (O'Hara (1995); Pasquariello (2014)). The empirical microstructure literature has proposed numerous measures of market quality (e.g., see Hasbrouck (2007)). We concentrate on trading volume, the fraction of zero returns, and Roll's price impact because of both their widespread use and their strong link with the theoretical microstructure literature on the process of price formation in financial markets in the presence of uncertainty (e.g., see Vives (2008) and Goyenko, Holden, and Trzcinka (2009)).

We conjecture that so-defined political uncertainty may affect market quality via three

[1] e.g., see Pantzalis, Stangeland, and Turtle (2000), Bernhard and Leblang (2006), Bialkowski, Gottschalk, and Wisniewski (2008), Durnev (2011), Bond and Goldstein (2012), Pástor and Veronesi (2012), Julio and Yook (2012), Goodell and Vahamaa (2012), Belo, Gala, and Li (2013), Pástor and Veronesi (Forthcoming), and Boutchkova, Durnev, Doshi, and Molchanov (Forthcoming).

channels related to *information asymmetry, ambiguity*, and *disagreement.* A priori, political uncertainty has an unclear effect on market quality. In his seminal work, Miller (1977) notes that "uncertainty, divergence in beliefs about a security's value, and risk go together." Thus, uncertainty implies dispersion of beliefs among market participants, which according to Varian (1985) can arise either because of differences in information or differences in opinion (i.e., disagreement). Subsequent literature (e.g., Epstein and Schneider (2008)) suggests that differences in information are either due to differences in information quantity or information quality.

With the *information asymmetry* hypothesis we conjecture that political uncertainty, as a source of fundamental uncertainty, may affect the information asymmetry between informed and uninformed investors, or investors and firms. Numerous rational expectations equilibrium (REE) models since Grossman and Stiglitz (1980) illustrate this linkage. Intuitively, greater fundamental uncertainty — e.g., before Presidential elections, when political uncertainty is likely high — makes private fundamental information more valuable, thus increasing adverse selection risk. The opposite would then occur after those elections. The effects of information asymmetry on market quality in REE models are less clear. According to Wang (1994), greater information asymmetry leads to lower trading volume as it decreases the informativeness of asset prices. However, informed trading volume may also increase with political uncertainty if liquidity trading is exogenous and inelastic, as in Kyle (1985). In addition, greater adverse selection risk may increase market-makers' inventory cost, leading to lower market liquidity — e.g., higher bid-ask spreads (Ho and Stoll (1981), Amihud and Mendelson (1986)) or lower depth (Kyle (1985)) — and consequently higher fraction of zero returns and Roll's price impact.

With the *ambiguity* hypothesis we conjecture that greater political uncertainty may lead to greater ambiguity about the *quality* of information available to market participants. Standard REE models (e.g., Vives (1995a); Vives (1995b)) assume investors' information to be of known quality. Recent studies (e.g., Epstein and Schneider (2008); Ozsoylev and

Werner (2011)) extend these models to incorporate ambiguity by allowing investors to have a distribution of beliefs about the mean and/or variance of the fundamentals of the traded asset. For instance, in the model of Ozsoylev and Werner (2011), greater fundamental uncertainty distorts the quality (rather than the quantity) of investors' information by worsening the ambiguity of their prior beliefs about asset fundamentals. Faced with greater such uncertainty, ambiguity-averse investors and arbitrageurs may choose to trade less or not trade at all. Thus, in this setting trading volume and liquidity would decline prior to U.S. elections — when both political uncertainty and ambiguity of information quality are high — and improve afterwards, once the election outcome is determined.

With the *disagreement* hypothesis we conjecture that greater political uncertainty may increase differences in opinion among market participants. In heterogeneous beliefs models (e.g., Banerjee and Kremer (2010), Hong and Stein (2007)), greater fundamental uncertainty increases disagreement among investors about the fundamental value of the traded asset, leading them to trade more with one another, i.e., increasing equilibrium trading volume. Thus, trading volume may first increase in the months preceding presidential elections — when both political uncertainty and accompanying information heterogeneity among market participants are likely high — and then decrease afterwards, when political uncertainty is resolved. However, according to Pasquariello and Vega (2007) and Pasquariello and Vega (2009) more heterogeneously informed speculators may instead trade more cautiously (i.e., less, rather than more) with their private information, leading to deteriorating trading volume and market liquidity.

These three hypotheses make distinct predictions (summarized in Table 1) regarding the impact of uncertainty on market quality. As noted earlier, we test these predictions by using all U.S. presidential elections between 1927 and 2012 as a proxy for the time-varying extent of political uncertainty over our sample period and investigate its effects on trading volume, the fraction of zero returns, and Roll's price impact. We find that trading volume decreases in the months preceding presidential elections and increases in the months immediately following the elections. Popular measures of illiquidity continuously available over our long sample period (Roll's price impact (1927) and the fraction of zero returns (1927) significantly increase in the months before and modestly decline in the months after the elections. The effects of political uncertainty on market quality are larger in correspondence with more uncertain elections (i.e., with smaller popular vote margin), consistent with the notion that political uncertainty is higher prior to the elections and dissipates once their outcome is determined.

Cross-sectional analysis provides further insights about the determinants of the effects of political uncertainty on market quality. Within our hypotheses, we expect these effects to be most pronounced for more "speculative" and difficult-to-value stocks (e.g., Baker and Wurgler (2007); Brunnermeier and Pedersen (2009)). Accordingly, we find political uncertainty to have its greatest impact on the quality of the process of price formation for smaller stocks, stocks with higher book-to-market, stocks with lower market beta, and stocks traded on NASDAQ. In those cases, the estimated *drop* in trading volume and liquidity prior to the elections and its subsequent increase afterwards are several times larger than for stocks of larger firms and NYSE stocks, respectively, as predicted by the *ambiguity* hypothesis. However, the estimated effects of political uncertainty on market quality have the *opposite* sign for the *least speculative* firms. For instance, large firms' trading volume *increases* and liquidity *improves* prior to the elections and decline afterwards. These dynamics are consistent with the predictions of the *disagreement* hypothesis and suggest that political uncertainty may induce speculators to shift their trading activity to the most liquid stocks by magnifying the dispersion of their beliefs prior to the elections. Stocks that operate in politically sensitive industries (tobacco, guns and defense, alcohol, utilities, natural resources, and mining; e.g., Hong and Kostovetsky (2010)) also experience a significantly lower pre-election drop in trading volume and a larger post-election increase as compared to stocks in non-politically sensitive industries.

These findings provide the strongest — albeit only *indirect* — support for the predictions of the *ambiguity* hypothesis. Time-varying ambiguity is elusive and difficult to measure. Nonetheless, the literature has developed several, more *direct* proxies for the (stock-level and market-wide) extent of information asymmetry and differences of opinions among market participants: working capital accruals and changes in cash holdings (Calomiris and Himmelberg (1997), Levy (2010)), the dispersion of analysts' forecasts (Diether, Malloy, and Scherbina (2002) and Scherbina (2004)) and analysts' forecasts error (Lang and Lundholm (1996), Levy (2010)). However, our estimates of the interaction of each of these proxies with the effects of political uncertainty on market quality yield no support for the *information asymmetry* and *disagreement* hypotheses. In fact, the estimates, although, not statistically significant, have the opposite sign from what the *information asymmetry* and *disagreement* hypotheses predict.

Our paper is related to recent empirical and theoretical studies on presidential elections around the world and their effects on firm-level investment, stock returns, and return volatility (e.g., Pantzalis, Stangeland, and Turtle (2000), Bernhard and Leblang (2006), Durnev (2011), Bialkowski, Gottschalk, and Wisniewski (2008), Goodell and Vahamaa (2012), Julio and Yook (2012), Pástor and Veronesi (2012), Pástor and Veronesi (Forthcoming), Boutchkova, Durnev, Doshi, and Molchanov (Forthcoming)). For instance, Julio and Yook (2012) document cycles in corporate investment in correspondence with the timing of national elections in 48 countries between 1980 and 2005. Goodell and Vahamaa (2012) show that political uncertainty around U.S. presidential elections affects option-implied stock market volatility insofar as the winner of the presidential elections becomes more uncertain. Boutchkova, Durnev, Doshi, and Molchanov (Forthcoming) show that this effect is stronger for firms operating in politically sensitive industries. Pástor and Veronesi (2012) and Pástor and Veronesi (Forthcoming) develop a general equilibrium model to show that government policy uncertainty and political uncertainty, respectively, may have ambiguous effects on stock prices because of their effects on both future cash flows and discount rates (e.g., by exposing stocks to an additional source of non-diversifiable risk). Relative to these studies, our focus is on the determinants and implications of investors' behavior for financial market quality when political uncertainty is high.

In the rest of the paper, we proceed as follows. In Section 2 we further discuss our notion of political uncertainty relative to the existing literature. We describe our data and empirical design in Sections 3 and 4, respectively. We present our results in Section 5. Section 6 concludes.

2 Political Uncertainty

Within the political science literature, political uncertainty typically refers to the lack of sureness or absence of strict determination in political life. As Dahl, Stinebrickner, et al. (1963) notes, uncertainty appears to be an important characteristic of all political life. Elections, wars, governmental processes, threats, and other political phenomena are all inherently uncertain political occurrences (Cioffi (2008)). In this study, we define political uncertainty as the uncertainty regarding the outcome of U.S. Presidential elections. We concentrate on presidential elections because in developed countries with stable political regimes, such as the United States, regularly scheduled Presidential elections are (exogenous) political events that define who holds office. Therefore, the timing of Presidential elections does not depend on economic conditions or business cycles.

One may argue that political uncertainty is merely a reflection of policy uncertainty. These two forms of uncertainty, while related, use distinct features. Policy uncertainty is the uncertainty regarding any government policies (monetary and fiscal policies) and their impact on economic activity or financial markets (e.g., Pástor and Veronesi (2012), Pástor and Veronesi (Forthcoming), Pasquariello (2014)). A popular index of economic policy uncertainty is developed by Baker, Bloom, and Davis (2013) and is comprised of news coverage about policy related economic uncertainty, tax code expiration, and analysts' disagreement. Insofar as there may be uncertainty about the government policies proposed by competing candidates for office, political uncertainty may also stem from policy uncertainty. Political uncertainty however is broader in scope for it entails greater uncertainty regarding the possible states of nature that can occur. In particular, political uncertainty encompasses both uncertainty about the election outcome and uncertainty about the policies that may ensue from that outcome.

Another important distinction is the one between political uncertainty and economic uncertainty. Economic uncertainty is the uncertainty regarding the economic conditions or the business cycles. Economic uncertainty may affect political uncertainty since during periods of high economic uncertainty the uncertainty regarding who wins the Presidential elections may increase. This raises the possibility that any investigation of the impact of political uncertainty on market quality may be plagued by endogeneity concerns. For instance, both market quality and political uncertainty may be amplified by economic uncertainty surrounding downturns in economic activity or outright recessions. However, as noted in the Introduction, in our study we make the important identification assumption that, although being possibly state-dependent, political uncertainty is always higher in the months leading to U.S. presidential elections and lower once their outcome is determined. Of course, economic conditions may (and often do) affect political outcomes as well. Nonetheless, given the above assumption, endogeneity concerns are mitigated by our prior observation that the timing of U.S. presidential elections is *exogenous* to current and expected economic uncertainty.

If, however, our identification assumption is not supported, then our results may be driven by political business cycles ("election year economics") rather than political uncertainty. As Alesina (1988) notes, "social planners" and "representative consumers" do not exist. Politicians are driven by their incentive to be re-elected ("office-motivated" politicians; e.g., see Nordhaus (1975), Rogoff (1987)). Office-motivated politicians can manipulate monetary and fiscal policy instruments to influence the level of economic activity and increase their chances of being re-elected. Under this scenario, our results may merely reflect the peaks and troughs of the political business cycle. However, according to Drazen (2001), there is much less hard evidence about the prevalence of “election-year economics” in developed countries (and especially in the United States) than suggested by both the aforementioned theoretical models and conventional wisdom. For instance, Drazen (2001) (p. 76) observes that “although there is wide — but not universal — agreement that aggregate economic conditions affect election outcomes in the United States, there is significant disagreement about whether there is opportunistic manipulation that can be observed in the macro data.” Thus, we argue that U.S. presidential elections may provide a clean setting to examine the effects of political uncertainty on financial market quality.

3 Data

3.1 Election Data

The U.S presidential elections are held every four years, the Tuesday between November 2nd and 8th. Traditionally, there have been two major political parties participating, Democrats and Republicans.[2] The candidates are nominated through a series of primary elections and caucuses. This process however, is not part of the United States Constitution and instead, was created by the political parties over time. As a result, the exact time that the nominees are selected is not pre-specified and in fact, has varied a lot across elections. For instance, in the 1976 elections, the Republican's party nominee was not selected until the party's national convention when the incumbent President, Gerald Ford, narrowly defeated Ronald Reagan. Thus, we choose to study the effects of political uncertainty over a fixed window of six months before (since May) and four months after (until February) the actual election day.

[2]However, three main candidates ran for office in the elections of 1968, 1980, 1992, 1996 and 2000.

We consider 22 U.S. presidential elections from 1928 until 2012. Table 2 shows summary characteristics of the presidential elections; incumbent president and party, winning candidate and party, and popular vote margin. The 6 most uncertain elections according to the popular vote margin are the elections of 1960, 1968, 1976, 1992, 2004 and 2012. The data on U.S. presidential elections have been collected from CQPress[3].

We conduct our analysis including the presidential elections of 2000 between George W. Bush (R) and Al Gore (D). Since however, the uncertainty about the winner was resolved in December 12th, 2000, we additionally test whether our results are robust to the exclusion of the 2000 elections. The results are indeed robust [results not shown].

3.2 Measures of Market Quality

We measure financial market quality through trading activity, the fraction of zero returns, and Roll's price impact.

Trading activity is defined using raw and log turnover. For each individual stock i, we define monthly turnover in month t as:

$$\tau_{it} = \frac{V_{it}}{N_i} \;, \tag{1}$$

where i indexes stocks and t indexes months. V_{it} is the total monthly share volume of stock i, and N_i are the number of shares outstanding of stock i.

Table 3, panels A and B show the summary statistics for monthly turnover and returns from 1926 to 2013 and subperiods. Turnover exhibits extreme positive skewness (64 in 1926-2013 period) and has a very fat tail (15379 kurtosis in 1926-2013)[4]. To correct for

[3]http://www.cqpress.com

[4]The extreme skewness (140.4 and 125.2) and kurtosis (44819 and 45230) in the subperiods 1966-1986 and 1997-2006 are driven by the October 1987 crash. The anomalous properties for both returns and volume in the 1986-1987 period have been well documented in the empirical literature.

these characteristics we apply the logarithmic function:

$$log(\tau_{it}) = log(\frac{V_{it}}{N_i}) \ . \tag{2}$$

Table 3, panel C, shows the transformed skewness and kurtosis, -0.26 and 3.43 respectively, which match closely the skewness and kurtosis of a normal distribution, allowing us to perform OLS regressions.

Several studies have documented that trading volume exhibits characteristics of non-stationarity and a time-trend. Figure 1 shows the time series of monthly market turnover where these two properties are evident. To address the issue of the time trend we use a time trend control and refrain from using any de-trending techniques. Lo and Wang (2001) apply several such techniques on the turnover time series and show that the characteristics of the de-trended series vary across the de-trending methods. Thus, they conclude that it is optimum to use the raw turnover.

To proxy liquidity, we use Roll (1984)'s impact and a measure developed in Lesmond, Ogden, and Trzcinka (1999), the proportion of days with zero returns (zeros hereafter). Roll (1984) estimates the effective spread based on the serial covariance of the change in prices as follows:

$$Roll_{it} = \begin{cases} 2\sqrt{-Cov(\Delta P_t, \Delta P_{t-1})} & \text{when } Cov(\Delta P_t, \Delta P_{t-1}) < 0 \\ 0 & \text{when } Cov(\Delta P_t, \Delta P_{t-1}) \geq 0 \end{cases} \tag{3}$$

The use of zeros is very intuitive as stocks with lower liquidity are more likely to have zero volume days and thus more likely to have nothing going on zero return days. Additionally, stocks with higher transaction costs have less private information acquisition (because it is more difficult to overcome higher transaction costs) and thus, even on positive volume days, they are more likely to have no-information-revelation, zero return days.

Following Lesmond, Ogden, and Trzcinka (1999) we calculate the fraction of zero returns as following:

$$Zeros = \frac{(\#\text{of days with zero returns})}{T} \tag{4}$$

where T is the number of trading days in a month. Goyenko, Holden, and Trzcinka (2009) show that zeros outperform other measures of liquidity both when using high frequency data and daily/monthly data.

3.3 Financial Market Data

We obtain the data on market quality from the University of Chicago's Center for Research in Security Prices (CRSP) Monthly Master File. We use monthly data for all the stocks listed on the NYSE, NASDAQ and AMEX from 1926 to 2013. NYSE and AMEX stocks span the whole period from 1926 to 2013, but NASDAQ stocks enter the sample in 1973 when it was first introduced. We include only common stocks (CRSP share code 10 and 11) and as conventional, omit ADRs, SBIs, REITs, and closed-end funds. We implement additional filters to exclude any outliers that may drive or distort our results. Hence, we exclude stocks with zero trading or whose price is missing (or is below $0.5). We also winsorize the data at the top and bottom 5% volume and 1% returns. Additionally, we only include stocks that have been listed and actively traded in either of the exchanges for at least 3 years.

Table 3 shows the number of firms in our sample. Overall, there are 18,810 unique stocks for the period 1926-2013. In the last 7 years (since 2007), after the recent financial crisis, there has been a significant drop in the number of firms that are listed on the exchanges.

On the account of the well known double counting issue related to NASDAQ volume (Atkins and Dyl (1997)) and the fact that the structure and capitalization differences between NASDAQ and NYSE may have important implications for the measurement and behavior of volume, most of the empirical literature analyzes the two exchanges separately. Particularly, the double counting issue arises because NASDAQ is primarily a dealer market, whereas the NYSE is an auction market. For instance, when an investor sells 100 shares of a firm x to a dealer, the dealer reports a 100-share transaction; when another investor buys these 100 shares of firm x from the dealer, the dealer reports another 100-share transaction. The reported trading volume for firm x is 200 shares, when only 100 shares have been exchanged between the two investors. Thus, the reported trading volume on the NASDAQ is overstated (Atkins and Dyl (1997)). For our purposes these differences do not play a major role. Thus, in the main regression specification we do not separate between the exchanges.

To measure the effects of the differences between the exchanges on market quality, we run separate regressions for NYSE/AMEX and NASDAQ. Table 11 shows and section 5 discusses the results.

4 Empirical Design and Results

This section presents our main empirical findings related to financial market quality around election months. We begin with our primary test on the effects of the U.S. Presidential Elections on market quality controlling for firm characteristics and economic conditions. We also vary the empirical specification to test whether our results are robust to different specifications. We then test directly the *information asymmetry* and *disagreement* hypotheses using various proxies for information asymmetry and differences in opinion. Finally, we conduct a sub–sample analysis to examine how and if our results are driven by firm characteristics.

4.1 Market Quality around U.S. Presidential Elections

To quantify the impact of U.S. presidential elections on market quality we run the following baseline panel data regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ , \qquad (5)$$

where i indexes firms and t indexes months. The dependent variable, market quality, is defined as either raw turnover, $log(\tau)$, the fraction of zero returns, $Zeros_{it}$, or Roll's impact, $Roll_{it}$. The primary explanatory variable is the (monthly) election dummy, M_t^-, M_t^+. M_t^- are the months preceding the elections, from May until October, and M_t^+ are the months following the elections, starting from November until February (of the following calendar year). For instance, consider the 2008 elections. $M_t^- = 1$ if $t = \text{May}_{2008}$ but $M_t^- = 0$ if $t = \text{May}_{2007}$ (the same applies for the aforementioned months). The coefficients of the election dummies, β_1 and β_2, capture the change in the *conditional* market quality in the months preceding and following the elections, controlling for firm characteristics and economic conditions, X_{it} and F_t, that explain trading volume. To control for the *unconditional* market quality we include a vector of month dummies, D_t.

Firm fixed effects are included and standard errors are clustered by firm throughout the paper. We do additional tests using two-way clustering (both across firms and months) and neither the qualitative nature nor the statistical significance of our results change [to preserve space, results are not reported]. We do not cluster by year, as the consistency of clustered standard errors comes from the large number of clusters (see Angrist and Pischke (2008) and Wooldridge (2002)). Thus, including clustered standard errors by year will distort our findings and any interpretations should be made with additional caution.

Trading volume exhibits a significant U–shaped time trend. Figure 1 shows the time series of the end of month market turnover. Beginning in the 1920's, turnover has a steep decrease reaching its minimum during the 1950–1980's. From the 1990's, turnover exhibits a steep increase that peaks in 2008 and 2009. This upward trend is possibly due to the elimination of fixed commissions in 1975 (Campbell, Grossman, and Wang (1993)), the technological innovations such as online trading (Ahmed, Schneible, and Stevens (2003)) and the increase in trading activity of institutional investors, especially hedge funds (Fung and Hsieh (2006)). To control for the time trend, we include a time trend dummy, T_t^2. As Figure 1 depicts, the time trend is not linear. To account for the non-linearity, we perform additional analysis including the cube of the time trend. The sign of the coefficients does not change and the statistical significance increases with this correction (results not shown).

The strong time trend along with the non-stationarity can constitute an important problem when conducting statistical inference - it is particularly difficult to interpret a t-statistic in the presence of a strong time trend. We however believe that refraining from imposing a statistical structure outweighs the statistical cost of analyzing the raw turnover. Additionally, due to the non-stationarity of turnover, we do not include year fixed effects in our regressions.

As proposed by the empirical literature (e.g., Chordia, Huh, and Subrahmanyam (2007), Hong and Stein (2007), Lo and Wang (2001)) on market quality we include several firm level controls, X_{it}, that explain trading volume and zeros. We control for log market capitalization and log price, the monthly standard deviation of returns and turnover, and the sign of the preceding month returns.

We argue that since market capitalization and price are important drivers of stock returns, they should also explain market quality. Specifically, larger firms, i.e., with higher market capitalization, tend to have more diverse ownership and are more visible, which can lead to higher trading volume. The log price captures the trading costs. The main trading costs come from the bid-ask spreads that are discrete values and thus, inversely related to the price levels. Therefore, we expect that, ceteris paribus, higher trading volume should be positively related to the price levels. For a detailed analysis on the significance of log market capitalization and log price see Black (1976) and Banz (1981).

To control for market quality due to portfolio rebalancing needs we include a dummy variable for past positive returns; the dummy variable is one if the return of the preceding month is positive and zero otherwise. Trading volume in response to past returns is predicted by the theoretical model of Hong and Stein (2007) and empirically suggested as a control in Chordia, Huh, and Subrahmanyam (2007).

To capture the effects of the general economic conditions, F_t, we include as controls the NBER recessions and the unemployment rate. We also include the Fama-French 3 factors and momentum using the same rationale as previously; since they are important drivers of stock returns, they may also explain market quality. We obtain the data on the FF 3 factors and momentum from the Wharton Research Data Services (WRDS) Fama French factors file.

Table 4, and Figure 2 report the results for our baseline regression specification (equation 4). The first three columns of Table 4 report the regression coefficients of market quality, i.e., log turnover, $log(\tau)$, the fraction of zero returns, $Zeros$, and Roll's impact, $Roll$, on the election month dummies without any controls but with firm FE and clustered standard errors. The following columns add the market level controls and the firm level controls. Figure shows the results of the main regression with controls and the 95% error band.

Our central result is that turnover decreases in the months preceding the presidential elections and increases modestly in the four months following the elections, as compared to the turnover during an average non-election month. The month of August experiences the highest decrease; monthly turnover decreases by 7% (the result is significant at the 0.1% level). The months following the elections show steady increase in turnover, with January and February experiencing the highest increase (4.5% and 3.3%, respectively, at the 0.1% level). Figure **??** shows graphically the monthly average change in turnover during an average election months, starting from May of an election year until January following the election. The coefficients represent the change in turnover relative to the average non-election month. The shaded areas represent 95% confidence intervals and the changes are the β coefficients of the main regression specification.

The fraction of zero returns, $Zeros$, increases in the months prior to the elections. The months following the elections experience a mixed behavior regarding the fraction of zero returns, indicating that liquidity still decreases even after the election outcome has been declared. The fraction of zero returns starts decreased long after the elections are over (results not shown here). These results also indicate that liquidity may be affected by policy uncertainty, which inevitably is high during the months following an election outcome and until the new government is settled down. Figure 2b shows graphically the monthly average change in zeros, starting from May of an election year until February following the election. Similar results apply to Roll's impact measure. The results of Roll's impact measure are qualitatively the same and are shown in Figure 2c.

Our main findings suggest that, for the average stock, the *disagreement hypothesis* potentially, is rejected since its main prediction is higher trading volume during the months prior to the elections. Both the *information asymmetry* and the *ambiguity hypothesis* cannot clearly explain the post-election pattern of liquidity. The findings so far however, are not sufficient to draw concrete inferences on the hypotheses. To address that we perform additional tests, which we discuss in Section .

4.2 Identification Assumption

Having shown that market quality deteriorates in the months preceding the presidential elections and improves in the months following the elections, we now deepen our analysis by introducing variation in the degree of uncertainty across the elections. If our main identification assumption holds, i.e., that political uncertainty is higher on average in the months leading up to presidential elections and is resolved when the outcome of the elections is declared, then the impact of political uncertainty on market quality should be more profound during more uncertain elections.

To incorporate the degree of election uncertainty, we split the election sample into two sub-samples; uncertain and non-uncertain elections. We define uncertain elections based on the popular vote margin; Table 2, column 6, shows the popular vote margin across the U.S. presidential elections. The uncertain elections are the following six elections: 1960, 1968, 1976, 1992, 2004, and 2012.

Table 5 reports the results for the following regression specification:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 UnEl_t M_t^{+/-} + \gamma D_t + \delta T_t + \theta X_{it} + \theta_2 F_t + \epsilon_{it} \ , \quad (6)$$

where $UnEl_t$ is a dummy that equals 1 if the election on year t is uncertain. We include an interaction term between uncertain elections and the uncertainty election indicator. It is not necessary however, since the indicator for the uncertain elections is zero whenever the election month dummies, M_{it}^- and M_{it}^+ , are zero.

Table 5 shows the results. The results on turnover support our identification hypothesis. During uncertain elections turnover decreases more in the months preceding the elections. In particular, the effect is more pronounced for August and October. In the months following the uncertain elections, the increase in turnover is significant but not as profound as it is in the months preceding the elections. Figure 8a shows the results for turnover during uncertain elections as compared to non–uncertain elections.

Table 5 also reports the results on the liquidity measures during uncertain elections. The fraction of zero returns decreases during uncertain elections. This result, combined with the result about turnover, potentially, suggests that during uncertain elections investors re–balance their positions more as compared to non–uncertain elections. Figure 8b and 8c show graphically the results, reinforcing the possibility for rebalancing during uncertain elections.

5 Information Asymmetry and Disagreement Hypotheses Test

To shed more light on the *asymmetric information* and *disagreement* hypotheses, and since *ambiguity* is elusive and difficult to measure, we directly test these two hypotheses. To proxy for information asymmetry we use two different types of variables, i.e., analysts' forecast error and working capital accruals. We proxy disagreement with the dispersion in the analysts' forecasts.

5.1 Working Capital Accruals

The empirical literature on political uncertainty provides evidence of information asymmetry. Lower investments and higher cash flows (Julio and Yook (2012)), higher accounting conservatism (Dai and Ngo (2012)), and lower investment to price sensitivity Durnev (2011) indicate that in the months prior to national elections the adverse selection and moral hazard problems worsen thus, leading to higher information asymmetry. In order to directly test the *information asymmetry* hypothesis we employ working capital accruals (Calomiris and Himmelberg (1997), Levy (2010)) as a proxy for information asymmetry.

We motivate this approach through existing literature that relates the working capital accruals to information asymmetry. Working capital accruals are associated with earnings management (Burgstahler and Dichev (1997)). The theoretical models of Dye (1988), and Trueman and Titman (1988) predict a positive relationship between earnings management and information asymmetry. The literature finds empirical evidence for this relationship as well (Richardson (2000)). Thus, we hypothesize that higher working capital accruals indicate potential earnings management which in turn implies higher information asymmetry.

We recognize a potential endogeneity issue with this approach. During periods of high political uncertainty, managers may be managing earnings in order to provide more conservative estimates rather than hide information from the market and investors. If that is the case, increases in working capital accruals would indicate an effort to better estimate future earnings rather than manipulation, i.e., adverse selection and moral hazard. If managers increase working capital accruals in order to be 'on the safe' side, they still provide less accurate information to the market and investors, leading possibly to worsening market quality.

The baseline regression we run is the following,

$$\Delta(WC)_{it} = \mu_i + \beta_1 Q_t^- + \beta_2 Q_t^+ + \gamma Q_t + \delta X_{it} + \epsilon_{it} \ , \tag{7}$$

where i indexes firms and t indexes months. $\Delta(WC)_{it}$ is the change in working capital, Q^- are the quarters preceding and Q^+ are the quarters following the presidential elections, and X_{it} are controls. Following the accounting literature, we choose the following controls: log sales, property, plant and equipment, industry, size, leverage, accounts receivable, and investment cycle.

An important drawback in the above specification is that the first quarter following an election begins in October, i.e., during a month that the uncertainty has not yet been resolved. We obtain the quarterly data from Standard Standard and Poor's Compustat North America files; they extend from 1966 to 2012.

Table 6 shows the results of the above regression. We find that working capital accruals do not change significantly neither in the quarters preceding nor in the quarters following the U.S. presidential elections. In fact, working capital accruals drop during the quarters before and after the elections. We run this empirical specification including clustered standard errors on the firm and quarter level, and including quarter and firm fixed effects. We find no significance under any specification.

Our results so far do not support the *information asymmetry* hypothesis. This evidence however is not sufficient to confidently draw any conclusions. To strengthen our understanding and address the potential endogeneity issues arising with this approach, we next investigate information asymmetry using analysts' forecast error as a proxy.

5.2 Analysts' Forecast

The literature on analysts' forecasts has identified the analysts' absolute forecast error as proxies for information asymmetry (Lang and Lundholm (1996) and Levy (2010)) and information heterogeneity (Pasquariello and Vega (2007) and Pasquariello and Vega (2009)). In particular, Barron, Kim, Lim, and Stevens (1998) develop a model that relates the properties of the analysts' forecasts to their information environment. They show that forecast error has two components; the idiosyncratic and common component. The idiosyncratic component is driven by the private information that analysts rely on, whereas the common error arises from the errors in the public information. They find that the forecast dispersion reflects only the idiosyncratic error while the absolute forecast error reflects primarily the common error.

Diether, Malloy, and Scherbina (2002) and Scherbina (2004) use the dispersion in the analysts' forecasts as a proxy for differences in opinion. Thus, we test the *disagreement* hypothesis through the analysts' forecasts.

Following the theoretical findings of Barron, Kim, Lim, and Stevens (1998), we define the dispersion in earnings forecasts as:

$$\text{Dispersion}_{it} = \frac{\sigma(\text{Earnings Forecasts})_{it}}{\text{Price}_{it}} \ , \tag{8}$$

and the absolute forecast error as:

$$|\text{Forecast Error}_{it}| = \frac{|\text{Actual} - \text{Median Earnings Forecasts}|_{it}}{\text{Price}_{it}} \ , \tag{9}$$

where σ(Earnings Forecasts) is the standard deviation of the quarterly earnings forecasts, and Price is the quarter closing price. We obtain the data on earnings forecasts and the dispersion of analysts' beliefs from Thomson and Reuters I/B/E/S files, which extend from 1975 to 2012; thus, we miss two elections: 1968 and 1972.

We investigate the following regression specification:

$$Y_{it} = \mu_i + \beta_1 Q_t^- + \beta_2 Q_t^+ + \gamma Q_t + \epsilon_{it} \ , \tag{10}$$

where Y_{it} is either the dispersion of the analysts' forecasts or the absolute forecast error (definitions are in eq. 7 and 8), and Q^- are the quarters preceding and Q^+ are the quarters following the presidential elections. Table 7 shows the results of this regression specification. Again, we find no statistically significant results. In fact, we notice that both the measures experience a decrease rather than an increase in the quarters preceding and following the elections (with the exception of the 3rd quarter, during which dispersion increases). Of course, we cannot draw any conclusions from these effects as the coefficients are not significant; that is, they are not estimated precisely.

The direct test of the *information asymmetry* and *disagreement* hypotheses provides evidence against the two hypotheses, leading us to conclude that the *ambiguity hypothesis* is more plausible.

6 Firm Characteristics

In this section we perform cross-sectional regressions based on several firm characteristics such as size, book to market ratio, market β, stock exchange, and industry. We begin first by examining the effect of political uncertainty on firms of different size, book to market ratio, and market β. We separate the sample into deciles and then interact the size, book–to–market, and β variable, respectively, with the election months. The following regression specification describes our test:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} Char_{it} + \beta_4 Char_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ , \tag{11}$$

where $Char_{it} \in \{1, 2, \ldots, 10\}$ describes the decile that a firm belongs in terms of size, book–to–market, or β. More specifically, $Size = 1$ refers to the smallest and $Size = 10$ the largest firms in our sample. Similarly for book–to–market and β. The coefficient of the interaction term, β_3, measures the differential effect of the size, book–to–market, or β of a firm on market quality before and after elections. Tables 8, 9, and 10 show the results.

Figure 4 shows the results graphically for the monthly turnover and Roll's impact (the zeros do not have statistical significance) across firms of different size. The pattern that emerges is that larger firms prior to the elections experience an increase in trading volume whereas after the elections, and in particular during December, a steep decrease. The opposite applies for smaller firms. That is the average effect is driven by the smaller firms.

Figure 5 shows the results graphically for the monthly turnover and Roll's impact (the zeros, again, do not have statistical significance and the Roll's impact estimate must be interpreted with caution since the standard errors are significant only on the 10% level) across firms of different book–to–market ratio. The pattern that emerges is similar to that of size. Firms with higher book–to–market ratios experience more pronounced market quality effects, as compared to firms with low book–to–market ratios.

Figure 6 shows the respective above results for market the β on turnover and Roll's impact. Again, zeros do not have statistical significance and the Roll's impact estimate must be interpreted with caution since the standard errors are significant only on the 10% level. Firms with low β experience the greater changes in turnover and liquidity before the elections and have slower recovery afterwards, as compared to firms with high market *beta*.

Within our hypotheses, we expect the effects on market quality of more "speculative" and harder–to–value stocks to be more pronounced. Indeed, the results described above reinforce this prior. Stocks with lower size, higher book–to–market ratios, and lower *beta* experience the greatest impact on the quality of price formation. These results are suggestive of the *ambiguity* hypothesis, as the above described stocks are the ones that face the higher uncertainty regarding the quality of information. These characteristics do not necessarily affect the quantity of information thus, implying a rejection of the *information asymmetry* hypothesis.

Similar differences in the cross-section of stocks are also captured in the specification of the trading exchange. That is, NASDAQ includes smaller cap and mostly growth stocks, as compared to NYSE that includes larger and more established firms. This separation additionally reinforces our claim regarding the quantity and quality of information. Table 11 and Figure 7 show the results. The effect on the market quality of the stocks traded on NASDAQ is more pronounced, suggesting again the potential dominance of the *ambiguity* hypothesis.

Next, we test whether firms in more politically sensitive industries are affected more as compared to firm that operate in other industries. Motivated by Hong and Kostovetsky (2010), we define as politically sensitive industries the following industries: tobacco, alcohol, guns, defense, utilities, and natural resources (mining and forestry). Table **??** shows the SIC codes for the industries and the Fama–French 48 industry code. To examine the effects of the politically sensitive industries on market quality, we define an indicator variable PSI that is 1 if a stock belongs to a politically sensitive industry and 0 otherwise. Below is the regression specification.

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^{-} + \beta_2 M_t^{+} + \beta_3 M_t^{+/-} PSI_{it} + \beta_4 PSI_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \tag{12}$$

The coefficient of the interaction term, β_3, measures the differential effect of the industry of a firm on market quality before and after elections. Table 13 and Figure 8 show the results.

It is very interesting to note that the politically sensitive industries experience a lower decline in trading volume prior to the elections and continue to have a very sharp decline in December. The same pattern emerges regarding liquidity.

7 Conclusion

Our empirical analysis shows that political uncertainty has a significant impact on financial market quality. In the months leading up to presidential elections, market quality deteriorates; we find that trading volume (measured by log turnover) decreases during the 5 months prior to the elections and increases in the 3 months following the elections. The fraction of zero returns and Roll's impact increase during the period preceding the elections and decrease modestly long after the elections are over.

Such results can be explained by the increased ambiguity regarding information quality in the months preceding the elections (*ambiguity* hypothesis). Under the *ambiguity* hypothesis, we expect the ambiguity of the quality of information available to investors to increase with higher political uncertainty. The increased ambiguity, as shown in Ozsoylev and Werner (2011), decreases expected trading volume and increases liquidity risk (defined as the probability of illiquidity). After the elections, once political uncertainty is resolved, the ambiguity decreases leading to higher trading volume and liquidity. Ambiguity hypothesis is reinforced by our cross-sectional results. Stocks with lower size, higher book–to–market ratios, lower β, and the ones traded on NASDAQ (i.e., more speculative and harder–to–evaluate stocks) suffer more prior to the elections and experience a slower recovery afterwards.

We additionally provide evidence in favor of the *ambiguity* hypothesis by directly testing and rejecting the alternative hypotheses; *information asymmetry* and *disagreement*. We do not directly test the *ambiguity* hypothesis as the current stage of the empirical and theoretical literature does not provide good and widely accepted proxies for ambiguity. A future avenue for our research however, is to identify and test proxies for ambiguity.

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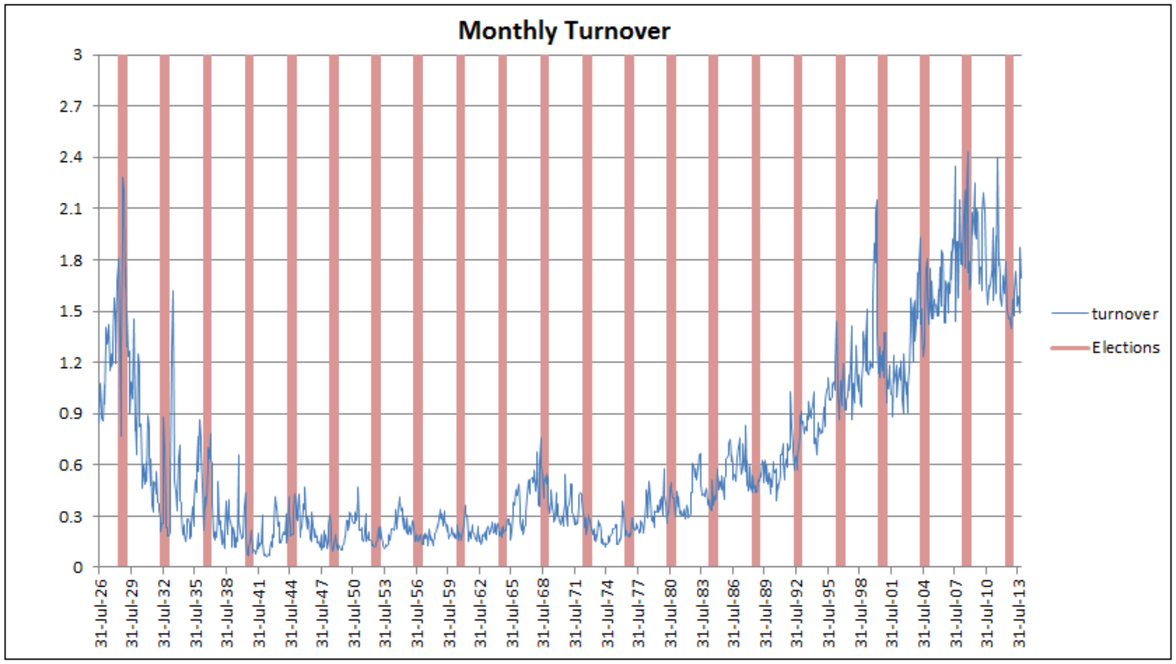
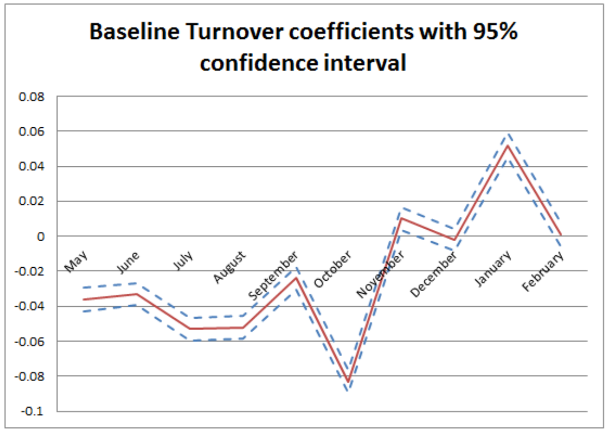
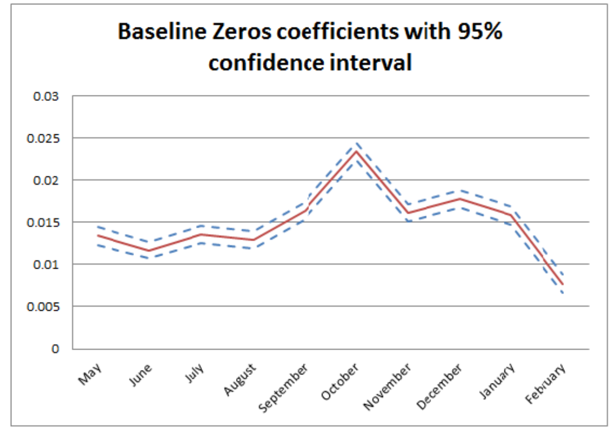


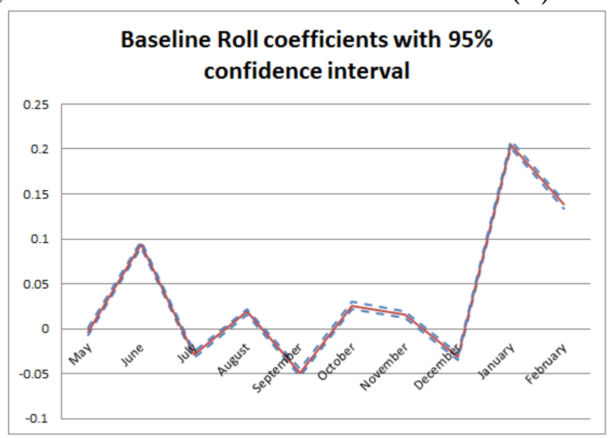
Figure 1: Monthly Market Turnover from 1926 to 2012 defined as $\tau_t = \frac{TotalVol_t}{Shares_t}$. Shaded areas represent 6 months preceding and 5 months following the U.S. presidential elections. The turnover exhibits a strong time trend with a steep increase after the mid-90's. To account for the time trend we use time trend dummy and avoid using any de-trending techniques, as the benefit of imposing no statistical structure outweighs the cost of analyzing raw turnover. We do also, account for the non-linearity of the turnover trend.



(a) Monthly Turnover



(b) Monthly Zeros

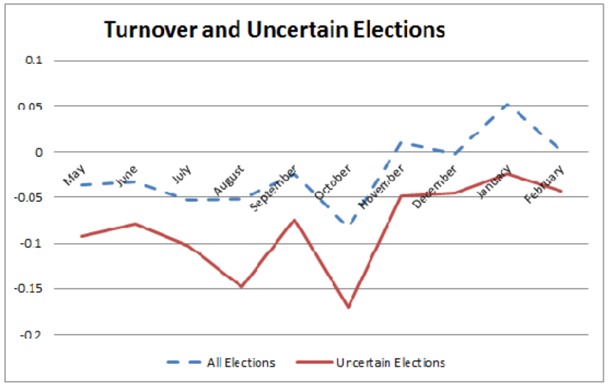


(c) Monthly Roll

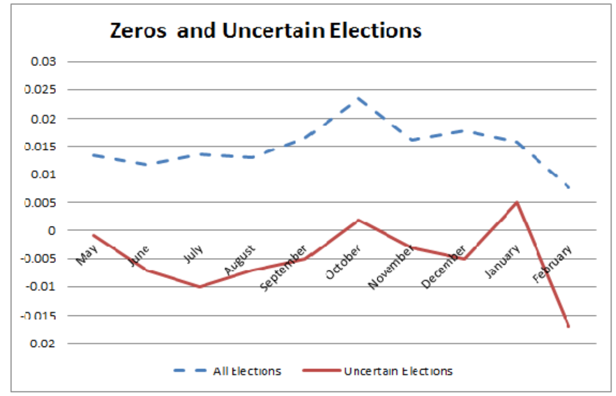
Figure 2: Monthly Change in Market Quality in the months preceding and following the presidential elections.The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

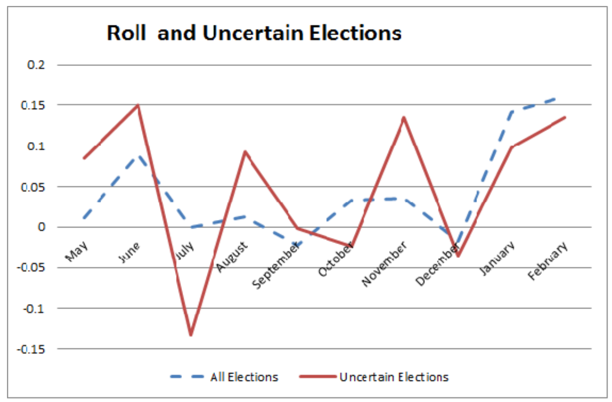
where M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, D_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at the firm level). Shaded area represents 95% confidence intervals.



(a) Monthly Turnover



(b) Monthly Zeros

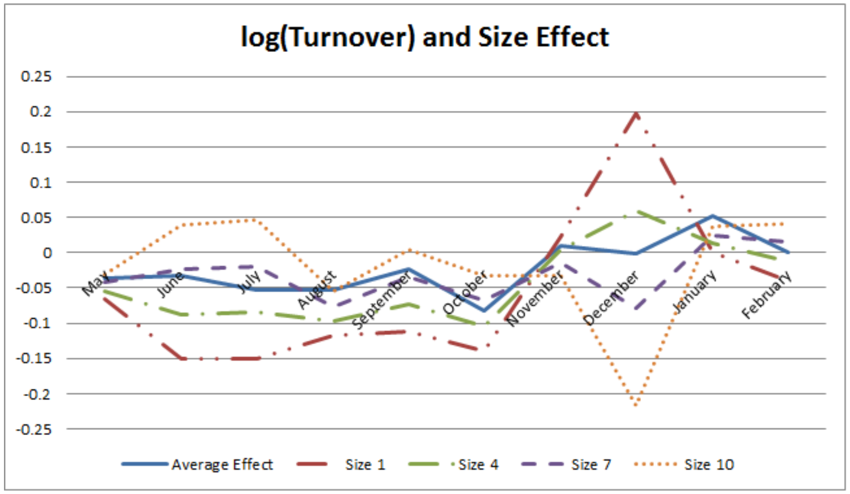


(c) Monthly Roll

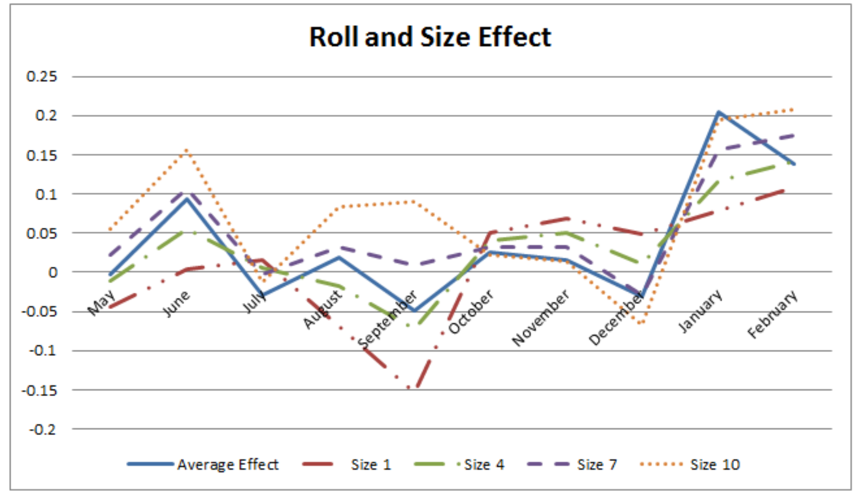
Figure 3: Monthly Change in Market Quality in the months preceding and following the uncertain and non-uncertain presidential elections. The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 UnEl_t M_t^{+/-} + \gamma D_t + \delta T_t + \theta X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, D_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at the firm level). The blue line displays changes in market quality for all elections (based on estimates from Table 4), and the red line displays changes in market quality for the uncertain elections (based on estimates from Table 5).



(a) Monthly Turnover

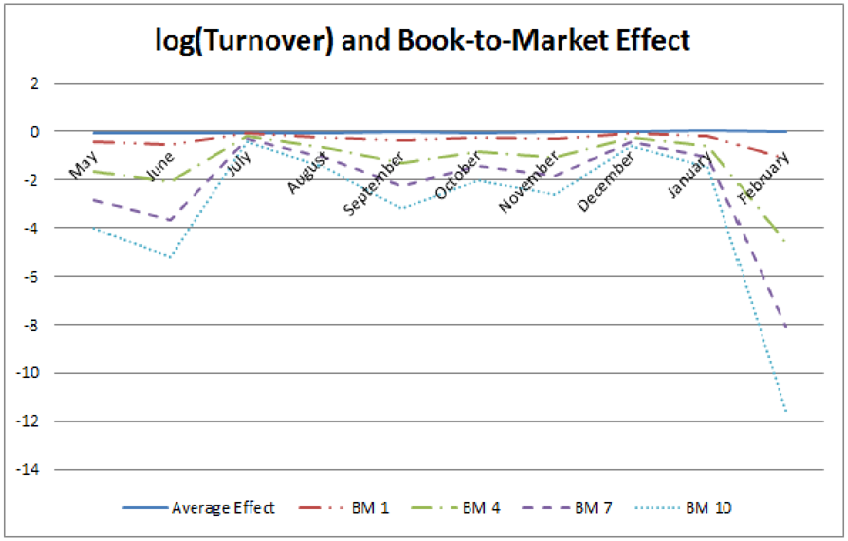


(b) Monthly Roll

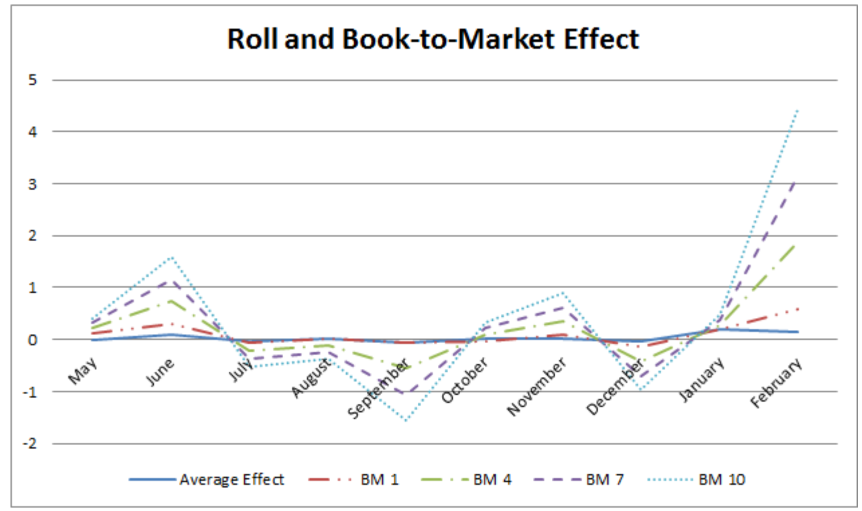
Figure 4: Monthly Change in Turnover and Roll's impact in the months preceding and following the presidential elections, according to size. The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} Size_{it} + \beta_4 Size_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where $Size_{it} \in \{1, 2, \ldots, 10\}$ describes the decile that a firm belongs.



(a) Monthly Turnover

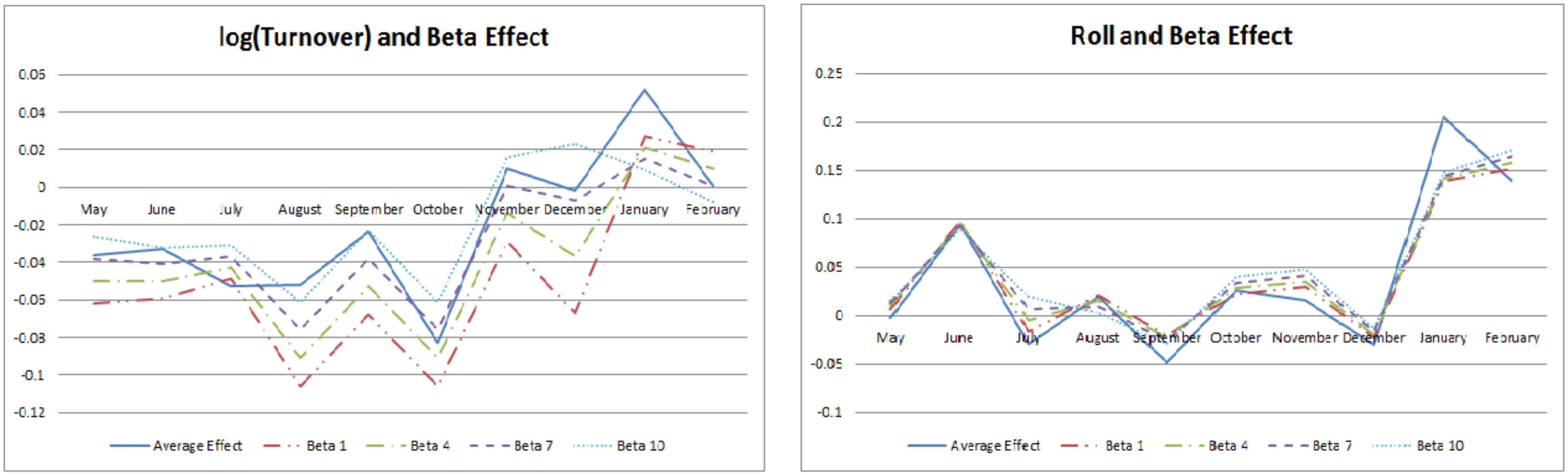


(b) Monthly Roll

Figure 5: Monthly Change in Turnover and Roll's impact in the months preceding and following the presidential elections, according to book–to–market. The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} BM_{it} + \beta_4 BM_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where $BM_{it} \in \{1, 2, \ldots, 10\}$ describes the decile that a firm belongs.



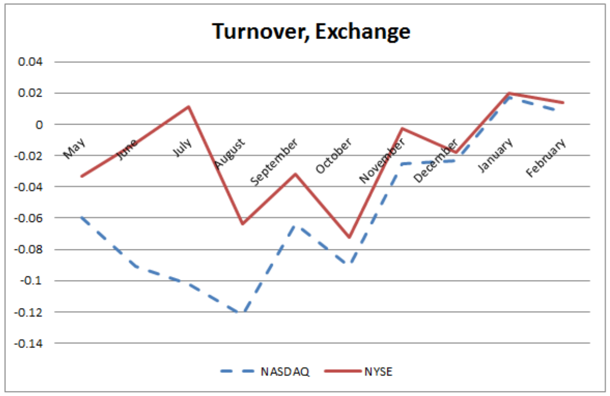
(a) Monthly Turnover

(b) Monthly Roll

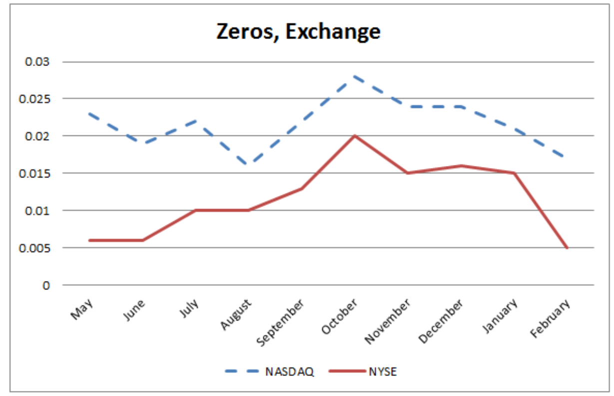
Figure 6: Monthly Change in Turnover and Roll's price impact in the months preceding and following the presidential elections, according to market β. The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} M-\beta_{it} + \beta_4 M-\beta_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

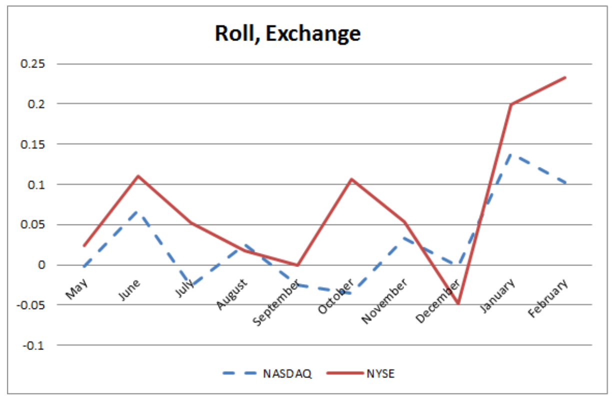
where $M-\beta_{it} \in \{1, 2, \ldots, 10\}$ describes the decile that a firm belongs. The coefficient of the interaction term, β_3, measures the differential effect of the market β of a firm on market quality before and after elections.



(a) Monthly Turnover



(b) Monthly Zeros

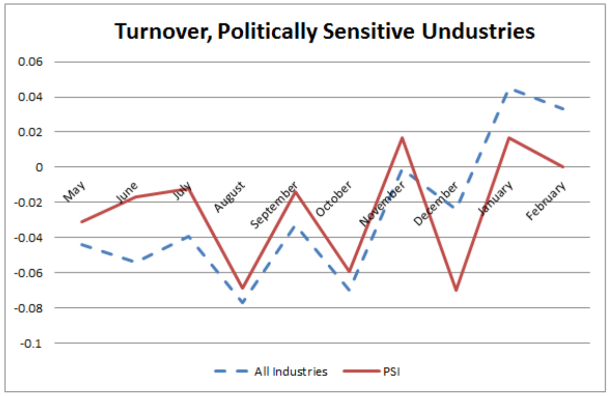


(c) Monthly Roll

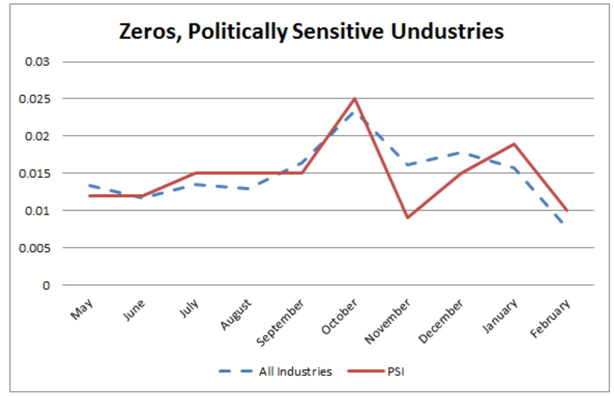
Figure 7: Monthly Change in Market Quality in the months preceding and following the presidential elections, in NASDAQ and NYSE separately. The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

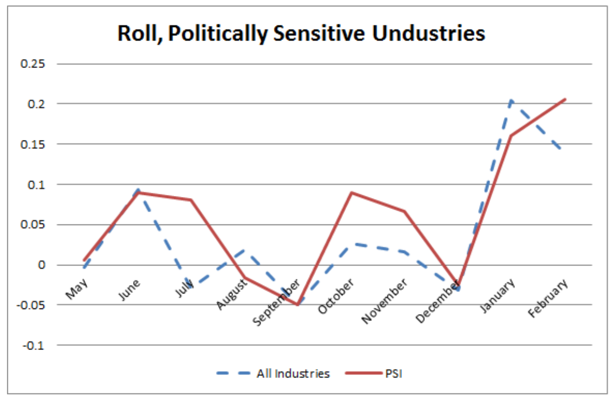
where usual specification applies



(a) Monthly Turnover



(b) Monthly Zeros



(c) Monthly Roll

Figure 8: Monthly Change in Market Quality in the months preceding and following the presidential elections, in Politically Sensitive Industries. The values are coefficients from the baseline regression specification,

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} PSI_{it} + \beta_4 PSI_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where usual specification applies

Table 1: Hypotheses

This Table reports a brief description of the hypotheses and a summary of their main predictions regarding trading volume and liquidity (the fraction of zero returns and Roll's impact) in the months preceding and following the presidential elections. The plus (minus) sign (+) indicates an increase (decrease), the question mark (?) the fact that no predictions have been developed, and the plus-minus sign (+/−) that there are theories that predict both an increase and a decrease in the corresponding variable.

Hypothesis	Description	Trading Volume		Liquidity	
		Before	After	Before	After
Information Asymmetry	Higher political uncertainty increases information asymmetry between informed and uninformed investors.	+/−	+/−	−	+
Ambiguity	Higher political uncertainty increases the ambiguity about the information quality.	−	+	+	−
Disagreement	Higher political uncertainty increases divergence in opinions.	+/−	+/−	+/?	−/?

Table 2: Election Characteristics

This Table reports summary characteristics of U.S. presidential elections since 1927 to 2012. The characteristics we report are the year of elections, whether there was an incumbent President, the incumbent party and the winner party, and the popular vote margin. The highlighted popular vote margins are the top 7 we use in order to define uncertain elections.

Year	Incumbent	Incumbent Party	Winner	Party	Margin
1928		Republican	H. Hoover	Republican	17.41%
1932	H. Hoover	Republican	F. Roosevelt	Democratic	17.76%
1936	F. Roosevelt	Democratic	F. Roosevelt	Democratic	24.26%
1940	F. Roosevelt	Democratic	F. Roosevelt	Democratic	9.96%
1944	F. Roosevelt	Democratic	F. Roosevelt	Democratic	7.50%
1948		Democratic	H. Truman	Democratic	4.48%
1952		Democratic	D. Eisenhower	Republican	10.85%
1956	D. Eisenhower	Republican	D. Eisenhower	Republican	15.40%
1960		Republican	J. Kennedy	Democratic	**0.17%**
1964		Democratic	L. Johnson	Democratic	22.58%
1968		Democratic	R. Nixon	Republican	**0.6%**
1972	R. Nixon	Republican	R. Nixon	Republican	23.16%
1976		Republican	J. Carter	Democratic	**2.7%**
1980	J. Carter	Democratic	R. Reagan	Republican	9.74%
1984	R. Reagan	Republican	R. Reagan	Republican	14.21%
1988		Republican	G.H. Bush	Republican	7.72%
1992	G.H.Bush	Republican	B. Clinton	Democratic	**5.56%**
1996	B. Clinton	Democratic	B. Clinton	Democratic	8.52%
2000		Democratic	G.W. Bush	Republican	**0.51%**
2004	G.W. Bush	Republican	G. W. Bush	Republican	**2.46%**
2008		Republican	B. Obama	Democratic	7.21%
2012	B. Obama	Democratic	B. Obama	Democratic	**3.86%**

Table 3: Trading Volume Summary Statistics

This Table reports summary statistics of monthly percentage return, percentage turnover, and log turnover. The data contain both NYSE and NASDAQ stocks, from 1927 to 2012 (for NASDAQ the data begin in 1973). We include stocks with at least 3 years of consecutive observations. The summary statistics are the mean, standard deviation (SD), skewness, kurtosis and the number of firms traded at each period. The monthly turnover is monthly volume divided by shares outstanding.

Period	Mean	SD	Skewness	Kurtosis	No. of Firms
			Panel A: Monthly Return (%)		
1926-2013	0.008	0.173	5.966	292.4	18180
1927-1947	0.011	0.184	4.083	56.886	1124
1948-1965	0.007	0.086	1.791	22.880	2367
1966-1986	0.014	0.147	2.426	32.400	8752
1987-1996	0.014	0.170	4.563	112.14	10295
1997-2006	0.016	0.202	4.300	81.521	9492
2007-2013	0.006	0.176	3.868	78.410	4964
			Panel B: Monthly Turnover (%)		
1926-2013	0.833	1.957	63.598	15379	18180
1927-1947	0.448	1.480	23.046	1001.4	1124
1948-1965	0.216	0.401	33.94	3539	2367
1966-1986	0.391	0.751	140.4	44819	8752
1987-1996	0.750	1.434	125.2	45230	10295
1997-2006	1.291	2.735	33.75	2688	9492
2007-2013	1.840	2.622	13.18	519.7	4964
			Panel C: Log Monthly Turnover (%)		
1926-2013	-1.065	1.388	-0.261	3.433	18180
1927-1947	-1.881	1.446	-0.652	3.682	1124
1948-1965	-2.081	1.033	-0.130	4.390	2367
1966-1986	-1.503	1.093	-0.313	3.954	8752
1987-1996	-0.997	1.300	-0.613	4.205	10295
1997-2006	-0.475	1.280	-0.449	3.754	9492
2007-2013	-0.048	1.306	-0.795	3.914	4964

Table 4: Baseline Market Quality Regressions

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, D_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at the firm level). X_{it} controls are: NBER recessions, unemployment rate, excess market return, FF 3 factors and momentum. F_t controls are: an indicator for lagged positive returns, log(size) and log(price), volatility of turnover and returns.

	$log(\tau)$	Zeros	Roll	$log(\tau)$	Zeros	Roll
May$^-$	-0.036***	0.010***	0.011***	-0.044***	0.013***	-0.003
	(-9.60)	(17.58)	(5.08)	(-12.31)	(22.63)	(-1.53)
June$^-$	-0.033***	0.011***	0.131***	-0.054***	0.011***	0.094***
	(-9.60)	(20.25)	(79.22)	(-15.77)	(20.98)	(49.32)
July$^-$	-0.053***	0.006***	-0.030***	-0.039***	0.015***	-0.029***
	(-15.42)	(11.89)	(-15.98)	(-11.37)	(26.50)	(-14.89)
Aug$^-$	-0.052***	0.008***	0.029***	-0.077***	0.014***	0.019 ***
	(-15.25)	(14.15)	(18.74)	(-22.46)	(26.70)	(9.91)
Sep$^-$	-0.024***	0.008***	0.057***	-0.033***	0.016***	-0.049***
	(-7.19)	(14.03)	(23.61)	(-9.23)	(29.46)	(-22.24)
Oct$^-$	-0.083***	0.016***	0.046***	-0.070***	0.026***	0.026***
	(-24.88)	(30.26)	(24.76)	(-20.37)	(47.96)	(12.39)
Nov$^+$	0.010**	0.007***	0.002	-0.001	0.020***	0.016***
	(3.02)	(12.59)	(0.68)	(-0.30)	(35.70)	(8.45)
Dec$^+$	-0.002	0.002***	-0.011***	-0.024***	0.019***	-0.031***
	(-0.78)	(4.47)	(-6.90)	(-7.46)	(34.82)	(-16.76)
Jan$^+$	0.052***	0.003***	0.127***	0.045***	0.017***	0.205***
	(14.08)	(4.94)	(67.75)	(11.84)	(29.58)	(81.14)
Feb$^+$	0.001	-0.002***	0.133***	0.033***	0.007***	0.138***
	(0.28)	(-4.15)	(79.15)	(8.65)	(11.09)	(65.43)
Intercept	-2.424***	0.520***	0.205***	-5.426***	0.792***	0.160***
	(-98.80)	(72.01)	(20.58)	(-74.39)	(83.38)	(6.11)
Controls	No	No	No	Yes	Yes	Yes
Obs.	2867696	3,139,809	3,139,809	2,469,068	2,472,048	2,472,048
Adj. R^2	0.110	0.077	0.033	0.256	0.304	0.053
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Turnover and Liquidity - Uncertain Elections

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 UnEl_t M_t^{+/-} + \gamma D_t + \delta T_t + \theta X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, M_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at a firm level). We include the uncertain election indicator, $UnElec_t$.

	$log(\tau)$	Zeros	Roll		$log(\tau)$	Zeros	Roll
May$^-$	-0.008	0.022***	-0.047***	Uncertain May$^-$	-0.085***	-0.023***	0.132***
	(-1.62)	(28.80)	(-16.55)		(-12.35)	(-22.20)	(40.93)
June$^-$	-0.026***	0.026***	0.042***	Uncertain June$^-$	-0.054***	-0.033***	0.108***
	(-5.60)	(34.69)	(18.26)		(-7.79)	(-32.58)	(37.24)
July$^-$	0.003	0.029***	0.106***	Uncertain July$^-$	-0.106***	-0.039***	-0.239***
	(0.59)	(39.62)	(40.39)		(-15.50)	(-37.41)	(-71.96)
Aug$^-$	-0.034***	0.028***	-0.050***	Uncertain Aug$^-$	-0.114***	-0.035***	0.142***
	(-7.66)	(38.33)	(-21.24)		(-16.69)	(-35.21)	(42.56)
Sep$^-$	-0.027***	0.030***	-0.041***	Uncertain Sep$^-$	-0.047***	-0.035***	0.039 ***
	(-5.81)	(40.15)	(-16.94)		(-6.95)	(-34.52)	(12.24)
Oct$^-$	-0.023***	0.036***	0.079***	Uncertain Oct$^-$	-0.147***	-0.034***	-0.102***
	(-5.13)	(49.31)	(26.12)		(-22.32)	(-33.87)	(-29.13)
Nov$^+$	0.020***	0.026***	-0.043***	Uncertain Nov$^+$	-0.068***	-0.029***	0.178***
	(4.69)	(35.67)	(-18.49)		(-10.45)	(-28.54)	(52.69)
Dec$^+$	-0.014***	0.031***	-0.001	Uncertain Dec$^+$	-0.031***	-0.036***	-0.034***
	(-3.38)	(42.02)	(-0.51)		(-4.83)	(-34.93)	(-10.82)
Jan$^+$	0.053***	0.024***	0.176***	Uncertain Jan$^+$	-0.077***	-0.019***	-0.079***
	(11.66)	(32.43)	(60.20)		(-11.79)	(-20.41)	(-23.87)
Feb$^+$	0.046***	0.019***	0.180***	Uncertain Feb$^+$	-0.089***	-0.036***	-0.045***
	(9.86)	(25.55)	(70.02)		(-13.36)	(-35.35)	(-11.70)
Intercept	-5.215***	0.927***	0.194***				
	(-74.69)	(110.25)	(8.68)				
Controls	Yes	Yes	Yes				
Obs.	2,683,743	2,687,061	2.687,061				
Adj. R^2	0.261	0.254	0.039				
Firm FE	Yes	Yes	Yes				
Month Dummies	Yes	Yes	Yes				

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6: Information Asymmetry: Accruals

This Table reports the results of the following regression:

$$\Delta(WC)_{it} = \mu_i + \beta_1 Q^-_{it} + \beta_2 Q^+_{it} + \gamma Q_{it} + \delta X_{it} + \epsilon_{it} \ ,$$

where Q^-_{it} are the quarters preceding and Q^+_{it} are the quarters following the U.S. presidential elections, Q_{it} are quarter dummies, and X_{it} are controls.

	Δ(Working Capital)	Δ(Cash)	Δ(Working Capital)	Δ(Cash)
Quarter 1^-	2.049	4.573	-0.873	-3.234
	(0.82)	(0.56)	(-0.35)	(-0.53)
Quarter 2^-	-14.809 ***	-26.304 **	-11.893 **	-17.566 **
	(-4.47)	(-2.91)	(-3.16)	(-3.28)
Quarter 3^-	2.269	6.265	3.165	0.906
	(0.86)	(0.90)	(1.15)	(0.23)
Quarter 4^-	-1.464	6.200	-2.004	-0.815
	(-0.50)	(0.67)	(-0.70)	(-0.17)
Quarter 1^+	6.748 *	-14.998	7.171	-6.795
	(2.16)	(-1.58)	(1.80)	(-1.50)
Quarter 2^+	-1.625	-10.802 *	-1.186	-4.244
	(-0.54)	(-2.00)	(-0.35)	(-0.93)
Intercept	9.960	25.851 ***	7.153	10.051 *
	(1.85)	(3.62)	(1.02)	(2.01)
Controls	No	No	Yes	Yes
Obs.	347,261	151,115	213,906	83,183
Adj. R^2	0.000	0.000	0.004	0.001
Firm FE & Quarter Dummies	Yes	Yes	Yes	Yes
Cluster s.e. firm	Yes	Yes	Yes	Yes

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 7: Analysts' Forecasts Dispersion and Forecast Error

This Table reports the results of the following regression:

$$Y_{it} = \mu_i + \beta_1 Q_{it}^{-} + \beta_2 Q_{it}^{+} + \gamma Q_{it} + \epsilon_{it} \ ,$$

where Y_{it} is either the dispersion in the analysts' forecasts or the absolute forecast error. Specification similar to Table 6 applies.

	(1) Dispersion	(2) |Forecast Error|
Quarter 1^{-}	0.031	0.659
	(0.29)	(0.25)
Quarter 2^{-}	-1.500	-4.672
	(-0.73)	(-0.98)
Quarter 3^{-}	0.108	-3.715
	(0.46)	(-0.76)
Quarter 4^{-}	-0.780	-21.492
	(-1.54)	(-1.14)
Quarter 1^{+}	-0.305	-1.153
	(-1.59)	(-0.39)
Quarter 2^{+}	-5.938	-7.830
	(-1.01)	(-0.85)
Intercept	5.868	11.017*
	(1.48)	(2.47)
Obs.	260872	321419
Adj. R^2	0.00	-0.00
Firm FE & Quarter Dummies	Yes	Yes

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 8: Turnover and Liquidity: Firm Characteristics - Size

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} Size_{it} + \beta_4 Size_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where $Size_{it} \in \{0, 1, \ldots, 10\}$ describes the decile to which a firm belongs. M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, M_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at a firm level).

	$log(\tau)$	Zeros	Roll		$log(\tau)$	Zeros	Roll
May$^-$	-0.07 ***	0.016 ***	-0.055 ***	Size × May$^-$	0.004 ***	0.000 **	0.011 ***
	(-8.64)	(12.76)	(-12.56)		(3.96)	(-3.03)	(19.35)
June$^-$	-0.171 ***	0.015 ***	-0.013 **	Size × June$^-$	0.021 ***	-0.001 ***	0.017 ***
	(-20.91)	(12.29)	(-3.28)		(19.08)	(-4.00)	(33.01)
July$^-$	-0.173 ***	0.011 ***	0.018 ***	Size × July$^-$	0.022 ***	0.000 **	-0.003 ***
	(-21.09)	(8.51)	(4.29)		(20.35)	(2.87)	(-4.82)
Aug$^-$	-0.125 ***	0.01 ***	-0.086 ***	Size × Aug$^-$	0.007 ***	0.000 *	0.017 ***
	(-15.17)	(8.28)	(-20.97)		(6.54)	(2.37)	(27.35)
Sep$^-$	-0.125 ***	0.011 ***	-0.18 ***	Size × Sep$^-$	0.013 ***	0.001 ***	0.027 ***
	(-15.10)	(8.40)	(-37.96)		(11.96)	(5.60)	(37.58)
Oct$^-$	-0.152 ***	0.019 ***	0.053 ***	Size × Oct$^-$	0.012 ***	0.001 ***	-0.003 ***
	(-18.72)	(14.86)	(13.43)		(11.17)	(4.71)	(-5.54)
Nov$^+$	0.028 ***	0.013 ***	0.074 ***	Size × Nov$^+$	-0.006 ***	0.001 ***	-0.006 ***
	(3.39)	(9.67)	(17.72)		(-5.90)	(3.69)	(-10.65)
Dec$^+$	0.244 ***	0.015 ***	0.062 ***	Size × Dec$^+$	-0.046 ***	0 *	-0.013 ***
	(30.49)	(11.46)	(15.87)		(-42.42)	(2.56)	(-24.12)
Jan$^+$	-0.003	0.007 ***	0.065 ***	Size × Jan$^+$	0.004 ***	0.001 ***	0.013 ***
	(-0.36)	(5.83)	(14.20)		(3.31)	(8.57)	(21.62)
Feb$^+$	-0.048 ***	0.000	0.098 ***	Size × Feb$^+$	0.009 ***	0.001 ***	0.011 ***
	(-5.91)	(0.13)	(23.42)		(8.77)	(7.85)	(18.00)
Intercept	-3.661 ***	0.609 ***	0.133 ***				
	(-37.54)	(65.73)	(4.85)				
Controls	Yes	Yes	Yes				
Obs.	2,683,743	2,687,061	2.687,061				
Adj. R^2	0.280	0.295	0.037				
Firm FE	Yes	Yes	Yes				
Month Dummies	Yes	Yes	Yes				

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9: Turnover and Liquidity: Firm Characteristics - Book to Market

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} BM_{it} + \beta_4 BM_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where $BM_{it} \in \{0, 1, \ldots, 10\}$ describes the book to market decile to which a firm belongs. M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, M_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at a firm level).

	$log(\tau)$	Zeros	Roll		$log(\tau)$	Zeros	Roll
May$^-$	-0.042 ***	0.015 ***	0.092 ***	BM × May$^-$	-0.396 **	-0.004	0.032
	(-7.61)	(19.05)	(24.89)		(-3.14)	(-0.19)	(0.67)
June$^-$	-0.031 ***	0.009 ***	0.170 **	BM × June$^-$	-0.515	0.037	0.141
	(-6.00)	(11.48)	(66.36)		(-1.76)	(1.28)	(1.96)
July$^-$	-0.035 ***	0.016 ***	0.002 ***	BM × July$^-$	-0.039	0.025	-0.052 ***
	(-6.64)	(21.34)	(0.89)		(-0.40)	(1.63)	(-6.36)
Aug$^-$	-0.092 ***	0.012 ***	0.071 ***	BM × Aug$^-$	-0.136 ***	-0.001	-0.045 **
	(-18.27)	(17.58)	(26.65)		(-6.89)	(-0.17)	(-2.59)
Sep$^-$	-0.011 *	0.018 ***	0.110 ***	BM × Sep$^-$	-0.316	0.047* *	-0.167
	(-2.02)	(24.05)	(35.18)		(-0.90)	(2.44)	(-1.27)
Oct$^-$	-0.067 ***	0.029 ***	-0.069 ***	BM × Oct$^-$	-0.192 ***	0.001	0.040
	(-12.00)	(37.54)	(-20.63)		(-3.40)	(0.24)	(1.86)
Nov$^+$	-0.045 ***	0.021 ***	-0.008 **	BM × Nov$^+$	-0.256 *	0.002	0.090
	(-7.09)	(25.47)	(-2.98)		(-2.41)	(0.26)	(1.57)
Dec$^+$	-0.027 ***	0.021 ***	-0.052 ***	BM × Dec$^+$	-0.057	-0.015	-0.092
	(-4.98)	(26.84)	(-19.31)		(-0.40)	(-0.62)	(-1.52)
Jan$^+$	-0.007	0.018 ***	0.157 ***	BM × Jan$^+$	-0.148 *	-0.013 **	0.032
	(-1.22)	(23.77)	(54.07)		(-2.47)	(-3.00)	(1.93)
Feb$^+$	0.007	0.013	0.168 ***	BM × Feb$^+$	-1.159	-0.078	0.426
	(1.23)	(15.56)	(54.62)		(-1.42)	(-1.88)	(1.85)
Intercept	-4.886 ***	0.756 ***	0.982 ***				
	(-40.18)	(50.66)	(24.22)				
Controls	Yes	Yes	Yes				
Obs.	836,057	836,292	836,292				
Adj. R^2	0.319	0.413	0.053				
Firm FE	Yes	Yes	Yes				
Month Dummies Yes	Yes	Yes					

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 10: Turnover and Liquidity: Firm Characteristics - Market Beta

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} Beta_{it} + \beta_4 Beta_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where $Beta_{it} \in \{0, 1, \ldots, 10\}$ describes the market beta decile to which a firm belongs. M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, M_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at a firm level).

	$log(\tau)$	Zeros	Roll		$log(\tau)$	Zeros	Roll
May$^-$	-0.066 ***	0.009* ***	0.006	Beta × May$^-$	0.004 **	0.001 ***	0.001
	(-10.24)	(9.28)	(1.41)		(3.25)	(4.66)	(0.84)
June$^-$	-0.062 ***	0.009 ***	0.099 **	Beta × June$^-$	0.003 *	0.001 ***	-0.001 *
	(-9.77)	(8.72)	(26.34)		(2.16)	(3.46)	(-2.33)
July$^-$	-0.051 ***	0.011 ***	-0.021 ***	Beta × July$^-$	0.002	0.001 **	0.004 ***
	(-7.93)	(10.86)	(-4.81)		(1.38)	(2.96)	(5.15)
Aug$^-$	-0.111 ***	0.012 ***	0.023 ***	Beta × Aug$^-$	0.005 ***	0.000	-0.002 *
	(-17.07)	(12.34)	(5.95)		(4.37)	(0.66)	(-2.53)
Sep$^-$	-0.073 ***	0.016 ***	-0.019 ***	Beta × Sep$^-$	0.005 ***	0.000	-0.001
	(-10.99)	(15.81)	(-4.15)		(4.27)	(0.34)	(-1.33)
Oct$^-$	-0.111 ***	0.023 ***	0.020 ***	Beta × Oct$^-$	0.005 ***	0.000	0.002 ***
	(-17.01)	(23.43)	(4.89)		(4.25)	(0.19)	(3.62)
Nov$^+$	-0.034 ***	0.016 ***	0.027 ***	Beta × Nov$^+$	0.005 ***	0.000	0.002 **
	(-5.32)	(15.90)	(6.54)		(4.25)	(0.54)	(2.62)
Dec$^+$	-0.077 ***	0.022 ***	-0.024 ***	Beta × Dec$^+$	0.010 ***	-0.001	0.001
	(-12.37)	(21.49)	(-5.87)		(8.80)	(-3.95)	(1.08)
Jan$^+$	0.029 ***	0.016 ***	0.137 ***	Beta × Jan$^+$	-0.002	-0.000	0.001
	(4.66)	(16.90)	(33.22)		(-1.80)	(-0.44)	(1.94)
Feb$^+$	0.022 ***	0.005 ***	0.150 ***	Beta × Feb$^+$	-0.003 **	0.001 ***	0.002 ***
	(3.58)	(4.66)	(38.62)		(-2.69)	(3.70)	(3.33)
Intercept	-4.669*** ***	0.678*** ***	0.180 ***				
	(-66.67)	(80.33)	(7.79)				
Controls	Yes	Yes	Yes				
Obs.	2,627,946	2,630,689	2,630,689				
Adj. R^2	0.277	0.297	0.036				
Firm FE	Yes	Yes	Yes				
Month Dummies	Yes	Yes	Yes				

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 11: Market Quality Regression on NYSE/AMEX and NASDAQ

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where M_t^- are the months preceding and M_t^+ are the months following the U.S. presidential elections, D_t are month dummies, and X_{it} and F_t are additional controls. We include firm fixed effects and clustered standard errors (at a firm level).

	Nasdaq			NYSE		
	$log(\tau)$	Zeros	Roll	$log(\tau)$	Zeros	Roll
May$^-$	-0.060***	0.023***	-0.002	-0.033***	0.006***	0.024***
	(-10.42)	(27.37)	(-0.46)	(-8.14)	(8.23)	(7.58)
Jun$^-$	-0.091***	0.019***	0.068***	-0.012**	0.006***	0.110***
	(-16.80)	(22.67)	(22.52)	(-3.21)	(9.37)	(41.00)
Jul$^-$	-0.102***	0.022***	-0.027***	0.011**	0.010***	0.052***
	(-18.34)	(26.72)	(-10.30)	(2.82)	(13.94)	(14.94)
Aug$^-$	-0.122***	0.016***	0.025***	-0.064***	0.010***	0.017***
	(-22.83)	(20.02)	(9.32)	(-16.56)	(14.98)	(6.68)
Sep$^-$	-0.064***	0.022***	-0.025***	-0.032***	0.013***	-0.001
	(-11.47)	(26.27)	(-7.43)	(-7.85)	(19.59)	(-0.34)
Oct$^-$	-0.091***	0.028***	-0.036***	-0.072***	0.020***	0.107***
	(-16.53)	(35.65)	(-13.20)	(-18.19)	(28.32)	(30.17)
Nov$^-$	-0.025***	0.024***	0.033***	-0.003	0.015***	0.054***
	(-4.57)	(28.63)	(12.91)	(-0.84)	(20.67)	(18.12)
Dec$^+$	-0.023***	0.024***	-0.002	-0.018***	0.016***	-0.048***
	(-4.44)	(28.60)	(-0.82)	(-4.96)	(22.90)	(-19.34)
Jan$^+$	0.017**	0.021***	0.139***	0.020***	0.015***	0.199***
	(2.87)	(24.04)	(38.66)	(4.62)	(20.56)	(72.25)
Feb$^+$	0.008	0.017***	0.103***	0.014**	0.005***	0.233***
	(1.31)	(18.83)	(33.48)	(3.29)	(7.19)	(86.43)
Intercept	-4.817***	1.212***	1.330***	-3.880***	0.574***	-0.027
	(-52.39)	(83.36)	(55.39)	(-35.99)	(69.56)	(-0.74)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Obs	1238596	1241312	1241312	1037975	1038321	1038321
Adj. (R^2)	0.190	0.383	0.031	0.457	0.271	0.075
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Month Dummies	Yes	Yes	Yes	Yes	Yes	Yes

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 12: Politically Sensitive Industries: SIC Codes

This Table reports the politically sensitive industries, their SIC codes and Fama-French 48 Industry codes.

Industry	SIC Codes	Fama-French
Tobacco	2100-2199	5
Guns and Defense	3760-3769	26
	3795	26
	3480-3489	26
Natural Resources	0800-0899	
Mining	1000-1119	
Utilities	4900	31
	4910-4911	31
	4920-4925	31
	4930-4932	31
	4939-4942	31
Alcohol	2080	4
	2082-2085	4

Table 13: Turnover and Liquidity: Firm Characteristics - Industries

This Table reports the results of the following regression:

$$\text{Market Quality}_{it} = \mu_i + \beta_1 M_t^- + \beta_2 M_t^+ + \beta_3 M_t^{+/-} PSI_{it} + \beta_4 PSI_{it} + \gamma D_t + \delta T_t + \theta_1 X_{it} + \theta_2 F_t + \epsilon_{it} \ ,$$

where PSI_{it} is an indicator variable that describes whether a stock belongs to a politically sensitive industry. The remaining specification is as usual.

	$log(\tau)$	Zeros	Roll		$log(\tau)$	Zeros	Roll
May^-	-0.047 ***	0.012 ***	0.012 ***	PSI × May^-	0.016	-0.000	-0.006
	(-13.29)	(22.19)	(5.29)		(1.56)	(-0.23)	(-0.93)
June^-	-0.052 ***	0.011 ***	0.09 ***	PSI × June^-	0.035 **	0.001	-0.001
	(-15.55)	(21.11)	(48.52)		(3.17)	(0.67)	(-0.16)
July^-	-0.045 ***	0.013 ***	-0.004 *	PSI × July^-	0.033 **	0.002	0.085 ***
	(-13.34)	(24.07)	(-2.14)		(2.80)	(1.15)	(10.56)
Aug^-	-0.086 ***	0.012 ***	0.015 ***	PSI × Aug^-	0.017	0.003	-0.031 ***
	(-25.69)	(24.00)	(8.39)		(1.61)	(1.62)	(-4.62)
Sep^-	-0.049 ***	0.016 ***	-0.022 ***	PSI × Sep^-	0.035 **	-0.001	-0.028 ***
	(-14.06)	(29.28)	(-9.82)		(3.26)	(-0.41)	(-3.70)
Oct^-	-0.088 ***	0.022 ***	0.031 ***	PSI × Oct^-	0.029 **	0.003	0.058 ***
	(-25.91)	(42.46)	(14.01)		(2.65)	(1.46)	(8.71)
Nov^+	-0.009 **	0.015 ***	0.034 ***	PSI × Nov^+	0.026 *	-0.006 ***	0.033 ***
	(-2.72)	(28.34)	(17.96)		(2.48)	(-3.31)	(4.65)
Dec^+	-0.023 ***	0.017 ***	-0.016 ***	PSI × Dec^+	-0.047 ***	-0.002	-0.009
	(-7.37)	(31.21)	(-8.77)		(-4.74)	(-1.24)	(-1.75)
Jan^+	0.018 ***	0.015 ***	0.14 ***	PSI × Jan^+	-0.001	0.004 *	0.02 **
	(4.96)	(26.67)	(61.81)		(-0.05)	(2.31)	(3.14)
Feb^+	0.009 *	0.006 ***	0.158 ***	PSI × Feb^+	-0.009	0.004 *	0.048 ***
	(2.47)	(9.80)	(75.78)		(-0.85)	(2.02)	(7.44)
Intercept	-5.205 ***	0.88 ***	0.079 ***				
	(-74.19)	(100.62)	(3.85)				
Controls	Yes	Yes	Yes				
Obs.	2,683,743	2,687,061	2.687,061				
Adj. R^2	0.280	0.295	0.037				
Firm FE	Yes	Yes	Yes				
Month Dummies	Yes	Yes	Yes				

t statistics in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$