The Role of Political Connections in Mitigating Policy

Uncertainty: Evidence from Firm-Specific Investment

by

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ABSTRACT

In this study, I test whether firms reduce the information asymmetry stemming from the political process by investing in political connections. I expect that connected firms enjoy differential access to relevant political information, and use this information to mitigate the negative consequences of political uncertainty. I investigate this construct in the context of firm-specific investment, where prior literature has documented a negative relation between investment and uncertainty. Specifically, I regress firm investment levels on the interaction of time-varying political uncertainty and the degree of a firm's political connectedness, controlling for determinants of investment, political participation, general macroeconomic conditions, and firm and time-period fixed effects. Consistent with prior work, I first document that firm-specific investment levels are significantly lower during periods of increased uncertainty, defined as the year leading up to a national election. I then assess the extent that political connections offset the negative effect of political uncertainty. Consistent with my hypothesis, I document the mitigating effect of political connections on the negative relation between investment levels and political uncertainty. These findings are robust to controls for alternative explanations related to the pre-electoral manipulation hypothesis and industry-level political participation. These findings are also robust to alternative specifications designed to address the possibility that time-invariant firm characteristics are driving the observed results. I also examine whether investors consider time-varying political uncertainty and the mitigating effect of political connections when capitalizing current earnings news.

I find support that the earnings-response coefficient is lower during periods of increased uncertainty. However, I do not find evidence that investors incorporate the value relevant information in political connections as a mitigating factor.

DEDICATION

I dedicate this dissertation to my husband, Eric, and Children, Joss, Kate, and Bruce,

for their constant support. Disneyland here we come!

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CHAPTER 1

INTRODUCTION

Governments are constantly faced with policy decisions – whether to change policy, and if so, which policies to adopt. The extent to which political influences (such as partisan differences, the demands of competing constituency, and (re)election concerns) alter policy outcomes represents a significant source of uncertainty for firms and market participants (e.g., Hibbs, 1977; Alesina, 1987; 1988; Garfinkel and Glazer, 1994; Pástor and Veronesi, 2012). Consistent with political uncertainty being a significant factor, several studies consider the extent to which investors and financial analysts factor in uncertainty in the prevailing political climate when revising expectations for firms' cash flows (Pástor and Veronesi, 2012; Boutchkova, Doshi, Durney, and Molchanov, 2012; Belo, Gala, and Li, 2012; Brown, Lin, Moore, and Wellman, 2014; Christensen, Mikhail, Walther, and Wellman, 2014; Baloria and Mamo, 2014). More recently, researchers have focused on the implications for firm-level decisions, documenting depressed investment levels during periods of high political uncertainty (Julio and Yook, 2012; Gulen and Ion, 2013). These studies demonstrate the negative impact of uncertainty, but do little to explore strategies that managers can adopt at the micro-level in an effort to reduce uncertainty at the macro-level. This study tests whether politically connected firms reduce the information asymmetry stemming from the political process, mitigating the negative consequences of political uncertainty.

Articles in the business press highlight the growing importance of managing investment risk with "economic challenges" and "ongoing questions about government fiscal direction" creating significant uncertainty for firms (CFO Journal, 2014, March

5). More recently, debates over "lucrative" tax extenders, such as the bonus depreciation deduction, point to uncertainty preventing real decisions such as investment and hiring (CFO Journal, 2014, July 9). Not surprisingly, partisan politics further contribute to uncertainty. In the case of tax extenders, the influences of competing constituency and partisan politics are clear. While Republicans may be willing to consider tax extenders in exchange for repealing an "unpopular tax" put in place under healthcare reform, Democrats may "roll the dice," pushing tax extenders that may benefit domestic firms, while also pushing to eliminate loopholes that largely benefit multinationals (McKinnon, 2014). Republicans and Democrats do have one thing in common – both groups are sensitive to (re)election concerns, and both can agree to postpone a final vote until after election time, further contributing to political uncertainty. Collectively, these anecdotes point to the various factors that compromise policy formation, contributing to uncertainty over firms' investment decisions.

While the legislative process can produce an abundance of information and possible alternatives, increased understanding over the factors that influence individual policymakers (i.e. re-election concerns, demands of constituency, and ideological views) allows connected firms to better assess the likelihood of legislative outcomes. This study examines whether firms that establish political connections via meaningful campaign support enjoy superior access to relevant information (e.g., Austen-Smith,1995; Hojnacki and Kimball, 2001). In turn, these firms should experience less investment-related information risk, offsetting (in part) the effect of policy uncertainty on investment levels.

To test this hypothesis, I regress firm-specific investment levels on the interaction

of time-varying policy uncertainty and the degree of a firm's political connectedness, controlling for determinants of investment, political participation, general macroeconomic conditions, and firm and time-period fixed effects. I consider several measures of time-varying policy uncertainty. Consistent with prior literature, I use the timing of national elections as a proxy for political uncertainty (e.g., Hibbs, 1977; Alesina, 1987, 1988; Garfinkel and Glazer, 1994; Julio and Yook, 2012). In addition, relying on the Economic Policy Uncertainty index constructed by Baker, Bloom, and Davis (2013), I employ two additional measures of policy uncertainty meant to capture general and tax-specific sources of uncertainty. Drawing on theory advanced by Hillman and Hitt (1999), and empirical measures developed by Cooper, Gulen, and Ovtchinnikov (2010), I consider four measures of a firm's political connectedness. These measures capture the dichotomous nature of political connections, the breadth of candidates supported, and relevant candidate attributes (i.e., whether the candidate shares domicile with the firm, and whether the candidate serves on tax-writing committees).

Consistent with my hypothesis, I find a mitigating effect of political connections on the negative relation between investment levels and policy uncertainty. This finding is robust to including previously identified determinants of investment and political participation, controls meant to capture general macroeconomic conditions, as well as firm and time period fixed effects. Among the various proxies for the firm's overall political connectedness that I study, I find the strongest evidence for connections

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¹ See Section 3 for additional detail on the construction of political uncertainty and political connectedness proxies.

established with "home state" candidates, or those candidates that share domicile with the affiliated firm, and connections established with tax-writing members of Congress.

My use of this measure is consistent with a line of research in political science that argues greater differential access will be granted to contributing firms that share a common district with an affiliated candidate (Hojnacki and Kimball, 2001). This is largely driven by the ability of large employers to mobilize their employees, which often represent a substantial constituency for the affiliated candidate. Furthermore, Eggers and Hainmueller (2013) contend that connections with home state candidates result in even less information asymmetry between the firm and the affiliated candidate because of geographic proximity, common policy objectives, and ideological views. Not surprisingly, the evidence in Cooper et al. (2010) suggests that political ties with home stat candidates most strongly capture the value associated with political connections, relative to other measures considered in their study.

While my primary findings are consistent with my hypothesis, I recognize and test two possible alternative explanations. First, the pre-electoral manipulation hypothesis, beginning with Nordhaus (1975) and Hibbs (1977), suggests that connected firms may undergo efforts to artificially improve economic conditions, influencing voter sentiment in an effort to ensure re-election for their affiliated candidates. If connected firms are temporarily inflating investment in the period leading up to an election, I expect to find reversals in the post-election period. Consistent with my primary hypothesis, and inconsistent with the pre-electoral manipulation hypothesis, I do not find any evidence that connected firms reverse investment in the post-election period. Second, another possible concern is that I am not adequately controlling for collective

action. In other words, the moderating effect of firm-specific political connectedness on macro-level policy uncertainty may be a result of collective action at the industry-level. However, my primary findings, although slightly weaker, are robust to including an additional control for industry-level campaign financing in my primary investment regression.

Finally, I perform additional sensitivity designed to address the possibility that time-invariant firm characteristics are driving the observed results. As an alternative to including firm fixed effects in my regression model, I control for time-invariant characteristics by estimating a difference-in-difference design. To do this, I interact my election cycle indicator variable with all time-varying firm and macroeconomic characteristics. I find that political connections continue to mitigate the negative effect of policy uncertainty on investment levels. Taken together, this evidence is consistent with firms obtaining relevant information through their political connections, rather than a time-invariant firm characteristic driving the results.

After addressing alternative explanations for my primary results, I test the valuation implications of policy uncertainty for firm-specific investment. Increased levels of policy uncertainty result in depressed levels of investment that are not fully recovered in the next period (Julio and Yook, 2012). Such a finding implies lower growth in investment through time, lower growth in abnormal earnings, and thus lower earnings persistence (Stigler, 1963; Collins and Kothari, 1989; Fama and French, 2000; Kothari, 2001). It is not clear, ex-ante, when the negative consequences of uncertainty would manifest in future earnings. Thus, I study the impact of increased policy uncertainty on investors' *expectations* of all future periods' earnings. Specifically, I

estimate the market reaction to unexpected earnings, conditional on the level of policy uncertainty. Lower persistence in the time-series property of earnings implies lower earnings response coefficients (Kormendi and Lipe, 1987; Easton and Zmijewski, 1989). Thus, I expect that investors will discount unexpected earnings during periods of increased uncertainty. Consistent with this expectation, I document that the earnings-response coefficient (ERC) is lower during periods of increased uncertainty.

I then test whether investors understand the potential value of political connections. I do not find any consistent evidence that the reduction in ERCs during periods of increased uncertainty varies with the political connectedness of the firm.

Investors' inability to recognize the value of connections is consistent with the findings of Cooper et al. (2010) who document future abnormal returns stemming from the firm's overall political relationships. The implication of their study is that investors do not immediately impound the information in political connections for firm value.

I contribute to the literature on the real effects of policy uncertainty by documenting an important strategy that managers can rely on in order to mitigate investment-related information risk, investing in political relationships. I also contribute to the literature on the outcomes of political connections. The extant literature argues that political connections can be important for firm value (Cooper et al., 2010; Faccio, 2006; Faccio, Masulis, and McConnell, 2006; Mian, Sufi, and Trebbi, 2010; Ovtchinnikov and Pantaleoni, 2012; Chaney, Faccio, and Parsley, 2011). More recently, researchers are starting to explore the mechanisms underlying value creation, documenting, for example, the tax benefits that arise from investments in relationships with candidates over time (Brown, Drake, and Wellman, 2014; Kim and Zhang, 2014).

Collectively, these studies establish a link between political participation and firm value, emphasizing the ability of connected firms to influence legislative outcomes. In contrast, I investigate the role of *information* in the political marketplace.² The findings of my study support theories from the literature on corporate political activity that managers can develop strategies that not only garner favorable legislative outcomes, but also directly impact internal decision making by gaining access to relevant information (Hillman and Hitt, 1999).

This paper proceeds as follows. In Section 2, I develop my hypothesis. In Section 3, I discuss the empirical measures for my two key constructs, time-varying policy uncertainty, and a firm's political connectedness. Section 4 presents evidence on the mitigating effect of investments in differential access to policy news on investment-related policy risk, and to what extent investors value these investments. Section 5 reports additional analysis. Section 6 concludes.

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² Legal scholars define political information as material, non-public information, acquired by policymakers throughout the course of their professional activities. Currently policymakers, protected under "legislative conduct," are permitted to disclose this information to their constituents in an effort to form more optimal policy decisions (Kim 2012).

CHAPTER 2

HYPOTHESIS DEVELOPMENT

In this section I develop my hypothesis that superior access to political information mitigates the negative effect of political uncertainty on investment levels. I argue that differential access to legislators, and thus access to relevant information about which policies will be adopted and their potential impact, should reduce investment-related information risk from the firm's perspective. Consequently, politically connected firms should not experience the same level of uncertainty surrounding pending or prospective legislation and/or regulation.

Governments have the potential to influence the various parameters that affect investment. Ambiguity over which policies will be adopted leads to a significant source of uncertainty from the firm's perspective (Julio and Yook, 2012). For example, governments frequently modify tax laws with the intent of stimulating the level of investment (Hall and Jorgenson, 1967). Furthermore, government influence may potentially affect the cost structure of firms through federal contracts, entry and exit barriers, antitrust legislation, and through various types of regulation pertaining to employment and healthcare (Hillman and Hitt, 1999; Boutchkova et al., 2012). Each of these potential levers makes investment in any given period more or less costly.

Uncertainties over which policies will eventually be adopted arise because of various factors that comprise each individual policymaker's objective function (Pástor and Veronesi, 2012). For example, considering the preferences of individual policymakers would suggest that partisan politics over various economic variables such as inflation, labor, taxes, and government spending may introduce additional uncertainty

over policy outcomes (Alesina, 1987, 1988). Furthermore, in a competitive marketplace, policymakers likely face conflicting pressures from various constituencies (Keim, 2001). To the extent there is heterogeneity in the preferences of the various constituencies within and across party lines, and thus heterogeneity in the menu of policy choices, the sensitivity of the policymaker's preferences to these (competing) demands introduces uncertainty into the political process (Hibbs, 1977; Alesina, 1987, 1988).

Given the potential influence of the political process on various investment parameters, and the uncertainty surrounding potential changes to policy, it is important to understand how managers respond to this source of uncertainty when making their investment decisions. A separate stream of research in economics and finance investigates investment under uncertainty, and in particular the option value associated with avoiding irreversible decisions (Bernanke, 1983; McDonald and Siegel, 1986). In theory, when individual projects are irreversible, firms will trade off returns from early commitment to investment against the benefits of increased information gained by waiting to invest. The option value associated with irreversible decisions is further highlighted by McDonald and Siegel (1986), who demonstrate that relatively moderate amounts of uncertainty can require a significantly higher rate of return on a given investment. Related to political uncertainty specifically, Rodrik (1991) shows that uncertainty with respect to the duration of reform can impose a hefty tax on investment. Interestingly, the response to uncertainty is more nuanced than simply shifting investments across time (Julio and Yook, 2012). That is, the option to postpone

investment in the current period does not guarantee that the same investment opportunity will be available in the next period (Bernanke, 1983).

The theoretical link between uncertainty and investment is driven by what Bernanke (1983) terms the "bad news" principle. Specifically, if the resulting policy potentially represents a bad outcome from the firm's perspective, the option value of waiting to invest increases and the firm will rationally postpone (forgo) investment until uncertainty is resolved. Consequently, the "bad news" principle suggests that an increase in political uncertainty causes reductions in current investment only if there is some probability of a bad outcome with respect to macroeconomic, taxation, or monetary policies, or with respect to the regulatory environment in general.

Relying on these theoretical predictions, recent empirical studies in economics and finance highlight the sensitivity of investment levels to uncertainty about future macroeconomic growth, monetary policy, and government regulation. At the firm-level, Julio and Yook (2012) demonstrate that in the face of uncertainty, firms will exercise caution and delay investing decisions. Specifically, the authors document that a temporary increase in political uncertainty around national elections is negatively associated with firm-specific investment levels. An important implication of their study is that political uncertainty alters the way in which managers pursue investment opportunities. Other studies document investment decisions are less sensitive to changes in stock price during election years, and that the impact of political uncertainty on investment depends on the difficulties surrounding the legislative process (Hassett and Metcalf, 1999). Taken together, these studies suggest that the political process represents a significant source of uncertainty from the firm's perspective, influencing

the various decisions that managers face (Hillman, Keim, and Schuler, 2004). These findings also suggest that managers have an incentive to reduce political uncertainty as it pertains to firm-level investment decisions.

To the extent firms are able to actively communicate with policymakers at various points of any given debate, managers have the opportunity to reduce uncertainty associated with pending or prospective legislation (Hillman and Hitt, 1999). I argue that there is less information asymmetry between policymakers and politically connected firms, allowing connected firms to better assess the likelihood of changes in prospective legislation and regulation. The policy arena is a competitive market place where both time and information are valuable (Keim, 2001; Austen-Smith, 1995). As a permitted part of the legislative process, firms have an opportunity to educate policymakers on the (potential) impact of (proposed) legislation (Hillman and Hitt, 1999). Through open communication, policymakers and their constituents exchange information on pending or prospective legislation leading to a reduction in information asymmetry for participating firms (Kim, 2013). However, it is unlikely that all firms will have an equal opportunity for communication, and differential "access" is granted to firms who establish political connections through meaningful campaign support over time (Hojnacki and Kimball, 2001; Austen-Smith, 1995; Humphries, 1991).³⁴

³ Economists have also studied the real effects of policy uncertainty at the aggregate level. For example, Baker et al. (2012) examine the association between policy uncertainty and various macroeconomic variables. For this analysis, the authors develop a novel measure of economic policy uncertainty (EPU) by combining the frequency of newspaper references to economic policy uncertainty, the number of federal tax code provisions set to expire, and the extent of forecaster disagreement (i.e., dispersion) over future inflation and government purchases. They document that the EPU index foreshadows declines in aggregate investment, hiring, and consumption.

⁴ I adopt the definition of "access" relied upon by several studies in the political science literature. These studies emphasize that money buys access, direct contact with a member of Congress or members of his or her staff (Hojnacki and Kimball, 2001), ultimately securing a legislator's attention (Austen-Smith 1995).

Campaign support not only increases the ability of firms to interact with legislators (i.e., provides access), but ultimately influences the quality of communication. For instance, connected firms enjoy "face time" with the legislator, rather than a member of their staff (Hojnacki and Kimball, 2001). Furthermore, contributing firms also have a greater understanding of the individual legislator's policy preferences and to what extent those preferences are (mis)aligned with the constituency that they serve (Austen-Smith, 1995). While the legislative process can produce an abundance of information and possible alternatives, increased understanding over the factors that comprise the policymaker's objective function allows connected firms to assess the likelihood of legislative outcomes with greater precision. Thus, contributing firms not only enjoy differential access to policy news, but also gain a better understanding of how policymakers will react to information, further reducing uncertainty from the firm's perspective.

Taken together, these studies suggest that pending or prospective legislation represents a significant source of uncertainty from the firm's perspective. Further, firms have an opportunity to hedge against potential policy shocks by gaining and maintaining access to policymakers via continued investment in campaign support. This support provides access to relevant information over which policies will be adopted and the potential impact of those policies. I argue that differential access to legislators should reduce investment-related information risk from the firm's perspective, and thus mitigate the effect of political uncertainty on investment levels. Based on these arguments, I predict that:

Hypothesis: The negative effect of political uncertainty on investment is mitigated by a firm's superior access to political information via connections to policymakers.

CHAPTER 3

MEASUREMENT OF POLITICAL UNCERTAINTY AND

POLITICAL CONNECTEDNESS

In this section, I outline the measures I use to capture time-varying political uncertainty and the degree of the firm's political connectedness to legislators. I draw from literature in economics and finance that has developed and tested measures for these constructs.

MEASUREMENT OF POLITICAL UNCERTAINTY

I consider several measures of time-varying political uncertainty. First, I investigate the impact of uncertainty arising from the electoral process. Following the approach in Julio and Yook (2012), I construct a dichotomous variable,

POL_UNCERTAINElectoral, set equal to one in the year leading up to a national election, and zero otherwise. Consistent with a rich literature in economics that examines the macroeconomic implications of political business cycles, Julio and Yook (2012) contend that the year leading up to a national election represents a heightened period of political uncertainty. In addition, this proxy offers advantages over alternative measures of time-varying political uncertainty. Investigating the impact of political uncertainty on investment raises concerns of potential endogeneity between uncertainty and economic growth. Specifically, policymakers absent poor macroeconomic conditions are more likely to maintain the status quo (Pástor and Veronesi, 2012). Elections are exogenously determined, recurring events in the U.S., providing a natural experimental framework that helps isolate the impact of political uncertainty from confounding factors.

I employ two additional measures of political uncertainty. The first, *POL UNCERTAIN*^{EPU}, is designed to capture more general sources of time-varying political uncertainty. The second, *POL UNCERTAIN*^{Tax}, emphasizes uncertainty stemming from tax-specific legislation. In constructing these measures, I rely on the Economic Policy Uncertainty (EPU) index developed by Baker et al. (2013). The EPU index is a contextual analysis-based measure built from the frequency of newspaper references to economic policy uncertainty found in over 2,000 local and national U.S. newspapers. 5 Newspaper references are summed and reported on a monthly basis for general and policy-specific indices. To construct my first EPU-based measure, POL_UNCERTAIN^{EPU}, I begin by averaging the index over each quarter. I then take the change in the average value of the index relative to the prior quarter. Specifically, POL_UNCERTAIN^{EPU} is the average value of the EPU Index from the beginning of quarter t to the end of quarter t, less the average value of the EPU Index from the beginning of quarter t-1 to the end of quarter t-1. My measure of the tax-specific component of the EPU index, POL_UNCERTAIN^{Tax}, is constructed in a similar fashion, but includes only those articles that specifically reference tax policy uncertainty, where tax-specific articles are separately summed and reported by Baker et al. (2013). I expect that changes in the level of uncertainty provide a powerful setting in which to observe changes in managerial behavior. Although the EPU index is subject to many of the design criticisms that the election indicator variable escapes, the EPU-based measures

correspondence in both cases.

⁵ The authors validate the EPU index along several dimensions, including a human audit of newspaper articles flagged by the automated contextual analysis program. Furthermore, the authors compare the EPU index against the frequency of the word "uncertainty" contained in the Federal Open Market Committee (FOMC) Beige Book, and large stock-market jumps surrounding policy news, finding a good

allow me to study more general sources of political uncertainty as captured by the composite index, and tax-specific uncertainty as captured by the tax-specific index.

Figure 1 plots the EPU Index and TPU Index over my sample period. The TPU Index spikes around the Jobs and Growth Tax Relief Reconciliation Act of 2003. An important component of this act was intended to spur investment. For example, the JGTRRA increased both the percentage rate at which items can be depreciated and the amount a taxpayer may choose to expense under Section 179 of the Internal Revenue Code, allowing them to deduct the full cost of the item from their income without having to depreciate the amount. There are also notable spikes later in the sample period when extensions of this act were considered, and eventually signed into law.

MEASUREMENT OF A FIRM'S POLITICAL CONNECTEDNESS

I measure a firm's political connectedness based on the approach in Cooper et al. (2010). The authors contend that the dollar amount contributed and disclosed to the Federal Elections Committee (FEC) likely represents only a small fraction of total campaign support. Recognizing that many forms of political connections are unobservable (e.g., fundraising and electioneering campaigns), the authors construct several proxies for a firm's overall political connectedness focusing instead on the number of candidates supported, and various candidate attributes (e.g., states represented, committee assignments, seniority, etc.). The authors argue that the number of candidates supported, and the attributes of these candidates, better capture the underlying nature of the firm's overall political connectedness. Furthermore, to the

extent observable activity is correlated with unobservable activity, these measures should serve as reasonable proxies for political connections.

I consider four measures of a firm's political connectedness. The first, CONNECTED^{Candidate}, is the number of candidates supported by the firm over a six-year window. Specifically, following Cooper et al. (2010), it is defined as:

$$CONNECTED_{it}^{Candidate} = Ln(1 + \sum_{p=1}^{J} Cand_{pt,t-5})$$
 (1a)

where $Cand_{pt,t-5}$ is an indicator variable equal to one if the firm has contributed money to candidate p over the years t-5 to t.

The second measure is a dichotomous version of *CONNECTED*^{Candidate}. Specifically, *CONNECTED*^{Indicator} is an indicator variable that equals 1 if the firm has any political connections as defined by *CONNECTED*^{Candidate}, 0 otherwise. This dichotomous variable, while simple, does not consider the magnitude, or the specific attributes of affiliated candidates, but is useful for economic interpretation of my empirical results.

My final two measures are modifications of *CONNECTED* Candidate, taking into account relevant candidate attributes. The first, *CONNECTED* Home State, captures the degree to which there is overlap in the legislator's home district and the firm's headquarters. Specifically, *CONNECTED* Home State counts the number of candidates supported by a firm if the candidate holds office in the same state in which the firm is headquartered. *CONNECTED* Home State is defined as follows:

$$CONNECTED_{it}^{HomeState} = Ln(1 + \sum_{p=1}^{J} HomeCandidate_{pt,t-5})$$
 (1b)

where $HomeCandidate_{pt,t-5}$ is an indicator variable equal to one if candidate j is running for office from the state in which firm i is headquartered and zero otherwise. My use of

this measure is consistent with a line of research in political science that argues greater differential access will be granted to contributing firms that share a common district with an affiliated candidate (Hojnacki and Kimball, 2001). This is largely driven by the ability of large employers to mobilize their employees, which often represent a substantial constituency for the affiliated candidate. Furthermore, Eggers and Hainmueller (2013) contend that connections with home state candidates result in even less information asymmetry between the firm and the affiliated candidate because of geographic proximity, common policy objectives, and ideological views. Not surprisingly, the evidence in Cooper et al. (2010) suggests that *CONNECTED*^{HomeState} more strongly captures the value associated with political connections, relative to other measures considered by the authors.

My final measure, *CONNECTED*^{Tax}, captures investments in political connections to tax-writing members of Congress. Consistent with Brown, Drake, and Wellman (2014), I modify *CONNECTED*^{Candidate} to consider only members of the Senate Finance committee and House Ways and Means committee. Specifically, *CONNECTED*^{Tax} is defined as follows:

$$CONNECTED_{it}^{Tax} = Ln(1 + \sum_{p=1}^{J} TaxCandidate_{pt,t-5})$$
 (1c)

where $TaxCandidate_{pt,t-5}$ is an indicator variable equal to one if candidate j is a member of the Senate Finance, or House Ways and Means committee. Brown et al. (2014) document the performance outcomes of gaining and maintaining relationships with tax-writing members of Congress in the form of lower and more consistent effective tax rates through time. The authors also document the complementary nature of connections to tax candidates and tax-specific lobbying efforts, but do not directly test the potential

benefits of having differential access to political *information* on managerial decisions. Given the increase in uncertainty surrounding various tax incentives linked to investment, this measure likely captures access to an important source of political information about pending or prospective tax legislation. Following Cooper et al. (2010), I construct all measures of political connectedness using Federal Elections Committee's (FEC) database of political contributions made by firm-sponsored Political Action Committees (PACs).⁶

⁶ Political contributions are tracked by the FEC, as required by the Federal Election Campaign Act, and any contribution of \$200 or above is publicly available on the FEC website starting with the 1979-1980 election cycle (http://www.fec.gov). I obtain firm headquarters data from Compustat. 19

CHAPTER 4

RESEARCH DESIGN AND DISCUSSION OF RESULTS

DATA SOURCES AND SAMPLE SELECTION

This section describes the construction of the sample used to test my hypothesis. My sample comprises the intersection of historical accounting information obtained from Compustat, daily stock return data obtained from CRSP, analyst forecast data obtained from I/B/E/S, macroeconomic data from the U.S. Bureau of Economic Analysis (BEA), and political contributions data obtained from the FEC website. After merging Compustat, CRSP, IBES, and BEA, and conditioning on the data required for my analysis, the sample consists of 104,220 firm-quarter observations, with 5,289 unique firms. The result of my sample selection procedure is summarized in Table 1, Panel A.

I then combine this dataset with a comprehensive dataset of political contributions. I obtain PAC data from the FEC detailed committee and candidate summary contribution files. Linking data on firm-sponsored PACs to financial data from Compustat requires matching multiple records, sometimes manually, by company name. I rely on the link table constructed by Christensen, Dhaliwal, Boivie, and Graffin (2014) for the period January 1, 1991 – December 31, 2011, which allows me to merge FEC data to the dataset containing firm-quarter observations. After merging with the FEC data, the final dataset consists of 1,673 politically active firms, with a total 847,896 of transactions (i.e. individual hard money political contributions). These contributions are made through firm-sponsored PACs to politicians running for President, the Senate, and the House of Representatives. From this file, I observe the date and the amount of each

contribution, the identity of the receiving candidate, and the home state/district of the candidate. In addition, I obtain data on Congressional committee assignments from the House and Senate websites, and identify all candidates serving on either the House Ways and Means Committee or Senate Finance Committee during my sample period and merge these data with the contribution detail file.

THE EFFECT OF POLITICAL UNCERTAINTY ON INVESTMENT

Consistent with Julio and Yook (2012), I model investment as a function of opportunity and available resources. Specifically, I replicate the findings of Julio and Yook (2012) for my sample period and firms by estimating the following OLS regression:

 $I_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 Q_{t-1} + \beta_3 CF_{it} + \beta_4 \Delta GDP_{t-1} + \gamma_t + \varepsilon_{it}$ (2a) where *i* indexes firms, and *t* indexes quarters. The dependent variable, investment (*I*), is defined as capital expenditures for quarter *t*, scaled by beginning-of-quarter book value of total assets. I employ a measure of Tobin's Q as my proxy for investment opportunities. Specifically, *Q* is the ratio of the market value of assets to the book value of assets at the beginning of each quarter *t-1*. Cash flow, *CF*, is defined as operating income before depreciation, minus interest expense, minus taxes, minus dividends, scaled by beginning of year total assets (Titman, Wei, and Xie, 2004). Finally, to capture the effects of general macroeconomic conditions on firm investment, I include the quarterly change in GDP, ΔGDP , measured as the percentage change in real GDP in the quarter prior to the investment decision. Firm, quarter, and year fixed effects are also included in the specification. Standard errors are clustered by firm and year throughout

the paper (Petersen, 2009). Consistent with Julio and Yook (2012), all continuous variables are winsorized at the 1st and 99th percentiles throughout the analysis.

To the extent that macroeconomic conditions are correlated with the current political climate and a firm's investment decisions, failure to adequately control for general macroeconomic conditions may confound my results. Following a line of research in economics (e.g., Drazen, 2001), I argue that prevailing macroeconomic conditions and the current political climate are distinct constructs but acknowledge that these constructs are likely correlated. Specifically, policymakers are motivated by economic (e.g., maximizing general welfare) and non-economic (e.g., (re)election efforts, partisan preferences, and the demands of competing constituents) objectives. The latter, which cannot be perfectly inferred by investors, is primarily what gives rise to uncertainty over policy changes.

To address this concern, I include additional macroeconomic indicators in my multivariate analysis. Standard investment models imply that the decision to invest is made on the basis of the present value of expected cash flows stemming from the potential investment. Thus, the decision to invest is a function of projected cash flows and the discount rate. Prior literature has explored sources of time-series variation in the discount rate, including the term premium, default premium, and the risk-free rate of interest (Fama and French, 1989; Collins and Kothari, 1989). Since my hypothesis predicts that investment decisions are sensitive to the level of time-varying political uncertainty, I further isolate the effect of political uncertainty by controlling for previously documented components of the discount rate just described. Specifically, I augment the model in Julio and Yook (2012) to include proxies for the term spread,

TERM, and the default spread, *DEF*, and the risk-free rate, *TBILL*. Including these controls yields the following OLS regression:

$$I_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_4 Q_{t-1} + \beta_5 CF_{it} + \beta_6 \Delta GDP_{t-1} + \beta_7 \Delta DEF_{t-1}$$
$$+ \beta_8 \Delta TERM_{t-1} + \beta_9 \Delta TBILL_{t-1} + \gamma_t + \varepsilon_{it}$$
(2b)

The coefficient on *POL_UNCERTAIN*, β_1 , is designed to capture changes in the conditional investment rate in periods of high political uncertainty, controlling for firm investment-opportunities and economic conditions. Consistent with Julio and Yook (2012), I expect a negative association between investment and political uncertainty (i.e., $\beta_I < 0$). Table 2 provides multivariate evidence on the negative effect of political uncertainty on investment. In Panel A, I investigate the effect of electoral uncertainty. In columns (1) – (3) of Panel A, I document evidence consistent with Julio and Yook (2012). Specifically, in column (1), the coefficient on *POL_UNCERTAIN*^{Electoral} is -0.0018 (t = -3.31, two-tailed p < 0.01), which is consistent with lower levels of investment, on average, in the four quarters leading up to an election, relative to all other quarters. In columns (2) and (3) this effect continues to hold after including relevant firm characteristics and macroeconomic controls, where the coefficient on $POL_UNCERTAIN^{Electoral}$ is -0.0017 (t = -3.24, two-tailed p < 0.01) and -0.0017 (t = -3.22, two-tailed p < 0.01), respectively. In column (4), I augment the model relied upon by Julio and Yook (2012) to include additional determinants of time-varying components of the discount rate. I find that the main effect of POL_UNCERTAIN^{Electoral} remains negative and significant (coefficient = -0.017, t = -3.15, two-tailed p < 0.01).

In Panel B of Table 2 I investigate the general and tax-specific EPU index as constructed by Baker et al. (2013). While I document a negative and significant effect

for the tax-specific component of the EPU index (coefficient = -0.0015, t = -2.71, two-tailed p < 0.01), I do not find a significant negative impact on investment levels for $POL_UNCERTAIN^{EPU}$ (coefficient = -0.0006, t = -1.58, two-tailed p = 0.11). Taken together, the evidence in Table 2 is consistent with Julio and Yook (2012), where electoral uncertainty has a negative impact on investment decisions, even after considering additional macroeconomic controls. I also find evidence that tax policy uncertainty influences investment decisions, but do not find statistical significance for the broader measure designed to capture more general sources of uncertainty (i.e., $POL_UNCERTAIN^{EPU}$).

TEST OF HYPOTHESIS: THE MITIGATING EFFECT OF POLITICAL CONNECTIONS

In this section I outline the model used to test my hypothesis and the results of my analysis. I investigate to what extent firms are able to mitigate investment-related information risk introduced through uncertainty over policy outcomes by investing in differential access to policy news. I expect that firms that establish political connections with legislators via meaningful campaign support will enjoy differential access to policy news. Thus, I posit that the difference in investment levels over periods of increased uncertainty will be less negative for connected firms, relative to the difference in investment levels over periods of increasing uncertainty for non-connected firms. To test this hypothesis, I augment the baseline investment model to include measures of access to policymakers (i.e., *CONNECTED*). Specifically, I estimate the following OLS regression:

$$I_{it} = \alpha + \beta_{1}POL_UNCERTAIN_{t} + \beta_{2}CONNECTED_{it}$$

$$+ \beta_{3}(ELECTION\ YEAR\ x\ CONNECTED)_{it} + \beta_{4}Q_{t-1} + \beta_{5}CF_{it} + \beta_{6}\Delta GDP_{t-1}$$

$$+ \beta_{7}\Delta DEF_{t-1} + \beta_{8}\Delta TERM_{t-1} + \beta_{9}\Delta TBILL_{t-1} + \beta_{10}SIZE_{it} + \beta_{11}HERFINDAHL_{it}$$

$$+ \beta_{12}MARKET\ SHARE_{it} + \beta_{12}(MARKET\ SHARE)^{2}_{it}$$

$$+ \beta_{13}N.\ PAC\ ACTIVE_{it} + \gamma_{t} + \varepsilon_{it}$$
(2c)

where i indexes firms, and t indexes quarters. The coefficient on the interaction of $POL_UNCERTAIN$ and CONNECTED, β_3 , is designed to capture the difference in investment rates during periods of increasing uncertainty for politically connected firms, relative to the difference in investment rates during periods of increasing uncertainty for non-connected firms. Consistent with my hypothesis, I expect that connected firms will reduce investment levels to a lesser extent in response to periods of increasing political uncertainty, relative to the reduction in investment in response to period of increasing uncertainty for non-connected firms (i.e., $\beta_3 > 0$).

Consistent with Julio and Yook (2012), I model investment as a function of opportunity and available resources. To help rule out the possibility that *CONNECTED* is proxying for unobservable firm characteristics that are also correlated with investment decisions, I include in the regression model additional controls for the determinants of being politically connected. Politically active firms tend to be larger, and have more resources available for investing in the political marketplace (Cooper et al., 2010; Hillman et al., 2004). Thus, in addition to including a measure of cash flow to proxy for firm resources, I include additional proxies for firm size and market share, *SIZE* and *MARKET SHARE*, respectively. Furthermore, firms may have an incentive to

⁷ See Appendix A for detailed variable definitions.

participate in the political process in order to compete against firms within and across industries for political favors, and/or collude with industry peers toward collective goals (Bombardini and Trebbi, 2012; Hillman and Hitt, 1999). For example, collective action is more likely to occur in concentrated industries, where the benefits of political participation can be shared by many (Lux, Crook, and Woehr, 2011). Consistent with this, I include *HERFINDAHL*, to capture industry concentration. Furthermore, I include the number of firms within the focal firms industry that also invest in campaign financing, *N. PAC ACTIVE*, to capture industry trends in campaign financing activity.

Table 3, Panel A, reports summary statistics for various firm characteristics of politically active and inactive firms. It is clear that politically active firms are significantly larger in terms of SIZE (CONNECTED mean = 8.5679, non-CONNECTED mean = 6.3943, t = 183.29, two-tailed p < 0.01) and MARKET SHARE (CONNECTED mean = 0.0928, non-CONNECTED mean = 0.0231, t = 99.87, p < 0.01), and have more available resources in terms of cash flow (CONNECTED mean = 0.0235, non-CONNECTED mean = 0.0148, t = 29.94,two-tailed p < 0.01). While investment as a percentage of assets (i.e., INVESTMENT) is lower for connected firms, relative to non-connected firms (CONNECTED mean = 0.0020, non-CONNECTED mean = 0.0032, t = -4.65,two-tailed p < 0.01), the absolute dollar of investments for politically connected firms is significantly larger. Specifically, the value of investments for politically connected firms, on average, is \$19.03 million, compared to \$4.53 million for non-connected firms (t = -3.73, two-tailed p < 0.01, untabulated). This suggests that the investments made by connected firms represent a significant portion of total investments.

Table 3, Panel B, documents the difference in unconditional investment rates during periods of increasing uncertainty for politically connected firms, relative to the difference in unconditional investment rates during periods of increasing uncertainty for non-connected firms. I find that the difference in investment levels for CONNECTED firms between election quarters and non-election quarters is -0.0008. Likewise, the difference in investment rates for non-CONNECTED firms between election quarters and non-election quarters is -0.0018. The difference-in-difference is 0.001 (t = 2.83, two-tailed p < 0.01). This result provides some initial univariate evidence consistent with my hypothesis. Specifically, the difference in investment rates between election quarters and non-election quarters is less negative for *CONNECTED* firms, relative to the difference in investment levels from election quarters to non-election firms for non-CONNECTED firms.

Table 4 provides multivariate evidence on the mitigating effect of political connections on the negative relation between investment levels and political uncertainty. In Panel A of Table 4, I investigate electoral uncertainty. In column (1), I find evidence consistent with my hypothesis, where the coefficient on the interaction of $POL_UNCERTAIN^{Electoral}$ and $CONNECTED^{Indicator}$ is 0.0009 (t = 2.91, two-tailed p < 0.01). In columns (2) and (3) this effect continues to hold after including relevant firm characteristics and macroeconomic controls, where the coefficient on the interaction of $POL_UNCERTAIN^{Electoral}$ and $CONNECTED^{Indicator}$ is 0.0009 (t = 2.95, two-tailed p < 0.01) and 0.0009 (t = 2.97, two-tailed p < 0.01), respectively.⁸

⁸ As an alternative to including firm fixed effects, I further study changes in CONNECTED through time. To do this, I identify firm-quarter observations where firms initiate (discontinue) political contributions during my sample period, and re-estimate my primary regressions separately for each of these subsamples.

In Panel B of Table 4, I move from the dichotomous variable to measures of the firm's overall political connectedness that consider the breadth of connections, and relevant candidate attributes (Cooper et al., 2010). First, in column (1), I study $CONNECTED^{Candidate}$, which captures the total number of candidates that the firm i is connected to at the end of quarter t. I find that the coefficient on the interaction of POL UNCERTAIN^{Electoral} and CONNECTED^{Candidate} is 0.0001 (t = 1.87, two-tailed p = 0.06). In columns (2) and (3), I factor in the extent of overlap between the legislators home state and the firm's state of domicile with CONNECTED^{HomeState}. and investments in tax-writing members of Congress with $CONNECTED^{Tax}$. Again, I find evidence consistent with my hypothesis, where the interaction on POL UNCERTAIN^{Electoral} and CONNECTED^{HomeState} is 0.0002 (t = 1.99, two-tailed p = 0.04), and the interaction on $POL_UNCERTAIN^{Electoral}$ and $CONNECTED^{Tax}$ is 0.0002 (t = 2.07, two-tailed p = 0.04). Regardless of the measure of CONNECTED used, I document evident consistent with my hypothesis.

In Panels C and D of Table 4, I investigate the general and tax-specific EPU Index. Although the evidence is not as strong, I do find some evidence in support of my hypothesis. The interaction of *POL_UNCERTAIN* and *CONNECTED* is statistically positive across $CONNECTED^{HomeState}$ (coefficient = 0.0004, t = 2.38, two-tailed p = 0.02) and $CONNECTED^{Tax}$ (coefficient = 0.0003, t = 1.71, two-tailed p = 0.09) when measuring political uncertainty with the general EPU index.

I find that the mitigating effect of political connections on depressed investment levels during periods of increased uncertainty is concentrated among firms who initiate, and maintain, political connections during my sample period. This suggests that firms who are able (unable) to capitalize on the benefits of political connections are those firms that initiate (discontinue) investments in relationships with policymakers.

Moving to the tax-specific EPU index, only interactions with $CONNECTED^{HomeState}$ and $CONNECTED^{Tax}$ remain positive and significant. Specifically, the coefficient on the interaction of $POL_UNCERTAIN^{Tax}$ and $CONNECTED^{HomeState}$ is 0.0006 (t = 1.97, two-tailed p = 0.05), and $CONNECTED^{Tax}$ is 0.0004 (t = 1.65, two-tailed p = 0.10), respectively. The evidence in Panel D suggests that only specific types of political connections are relevant for navigating tax-specific uncertainty.

Intuitively, one might expect connections to tax-writing members of Congress to be more statistically powerful when investigating tax-specific sources of policy uncertainty. However, identifying important sources of information is only one piece of the puzzle. That is, while tax-writing members of Congress may have more political information pertaining to pending or prospective tax legislation, connected firms, on average, may achieve greater access to home state candidates (Hojnacki and Kimball, 2001). Differential access to home state candidates is largely driven by the ability of large employers to mobilize their employees (often a substantial constituency for the affiliated candidate), geographic proximity to the candidate, and common policy objectives (Eggers and Hainmueller, 2013). In fact, the statistical strength of CONNECTEDHomeState is consistent with the evidence in Cooper et al. (2010), who document that CONNECTEDHomeState more strongly captures the value associated with political connections, relative to other measures considered by the authors.

CHAPTER 5

ADDITIONAL ANALYSIS

ADDRESSING ALTERNATIVE EXPLANATIONS: PRE-ELECTORAL MANIPULATION HYPOTHESIS

My primary hypothesis predicts that politically connected firms are able to mitigate the negative consequences of policy uncertainty on capital investments by achieving superior access to political information. Overall, my findings support this hypothesis. Specifically, I find that connected firms are able to mitigate some, but not all, of the negative effect of policy uncertainty on investment, decreasing their rate of investment to a lesser extent than non-connected firms during periods of increased uncertainty. An alternative theory to the one advanced in this study maintains that connected firms have an incentive to change their investment behavior in order to ensure (re)election for affiliated candidates (e.g., Nordhaus, 1975). This theory would suggest that connected firms artificially inflate investment rates in the period leading up to an election relative to non-connected firms. This implies that the incremental investment rates observed in connected firms in my sample are not due to their access to political information, which they use to reduce political uncertainty, but due to an incentive to support candidates.

Ramanna and Roychowdhury (2010) consider to what extent connected firms attempt to shield affiliated candidates from voter scrutiny through accruals manipulation. Specifically, they examine accrual choices of outsourcing firms and find that politically connected firms who also engage in relatively more outsourcing are more likely to have income-decreasing discretionary accruals in the period just before an

election. Ramanna and Roychowdhury (2010) document evidence consistent with the pre-electoral manipulation hypothesis in the context of accruals manipulation. Since real decisions may be more costly for a manager to manipulate (Cohen and Zarowin, 2010), it is unclear to what extent their evidence will extend to real investment decisions.

While I document evidence consistent with my hypothesis relying on alternative measures of political uncertainty (i.e. *POL_UNCERTAIN*^{EPU} and *POL_UNCERTAIN*^{Tax}) that are not subject to the same criticism, I further address this alternative explanation by examining investment reversals in the post-election period. If investment during periods of increased uncertainty are meant to influence voter sentiment in that period, but not meant to improve the economic performance of the firm, then I expect managers to artificially inflate investment in the pre-election period, thus observing relatively higher investment rates than non-connected firms between election quarters and non-election quarters. Subsequently, if connected firms are artificially inflating investment, I expect that they will reduce these increases in investment once the election is over (i.e., during the post-election period).

To test this alternative hypothesis, I construct a post-election indicator variable similar to the election quarter indicator variable. Specifically, the post-election indicator variable, $POL_UNCERTAIN^{Post-Electoral}$, takes a value of one in the four quarters after a presidential election. I then include this indicator variable in my investment specification. To test whether investments rates between politically connected and non-connected firms vary between post-election quarter and other quarters, I further interaction $POL_UNCERTAIN^{Post-Electoral}$ with all measures of political connectedness. Overall, I do not find evidence that connected firms decrease investment in the

post-election period. Specifically, the coefficient on the interaction of POL_UNCERTAIN^{Post-Electoral} and CONNECTED^{Indicator} is insignificant, where a negative and significant coefficient would imply investment reversals in the post-election period. The result is consistent across all measures of political connectedness. Overall the evidence in Table 5 provides additional support to my hypothesis, and is inconsistent with the alternative explanation of pre-electoral manipulation.

ADDRESSING ALTERNATIVE EXPLANATIONS: CONTROLLING FOR COLLECTIVE ACTION WITHIN AN INDUSTRY

In this section, I investigate the influence of collective campaign financing activity among firms within an industry. Given the findings of my main analysis, one possible concern is that I am not adequately controlling for collective action. In other words, the moderating effect of firm-specific political connectedness on macro-level political uncertainty may be a result of collective action at the industry-level.

To address this concern, I investigate whether firm-specific effects are robust to including a control for aggregate PAC participation within a given industry. To address this concern, I aggregate *CONNECTED*^{Candidate} by industry group (using the 49 industries identified in Fama and French 1997) to construct an industry-based measure, *CONNECTED*^{Industry}. I then re-estimate the investment model, including *CONNECTED*^{Industry} as an additional control variable.

First, I provide descriptive evidence of the correlation among the various measures of political connectedness. In Table 6, I document that all firm-specific measures of political connectedness (i.e. *CONNECTED*^{Indicator}, *CONNECTED*^{Candidate}, *CONNECTED*^{Home}, *CONNECTED*^{Tax}) are highly correlated. Specifically, focusing on

Pearson correlations, the two most highly correlated proxies are $CONNECTED^{Home}$ and $CONNECTED^{Tax}$ (coefficient = 0.896, p<0.01). The two least correlated proxies, although still highly correlated in general, are $CONNECTED^{Candidate}$ and $CONNECTED^{HomeTax}$ (coefficient = 0.714, p < 0.01). In contrast, I document a significantly lower correlation between the proxy for collective action, $CONNECTED^{Industry}$, and any of the firm-specific measures of political connectedness, where coefficients range from 0.225 to 0.111 (p < 0.01). This may not be surprising given that firms compete both within and across industries in the market for political favors. Thus, to the extent firm-specific policy objectives differ from collective goals, I would not expect firm-specific and industry-based measures to be positively correlated.

In Table 7, I document that my primary analysis is robust to including an additional control for aggregate PAC participation at the industry level. In Panel A, I document that, regardless of the measure of *CONNECTED* used, the coefficient on the interaction between *POL_UNCERTAIN*^{Electoral} and *CONNECTED* is positive and significant. In Panels B and C, I investigate more general and tax-specific sources of political uncertainty. After controlling for aggregate PAC participation within an industry, only *CONNECTED*^{Home} and *CONNECTED*^{Tax} have a significant mitigating effect on *POL_UNCERTAIN*^{EPU} and *POL_UNCERTAIN*^{Tax}. In general, the findings of my primary analysis are robust to including sources of industry-level PAC participation.

ALTERNATIVE SPECIFICATIONS TO ADDRESS OMITTED VARIABLES

Collectively, the evidence in Section 4 is consistent with firms obtaining value relevant information through their political connections. In this section I investigate alternative specifications designed to address the possibility that time-invariant firm

characteristics are driving the observed results. First, I hold the firm constant and examine the mitigating effect of political connections during times when the firm is connected versus times when it is not connected. Second, I employ a difference-in-difference design.

First, I compare times when the firm is connected to times when the same firm is not connected. Specifically, I identify firm-quarter observations where firms initiate (discontinue) political contributions during my sample period, and re-estimate my primary regressions separately for each of these subsamples. In Table 8, I find that the mitigating effect of political connections is concentrated among firms that initiate, and maintain, political connections during my sample period. Specifically, among the 16,127 firm-quarter the interaction of $POL_UNCERTAIN$ and CONNECTED is positive and significant (coefficient = 0.0020, t = 2.53, two-tailed p = 0.01). In contrast, among firms that discontinue investments in political connections during my sample period, the interaction of $POL_UNCERTAIN$ and CONNECTED is insignificant. This suggests that firms who are able (unable) to capitalize on the benefits of political connections are those firms that initiate (discontinue) investments in relationships with policymakers.

Second, in addition to including firm fixed effects in my model, I re-estimate my investment regressions using a difference-in-difference design. A difference-in-difference design is ideal in my setting because I can identify (1) a time period where I expect a temporary shock to investment decisions stemming from political uncertainty, election cycles, and (2) two types of firms that I expect to be differentially impacted by this shock, politically connected versus non-connected firms.

In addition, to reduce the influence of differences in time-varying characteristics between connected and non-connected firms from confounding my results, I fully interact my time-period dummy, $POL_UNCERTAIN^{Electoral}$, with all firm characteristics previously included in my main analysis. I further interact $POL_UNCERTAIN^{Electoral}$ with all macroeconomic controls previously included in my main analysis to allow for the possibility that macroeconomic conditions differentially impact connected and non-connected firms. Consistent with my hypothesis, in Table 9, I find that the coefficient on the interaction of $POL_UNCERTAIN^{Electoral}$ and $CONNECTED^{Indicator}$ remains positive and significant (coefficient = 0.0009, t = 2.26, two-tailed p = 0.02).

POLICY UNCERTAINTY, POLITICAL CONNECTIONS, AND FIRM VALUE

The real effect of political uncertainty on investment levels suggests time-varying political uncertainty has implications for how investors value the firm. Specifically, my findings imply that firms are unable to (fully) capitalize on their economic growth opportunities during periods of increased political uncertainty (see also Julio and Yook, 2012; Gulen and Ion; 2013). As a result, previous rates of economic growth stemming from investment opportunities will not persist (Stigler, 1963; Fama and Miller, 1977). Consequently, the choice to forgo (reduce) investment implies less persistent economic growth, lower growth in abnormal earnings, and thus lower earnings persistence (Stigler, 1963; Collins and Kothari, 1989; Fama and French, 2000; Kothari, 2001)

Following this reasoning, I examine whether investors consider time-varying political uncertainty when capitalizing current earnings news. Specifically, I estimate the market reaction to unexpected earnings, conditional on the level of political

uncertainty. Since variation in the response of equity returns is increasing with the expected persistence of earnings (Fama and French, 2000; Kormendi and Lipe, 1987; Easton and Zmijewski, 1989), I anticipate that investors will discount unexpected earnings during periods of increased uncertainty.

I include controls for determinants of time-series variation in the earnings-return relation identified in prior literature (Fama, 1990; Collins and Kothari, 1989; Johnson, 1999). These determinants include time-varying macroeconomic factors *GDP*, *DEF*, *TERM*, and *TBILL* (previously defined in my investment regressions). To allow the slope coefficients to vary with unexpected earnings, I further interact these controls with unexpected earnings.

I also include controls for the effects of cross-sectional variation in firm characteristics on the earnings-return relation. Prior research documents that the earnings response coefficient is increasing in earnings persistence and earnings predictability, and decreasing with firm-specific risk (Kormendi and Lipe, 1987; Easton and Zmijewski, 1989). Thus, I control for the revision in expected future cash flows as a function of prior earnings persistence, *PERSISTENCE*, measured as the coefficient on a one-quarter lag of earnings estimated from a firm-specific AR1 model of earnings over the prior 16 quarters. In addition, I estimate the variance in firm *i*'s unexpected earnings (*PREDICTABILITY*), where the higher the error variance, the lower the predictive power of past earnings with respect to future earnings. Furthermore, I include a measure of firm-specific risk (*BETA*) as a proxy for cross-sectional variation in expected rates of return (Easton and Zmijewski, 1999). To allow the slope coefficients to vary with

unexpected earnings, I further interact these controls with unexpected earnings, yielding the following OLS regression:

 $UR_{(-1,+1)} = \alpha + \beta_1 UE_{it} + \beta_2 POL_UNCERTAIN_t + \beta_3 (UE \times POL_UNCERTAIN)$

 $+ \beta_{10}\Delta GDP_t + \beta_{11}(UE \times \Delta GDP) + \beta_{12}\Delta DEF_{t-1} + \beta_{13}(UE \times \Delta DEF)$ $+ \beta_{14}\Delta TERM_{t-1} + \beta_{15}(UE \times \Delta TERM) + \beta_{16}\Delta TBILL_{t-1} + \beta_{17}(UE \times \Delta TBILL)$ + $\beta_4 PERSISTENCE_{it}$ + $\beta_5 (UE \times PERSISTENCE)$ + $\beta_6 PREDICTABILITY_{it}$ + $\beta_7(UE \ x \ PREDICTABILITY)_{it} + \beta_8 BETA_{it} + \beta_9(UE \ x \ BETA) + \gamma_t + \varepsilon_{it}$ where i indexes firms, and t indexes quarters. The dependent variable, UR, is firm i's three-day cumulative abnormal return around earnings announcement date t, relative to the Fama-French-momentum four-factor benchmark return (Carhart, 1997). The explanatory variable of interest, *POL_UNCERTAIN*, is defined in Section 3. If political uncertainty contains information about the mean reversion in profitability, then I expect to find a negative coefficient on the interaction of unexpected earnings and political uncertainty (i.e., $\beta_3 < 0$). I am interested in the extent to which time-varying policy uncertainty varies predictability through time with the earnings-return relation, thus I include controls for determinants of time-series variation in the earnings-return relation identified in prior literature. A stream of research in accounting and finance has considered how expected returns and earnings-response coefficients vary predictably with time-varying components of the discount rate (Fama, 1990; Collins and Kothari, 1989), and changes in macroeconomic conditions (Johnson, 1999). Following this line of research, I include several controls for time-varying macroeconomic factors (i.e., GDP, DEF, TERM, and TBILL) previously defined in my investment regressions. To allow the slope coefficients to vary with unexpected earnings, I further interact these

controls with unexpected earnings and investigate the incremental effect of policy uncertainty on the relation between unexpected earnings and earnings announcement returns.

In Table 10 I examine the effect of political uncertainty on the earnings-return relation. I find that the earnings-response coefficient is lower during periods of increased uncertainty. Specifically, in column (1), I document a negative and significant interaction between UE and $POL_UNCERTAIN^{Electoral}$ (coefficient = -0.0068, t = -2.12, two-tailed p = 0.03). In column (2), the coefficient on the interaction of UE and $POL_UNCERTAIN^{Electoral}$ remains negative and significant after controlling for macroeconomic characteristics (coefficient = -0.0065, t = -2.01, two-tailed p = 0.04).

After including additional controls for firm characteristics, in column (3) of Table 7 I find that the coefficient on the interaction of UE and $POL_UNCERTAIN^{Electoral}$ remains negative and significant (coefficient = -0.0063, t = -1.89, two-tailed p = 0.06). Turning to columns (4) and (5), I continue to find that the interaction of UE and $POL_UNCERTAIN$ remains negative and significant using the more general and tax-specific measures of uncertainty.

I then test whether investors incorporate the information on the mitigating effect of political connections on political uncertainty when capitalizing current earnings news. To the extent investors recognize the value of the information advantage for politically connected firms, I expect that the effect of political uncertainty on the earning-return relation will vary between connected and non-connected firms. To test this prediction, I re-estimate equation (3a), but include an additional term to capture the degree of the firm's political connectedness. In addition, I further control for the

determinants of political connectedness included in the investment regressions.

Specifically, I estimate the following OLS regression:

$$UR_{(-I,+I)} = \alpha + \beta_{I}UE_{it} + \beta_{2}POL_UNCERTAIN_{t} + \beta_{3}(UE \times POL_UNCERTAIN)$$

$$+ \beta_{4}CONNECTED_{it} + \beta_{5}(UE \times CONNECTED)$$

$$+ \beta_{6}(POL_UNCERTAIN \times CONNECTED)$$

$$+ \beta_{7}(UE \times POL_UNCERTAIN \times CONNECTED) + \beta_{8}PERSISTENCE_{it}$$

$$+ \beta_{9}(UE \times PERSISTENCE) + \beta_{10}PREDICTABILITY_{it}$$

$$+ \beta_{11}(UE \times PREDICTABILITY) + \beta_{12}BETA_{it} + \beta_{13}(UE \times BETA) + \beta_{14}\Delta GDP_{t}$$

$$+ \beta_{15}(UE \times \Delta GDP) + \beta_{16}\Delta DEF_{t-1} + \beta_{17}(UE \times \Delta DEF) + \beta_{18}\Delta TERM_{t-1}$$

$$+ \beta_{19}(UE \times \Delta TERM) + \beta_{20}\Delta TBILL_{t-1} + \beta_{21}(UE \times \Delta TBILL) + \beta_{22}SIZE_{it}$$

$$+ \beta_{23}(UE \times SIZE) + \beta_{24}HERFINDAHL_{it} + \beta_{25}(UE \times HERFINDAHL)$$

$$+ \beta_{26}MARKET SHARE_{it} + \beta_{27}(UE \times MARKET SHARE)$$

$$+ \beta_{28}(MARKET SHARE)^{2}_{it} + \beta_{29}(UE \times (MRKET SHARE)^{2})$$

$$+ \beta_{30}N. PAC ACTIVE_{it} + \beta_{31}(UE \times N. PAC ACTIVE) + \gamma_{t} + \varepsilon_{it}$$
(3b)

In Table 11, regardless of the specification used, I do not find evidence that investors incorporate the value relevant information in political connections. Specifically, I do not find evidence that the reduction in the earnings-response coefficient during periods of increased uncertainty is mitigated by the political connectedness of the firm. Investors' inability to recognize the value of connections is consistent with the findings of Cooper et al. (2010) who document future abnormal returns associated with the firm's overall political relationships. The implication of their study is that investors do not immediately impound the information in political connections for firm value.

CHAPTER 6

CONCLUSION

In this study, I test whether politically connected firms reduce the information asymmetry stemming from the political process, thereby mitigating the negative consequences of political uncertainty on investment. Articles in the business press highlight that "ongoing questions about government fiscal direction" create significant investment risk for firms (CFO Journal, 2014, March 5). More recently, debates over "lucrative" tax extenders, such as the bonus depreciation deduction, point to uncertainty preventing real decisions such as investment and hiring (CFO Journal, 2014, July 9). I argue that differential access to legislators, and thus access to relevant information over which policies will be adopted and the potential impact of those policies, should reduce investment-related information risk from the firm's perspective. I predict, and find, that the negative effect of political uncertainty on investment is reduced (in part) by a firm's superior access to political news through connections to policymakers. This finding is robust to alternative explanations related to the pre-electoral manipulation hypothesis and industry-level political participation. Collectively, the evidence in this study is consistent with politically connected firms obtaining access to relevant information about pending or prospective legislation, aiding managers in their investment decisions during periods of increased political uncertainty.

I also consider the implications of the political uncertainty-investment link for firm value. There is little evidence that suggests that incorporation of macroeconomic factors helps to generate superior forecasts of firm earnings and value (Richardson, Tuna, and Wysocki, 2010). Richardson et al. (2010) suggest that a simple framework

that considers well motivated links between specific macroeconomic factors and specific firm-level outcomes would greatly enhance our understanding of how, and to what extent, macroeconomic factors should be incorporated into the forecasting task. In an effort to improve our understanding of the issues identified by Richardson et al. (2010), I estimate the market reaction to unexpected earnings, conditional on the level of political uncertainty. Depressed investment levels during periods of increased uncertainty imply lower growth in abnormal earnings, and thus less persistent earnings through time (Stigler, 1963; Collins and Kothari, 1989; Fama and French, 2000; Kothari, 2001). Drawing from this theory and evidence, I examine whether investors consider time-varying political uncertainty and the mitigating effect of political connections when capitalizing current earnings news. If investors do not expect current abnormal earnings to persist in the future, I predict that they will discount unexpected earnings in the current period. Consistent with this prediction, I find that the earningsresponse coefficient is lower during periods of increased uncertainty. However, I do not find evidence that investors incorporate the value relevant information in political connections as a mitigating factor.

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APPENDIX A

VARIABLE DEFINITIONS

<u>Variable Name</u> <u>Variable Description</u>

Variables of Interest

POL_UNCERTAIN^{Electoral} A dichotomous variable, *POL_UNCERTAIN*^{Electoral} set

equal to one in the year leading up to a national election,

and zero otherwise.

POL_UNCERTAIN^{EPU} The average value of the EPU Index from the beginning of

quarter t to the end of quarter t, less the average value of the EPU Index from the beginning of quarter t-l to the end

of quarter *t-1* (See Baker et al. 2013).

POL_UNCERTAN^{Tax} The average value of the tax-specific EPU Index from the

beginning of quarter t to the end of quarter t, less the average value of the EPU Index from the beginning of quarter t-1 to the end of quarter t-1(See Baker et al. 2013).

CONNECTED The natural logarithm of the sum of supported candidates

over rolling six-year windows, measured at the end of

quarter t.

CONNECTED^{Home} The natural logarithm of the sum of supported canddiates

over rolling six-year windows if the candidate holds office in the same state in which the firm is headquartered,

measured at the end of quarter t.

CONNECTED^{Incumbent} The natural logarithm of the sum of supported canddiates

over rolling six-year windows if the candidate serves on either the House Ways & Means Committee, or the Senate Finance Committee measured at the end of quarter *t*.

Control Variables (in order of appearance)

ΔDEF

Q Tobin's Q measured asthe ratio of the market value of

assets to the book value of assets at the beginning of each

quarter *t-1*

CF Cash Flow constructed as ((Operating income before

depreciation - interest expense - taxes - dividends)/total assets) at the end of quarter t (See Titman, Wei, and Xie,

2004).

The quarterly change in real Gross Domestic Product

 \triangle GDP (GDP) observed at the end of quarter t-1.

The quarterly change in the default premium obesrved at

the end of quarter *t-1*. Default premium, following Fama and French 1993, is the difference between monthly U.S.

corporate bond index return and the monthly long-term

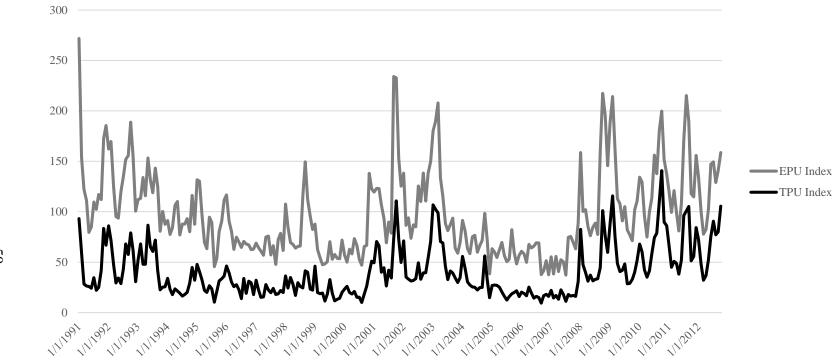
government bond index return.

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The quarterly change in the term premium observed at the end of quarter t-1. The term premium, following Fama and French 1993, is the difference between monthly long-term ΔTERM government bond index return and the one-month T-bill rate. The quarterly change in the one-month T-bill rate observed at the end of quarter t-1. ΔTBILL SIZE Firm size measured as the natural logarithm of total assets at the end of quarter t. MARKET SHARE Firm sales scaled by total industry sales measured at the end of quarter t, where industry is defined by two digit SIC codes. The Herfindahl index of industry concentration computed HERFINDAHL INDEX with firm sales figures from Compustat, measured at the end of quarter t. NO. PAC ACTIVE The number of firms in a firm's industry with PAC contributions, measured at the end of quarter t. **FIRMS** Persistence of earnings, measured as the coefficient on one quarter lagged earnings from a firm-specifc AR1 model for earnings estimated over the prior 16 quarters. PERSISTENCE Predictability of earnings, measured as the adjusted R² from a firm-specific AR1 model for earnings estimated over the prior 16 quarters. **PREDICTABILITY** Firm-specific risk, BETA, measured as the slope coefficient from a regression of firm i's dividend adjusted return on the equal-weighted market index over the 100-day period **BETA** ending 60 days prior to the earnings announcement date

(Johnson 1999).

FIGURE 1 Economic Policy Uncertainty Index, 1991 - 2011



I rely on the Economic Policy Uncertainty (EPU) index developed by Baker et al. (2013). The EPU Index is a contextual analysis-based measure built from the frequency of newspaper references to economic policy uncertainty found in over 2,000 local and national U.S. newspapers. Newspaper references are summed and reported on a monthly basis for general and policy-specific indices. The "EPU Index" captures newspaper references to "Economic Policy Uncertainty". The "TPU Index" captures newspaper references to "Tax Policy Uncertainty".

C	
	-

	,	Table 1		
	Summ	ary Statistics		
	Panel A: S	Sample Selection		
<u>Filter</u>				<u>N</u>
All firm-quarter observation	s included in Co	mpustat, 1991-2	011	894,863
Less: missing historical acco	ounting data			526,467
Less: missing returns data				208,000
Less: missing analyst foreca	st data			123,510
Less: less observations with	fiscal quarter e	nd (does not coin	cide with GDP data	104,220
Panel B:	Firm Characteri	stics by Political	Connectedness	
<u>Variable</u> ^{a,b}	<u>N</u>	<u>Mean</u>	Median	Std. Dev.
$INVESTMENT (I_t/A_{t-1})$	104,220	0.0029	0.0067	0.0370
Q	104,220	1.9763	1.5116	1.4295
CF	104,220	0.0168	0.0216	0.0393
Panel C: Mean Inves	stment Rates in I	Election Quarters	vs. Non Election Qu	ıarters
	<u>N</u>	<u>Mean</u>	<u>Median</u>	Std. Dev.
Election Years	75,014	0.0026	0.0066	0.0374
Non Election Years	29,206	0.0037	0.0070	0.0358
Difference		-0.0010		
Diff (t-stat)		-4.08		

<sup>All variables are defined in Appendix A.
All p-values are based on two-tailed tests (in parentheses).</sup>

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Table 2 Political Uncertainty and Investment

 $INVESTMENT_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 Q_{it-1} + \beta_3 CF_{it} + \beta_4 \Delta GDP_{it-1} + \beta_5 \Delta DEF_{it-1} + \beta_6 \Delta TERM_{it-1} + \beta_7 \Delta T-Bill_{it-1} + \beta_6 \Delta TERM_{it-1} + \beta_7 \Delta T-Bill_{it-1} + \beta_8 \Delta TERM_{it-1} + \beta_8 \Delta TER$

		Panel A: Electoral	Uncertainty		
<u>Variable</u> ^{a,b}	Prediction	(1)	(2)	(3)	(4)
POL_UNCERTAIN Electoral	(-)	-0.0018***	-0.0017***	-0.0017***	-0.0017***
		(-3.31)	(-3.24)	(-3.22)	(-3.15)
Q			0.0004***	0.0004***	0.0004***
			(4.43)	(4.82)	(4.68)
CF			0.0232***	0.0227***	0.0226***
			(5.08)	(5.00)	(4.98)
ΔGDP				0.0002***	0.0001***
				(4.45)	(3.27)
ΔDEF					-0.0425***
					(-6.10)
Δ TERM					0.0104***
					(3.57)
Δ T - $BILL$					-0.6440**
					(-2.02)
Intercept		-0.0385***	-0.0396***	-0.0396***	-0.0367***
		(-46.89)	(-47.09)	(-47.05)	(-21.45)
Firm Fixed Effects		Included	Included	Included	Included
Quarter Fixed Effects		Included	Included	Included	Included
Year Fixed Effects		Included	Included	Included	Included
Cluster by Firm and by Ye	ar	Included	Included	Included	Included
Adj. R-squared		49.50%	49.50%	49.50%	49.50%
N		104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 2, (Continued) **Political Uncertainty and Investment**

INVESTMENT $_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 Q_{it-1} + \beta_3 CF_{it} + \beta_4 \Delta GDP_{t-1} + \beta_5 \Delta DEF_{t-1} + \beta6\Delta TERMt-1 + \beta7\Delta T-Billt-1 + \varepsilon$

Panel B: Economic Policy Uncertainty Index (1)(2) Variable^{a,b} **Prediction EPU Index** Tax POL_UNCERTIAN EPU -0.0015*** -0.0006(-) (-1.58)(-2.71)Q0.0004*** 0.0004*** (4.78)(4.81)CF0.0226*** 0.0226*** (4.96)(4.97) ΔGDP 0.0001**0.0001(2.11)(1.52)-0.0409*** -0.0389*** ΔDEF (-5.77)(-5.50)∆ TERM 0.0087*** 0.0088*** (2.94)(3.07)ΔT-BILL -0.7250** -0.7540** (-2.27)(-2.35)Intercept -0.0381*** -0.0381*** (-23.10)(-23.02)Firm Fixed Effects Included Included **Ouarter Fixed Effects** Included Included Year Fixed Effects Included Included Cluster by Firm and by Year Included Included Adj. R-squared 49.50% 49.50% 104,220 N 104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 3								
Summary Statistics for Politically Connected vs. Non-Connected Firms								
	Panel A: Firm Characteristics by Political Connectedness							
	(1)	(2)						
	$CONNECTED^{Indicator} = 1$	$CONNECTED^{Indicator} = 0$						
<u>Variable</u> ^{a,b}	N = 23,474	N = 80,746	<u>Diff (1) - (2)</u>	<u>t-stat</u>				
$INVESTMENT (I_t/A_{t-1})$	0.0020	0.0032	-0.0013	-4.65				
Q	1.7416	2.0445	-0.3029	-28.69				
CF	0.0235	0.0148	0.0087	29.94				
SIZE	8.5679	6.3943	2.1736	183.29				
MARKET SHARE	0.0928	0.0231	0.0697	99.87				
HERFINDAHL	0.1652	0.1590	0.0062	6.66				
N. PAC ACTIVE	15.2057	11.8055	3.4002	37.39				
Panel B: Mean Investment Rates by Election Quarters, and by Political Connectedness								
	$POL_UNCERTAIN^{Electoral} = 1$	POL_UNCERTAIN Electoral = ((EQ = 1) - (EQ = 0)					
$CONNECTED^{Indicator} = 1$	0.0030	0.0038	-0.0008					

0.0033

Difference - In - Difference

t-Statistic p-Value

-0.0018

0.0010 2.83

0.0000

a	All	variables	are	defined	in	Appendix	A.

 $CONNECTED^{Indicator} = 0$

0.0015

^b All p-values are based on two-tailed tests (in parentheses).

Table 4
Political Uncertainty, Political Connections, and Investment

INVESTMENT $_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 CONNECTED_{it} + \beta_3 POL_UNCERTAIN_x CONNECTED + \beta_4 Q_{it-1} + \beta_5 CF_{it} + \beta_6 \Delta GDP_{t-1} + \beta_7 \Delta DEF_{t-1} + \beta_8 \Delta TERM_{t-1} + \beta_9 \Delta TBill_{t-1} + \beta_{10} SIZE_{it} + \beta_{11} MARKET SHARE_{it} + \beta_{12} (MARKET SHARE)^2_{it} + \beta_{13} HERFINDAHL_{it} + \beta_{14} N. PAC ACTIVE_{it} + \varepsilon$ Panel A: Electoral Uncortainty

Panel A: Electoral Uncertainty					
	(1)	(2)	(3)		
Prediction (CONNECTED Indicat	or CONNECTED Indicato	r CONNECTED Indicator		
(-)	-0.0020***	-0.0019***	-0.0019***		
	(-3.59)	(-3.44)	(-3.41)		
?	-0.0007*	-0.0007*	-0.0005		
	(-1.87)	(-1.81)	(-1.47)		
(+)	0.0009***	0.0009***	0.0009***		
	(2.91)	(2.95)	(2.97)		
		0.0004***	0.0004***		
		(4.65)	(4.43)		
		0.0227***	0.0231***		
		(4.99)	(5.06)		
		0.0001***	0.0001***		
		(3.26)	(3.26)		
		-0.0425***	-0.0423***		
		(-6.11)	(-6.08)		
		0.0104***	0.0104***		
		(3.58)	(3.58)		
		-0.6410**	-0.6540**		
		(-2.01)	(-2.05)		
			-0.0004*		
			(-1.74)		
			0.0022		
			(0.69)		
	Prediction (-)	(1) Prediction CONNECTED Indicate (-) -0.0020***	(1) (2) Prediction CONNECTED Indicator CONNECTED Indicator (-) -0.0020*** -0.0019*** (-3.59) (-3.44) ? -0.0007* -0.0007* (-1.87) (-1.81) (+) 0.0009*** 0.0009*** (2.91) (2.95) 0.0004*** (4.65) 0.0227*** (4.99) 0.0001*** (3.26) -0.0425*** (-6.11) 0.0104*** (3.58) -0.6410**		

(MARKET SHARE) ²			-0.0053
			(-1.41)
HERFINDAHL			0.0071***
			(6.15)
N. PAC ACTIVE			0.0001
			(0.35)
Intercept	-0.0385***	-0.0367***	-0.0361***
-	(-46.72)	(-21.43)	(-16.78)
Firm Fixed Effects	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included
Year Fixed Effects	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included
Adj. R-squared	49.50%	49.50%	49.60%
N	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

 Table 4, (Continued)

Political Uncertainty, Political Connections, and Investment

INVESTMENT $_{it} = \alpha + \beta_{1}POL_UNCERTAIN_{t} + \beta_{2}CONNECTED_{it} + \beta_{3}POL_UNCERTAIN_{t} CONNECTED + \beta_{4}Q_{it-1} + \beta_{5}CF_{it} + \beta_{6}\Delta GDP_{t-1} + \beta_{7}\Delta DEF_{t-1} + \beta_{8}\Delta TERM_{t-1} + \beta_{9}\Delta TBill_{t-1} + \beta_{10}SIZE_{it} + \beta_{11}MARKET_{t} SHAR + \beta_{12}(MARKET_{t} SHARE)^{2}_{it} + \beta_{13}HERFINDAHL_{it} + \beta_{14}N. PAC_{t} ACTIVE_{it} + \varepsilon$ Panal R: Electral Uncertainty

	Panel B: Electoral Uncertainty					
		(1)	(2)	(3)		
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Candidate	CONNECTED Home	CONNECTED Tax		
POL_UNCERTAIN Electoral	(-)	-0.0018***	-0.0018***	-0.0018***		
		(-3.25)	(-3.27)	(-3.26)		
CONNECTED	?	-0.0001	-0.0004*	-0.0002		
		(-0.61)	(-1.91)	(-1.27)		
$POL_UNCERTAIN x$						
CONNECTED	(+)	0.0001*	0.0002**	0.0002**		
		(1.87)	(1.99)	(2.07)		
Q		0.0004***	0.0004***	0.0004***		
		(4.44)	(4.44)	(4.45)		
CF		0.0231***	0.0231***	0.0231***		
		(5.06)	(5.06)	(5.06)		
ΔGDP		0.0001***	0.0001***	0.0001***		
		(3.26)	(3.26)	(3.26)		
ΔDEF		-0.0423***	-0.0423***	-0.0423***		
		(-6.08)	(-6.08)	(-6.08)		
$\Delta TERM$		0.0104***	0.0104***	0.0104***		
		(3.57)	(3.57)	(3.57)		
ΔT -BILL		-0.6530**	-0.6540**	-0.6540**		
		(-2.05)	(-2.05)	(-2.05)		
SIZE		-0.0004*	-0.0004*	-0.0004*		
		(-1.78)	(-1.68)	(-1.73)		
MARKET SHARE		0.0022	0.0022	0.0022		
		(0.69)	(0.70)	(0.70)		

(MARKET SHARE) ²	-0.0054	-0.0054	-0.0054
	(-1.42)	(-1.41)	(-1.42)
HERFINDAHL	0.0071***	0.0072***	0.0071***
	(6.14)	(6.16)	(6.16)
N. PAC ACTIVE	0.0001	0.0001	0.0001
	(0.30)	(0.39)	(0.33)
Intercept	-0.0360***	-0.0361***	-0.0361***
	(-16.69)	(-16.79)	(-16.74)
Firm Fixed Effects	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included
Year Fixed Effects	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included
Adj. R-squared	49.60%	49.60%	49.60%
N	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 4, (Continued)

Political Uncertainty, Political Uncertainty, and Investment

INVESTMENT $_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 CONNECTED_{it} + \beta_3 POL_UNCERTAIN_x CONNECTED_t + \beta_4 Q_{it-1} + \beta_5 CF_{it} + \beta_6 \Delta GDP_{t-1} + \beta_7 \Delta DEF_{t-1} + \beta_8 \Delta TERM_{t-1} + \beta_9 \Delta TBill_{t-1} + \beta_{10} SIZE_{it} + \beta_{11} MARKET_SHARE_{it} + \beta_{12} (MARKET_SHARE)^2_{it} + \beta_{13} HERFINDAHL_{it} + \beta_{14} N. PAC_ACTIVE_{it} + \varepsilon$ Panal C: Footomic Policy Uncertainty Index

	Panel C: Economic Policy Uncertainty Index					
		(1)	(2)	(3)	(4)	
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indicate	or <u>CONNECTED</u> Candidate	CONNECTED Home	<u>CONNECTED</u> Tax	
$POL_UNCERTAIN^{EPU}$	(-)	-0.0007*	-0.0007*	-0.0008**	-0.0007*	
		(-1.89)	(-1.89)	(-2.10)	(-1.89)	
CONNECTED	?	-0.0003	-0.0003	-0.0003*	-0.0002	
		(-0.80)	(-0.30)	(-1.72)	(-1.04)	
$POL_UNCERTAIN x$						
CONNECTED	(+)	0.0006	0.0002	0.0004**	0.0003*	
		(1.40)	(1.61)	(2.38)	(1.71)	
Intercept		-0.0375***	-0.0376***	-0.0377***	-0.0376***	
		(-17.81)	(-17.82)	(-17.88)	(-17.83)	
Firm Characteristics		Included	Included	Included	Included	
Macroeconomic Characteristics	1	Included	Included	Included	Included	
Firm Fixed Effects		Included	Included	Included	Included	
Quarter Fixed Effects		Included	Included	Included	Included	
Year Fixed Effects		Included	Included	Included	Included	
Cluster by Firm and by Year		Included	Included	Included	Included	
Adj. R-squared		49.60%	49.60%	49.60%	49.60%	
N		104,220	104,220	104,220	104,220	

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 4, (Continued)

Political Uncertainty, Political Connections, and Investment: Alternative Measures of Political Uncertainty

 $INVESTMENT_{it} = \alpha + \beta_{1}POL_UNCERTAIN_{t} + \beta_{2}CONNECTED_{it} + \beta_{3}POL_UNCERTAIN_{x}CONNECTED + \beta_{4}Q_{it-1} + \beta_{5}CF_{it} + \beta_{6}\Delta GDP_{t-1} + \beta_{7}\Delta DEF_{t-1} + \beta_{8}\Delta TERM_{t-1} + \beta_{9}\Delta TBill_{t-1} + \beta_{10}SIZE_{it} + \beta_{11}MARKET_{t}SHARE_{it} + \beta_{12}(MARKET_{t}SHARE_{t})^{2}_{it} + \beta_{13}HERFINDAHL_{it} + \beta_{14}N. PAC_{t}ACTIVE_{it} + \varepsilon$

Panel D: Tax-specific Economic Policy Uncertainty Index (3) (4) (1) (2) CONNECTED Indicator CONNECTED Candidate CONNECTED Home CONNECTED Tax Variable^{a,b} Prediction POL_UNCERTAIN Tax -0.0017*** (-) -0.0017*** -0.0017*** -0.0018*** (-2.80)(-2.87)(-3.07)(-2.95)? -0.0003 -0.0004* **CONNECTED** -0.0003 -0.0002(-0.80)(-0.32)(-1.72)(-1.05)POL UNCERTAIN x **CONNECTED** (+)0.0006 0.0002 0.0006** 0.0004*(0.83)(1.13)(1.97)(1.65)-0.0374*** -0.0374*** -0.0376*** -0.0375*** Intercept (-17.75)(-17.74)(-17.82)(-17.77)Firm Characteristics Included Included Included Included Macroeconomic Characteristics Included Included Included Included Firm Fixed Effects Included Included Included Included **Ouarter Fixed Effects** Included Included Included Included Year Fixed Effects Included Included Included Included Cluster by Firm and by Year Included Included Included Included Adj. R-squared 49.60% 49.60% 49.60% 49.60% 104,220 104,220 104,220 104,220 N

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 5 Investment Reversals

 $INVESTMENT_{it} = \alpha + \beta_{1}POL_UNCERTAIN_{t} + \beta_{2}CONNECTED_{it} + \beta_{3}POL_UNCERTAIN_{x}CONNECTED + \beta_{4}Q_{it-1} + \beta_{5}CF_{it} + \beta_{6}\Delta GDP_{t-1} + \beta_{7}\Delta DEF_{t-1} + \beta_{8}\Delta TERM_{t-1} + \beta_{9}\Delta TBill_{t-1} + \beta_{10}SIZE_{it} + \beta_{11}MARKET_{t}SHARE_{it} + \beta_{12}(MARKET_{t}SHARE_{it})^{2} + \beta_{13}HERFINDAHL_{it} + \beta_{14}N. PAC_{t}ACTIVE_{it} + \varepsilon$

		(1)	(2)	(3)	(4)
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indicate	Or <u>CONNECTED</u> Candidate	CONNECTED Home	<u>CONNECTED</u> Tax
POL_UNCERTAIN Electoral	(-)	-0.0019***	-0.0018***	-0.0018***	-0.0018***
		(-3.44)	(-3.30)	(-3.31)	(-3.29)
CONNECTED	?	-0.0007*	-0.0001	-0.0005**	-0.0003
		(-1.73)	(-1.18)	(-2.13)	(-1.58)
POL_UNCERTAIN Electoral					
x CONNECTED	(+)	0.0011***	0.0002**	0.0003**	0.0003**
		(3.17)	(2.44)	(2.27)	(2.46)
POL_UNCERTAIN Post-Electoral	(?)	0.0001	-0.0001	0.0001	0.0001
		(0.05)	(-0.01)	(0.06)	(0.05)
POL_UNCERTAIN Post-Electoral					
x CONNECTED	(?)	0.0004	0.0002*	0.0002	0.0002
		(1.01)	(1.91)	(1.12)	(1.46)

Intercept	-0.0360***	-0.0359***	-0.0361***	-0.0360***
	(-16.73)	(-16.64)	(-16.74)	(-16.69)
Firm Characteristics	Included	Included	Included	Included
Macroeconomic Characteristics	Included	Included	Included	Included
Firm Fixed Effects	Included	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included	Included
Adj. R-squared	49.56%	49.56%	49.56%	49.56%
N	104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

 ^a All variables are defined in Appendix A.
 ^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 6 Pearson and Spearman Correlations, Measures of $CONNECTED^{a}$					
$\overline{\text{Variables}^{\text{b,c}}}$					
CONNECTED Indicator	1.000	0.809	0.866	0.827	0.111
CONNECTED Candidate	0.820	1.000	0.847	0.890	0.225
a a Home	0.001	0.040	1 000	0.007	0.140
CONNECTED Home	0.901	0.848	1.000	0.896	0.149
$CONNECTED^{Tax}$	0.891	0.869	0.922	1.000	0.149
CONNECTED Industry	0.059	0.224	0.082	0.094	1.000

CONNECTED Industry 0.059 0.224 0.082 0.094 1.000

a Pearson (Spearman) Correlations are tabulated in the lower (upper) diagonal. Coefficients shown in bold are significant at p<0.10 (two-tailed test).

^b All variables are defined in Appendix A.

^c All continuous variables are winsorized (reset) at the 1st and 99th percentiles.

Table 7 Controlling for Sources of Collective Action

INVESTMENT $_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 CONNECTED_{it} + \beta_3 POL_UNCERTAIN_x CONNECTED_t + \beta_4 Q_{it-1} + \beta_5 CF_{it}$ $+ \beta_6 \Delta GDP_{t-1} + \beta_7 \Delta DEF_{t-1} + \beta_8 \Delta TERM_{t-1} + \beta_9 \Delta TBill_{t-1} + \beta_{10} SIZE_{it} + \beta_{11} MARKET SHARE_{it}$ $+ \beta_{12} (MARKET SHARE)^2_{it} + \beta_{13} HERFINDAHL_{it} + \beta_{14} N. \ PAC\ ACTIVE_{it+} \beta_{15} CONNECTED^{Industry}_{it} + \varepsilon$ $= \frac{1}{2}

		Panel A: Elector	al Uncertainty		
		(1)	(2)	(3)	(4)
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indica	ctor CONNECTED Candida	tte <u>CONNECTED</u> Home	<u>CONNECTED</u> Tax
POL_UNCERTAIN Electoral	(-)	-0.0019***	-0.0018***	-0.0018***	-0.0018***
		(-3.41)	(-3.25)	(-3.27)	(-3.25)
CONNECTED	?	-0.0005	-0.0001	-0.0004*	-0.0002
		(-1.42)	(-0.40)	(-1.83)	(-1.11)
POL_UNCERTAIN x CONNECTED	(+)	0.0009***	0.0001*	0.0002**	0.0002**
		(2.97)	(1.86)	(1.97)	(2.04)
CONNECTED Industry		-0.0003**	-0.0003**	-0.0003*	-0.0003**
		(-2.03)	(-2.02)	(-1.96)	(-1.98)
Intercept		-0.0362***	-0.0361***	-0.0363***	-0.0362***
		(-16.83)	(-16.74)	(-16.83)	(-16.79)
Firm Characteristics		Included	Included	Included	Included
Macroeconomic Characteristics		Included	Included	Included	Included
Firm Fixed Effects		Included	Included	Included	Included
Quarter Fixed Effects		Included	Included	Included	Included
Year Fixed Effects		Included	Included	Included	Included
Cluster by Firm and by Year		Included	Included	Included	Included
Adj. R-squared		49.56%	49.56%	49.56%	49.56%
N		104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Peterson

Table 7, (Continued)

Political Uncertainty, Political Connections, and Investment: Alternative Measures of Political Uncertainty

 $INVESTMENT_{it} = \alpha + \beta_{1}POL_UNCERTAIN_{t} + \beta_{2}CONNECTED_{it} + \beta_{3}POL_UNCERTAIN_{t} CONNECTED + \beta_{4}Q_{it-1} + \beta_{5}CF_{it} \\ + \beta_{6}\Delta GDP_{t-1} + \beta_{7}\Delta DEF_{t-1} + \beta_{8}\Delta TERM_{t-1} + \beta_{9}\Delta TBill_{t-1} + \beta_{10}SIZE_{it} + \beta_{11}MARKET_{t} SHARE_{it} \\ + \beta_{12}(MARKET_{t}SHARE)^{2}_{it} + \beta_{13}HERFINDAHL_{it} + \beta_{14}N. \ PAC_{t}ACTIVE_{it} + \beta_{15}CONNECTED_{t}^{Industry} + \varepsilon$

	Pane	B: Economic Police	cy Uncertainty Index		
		(1)	(2)	(3)	(4)
<u>Variable</u> ^{a,b}	<u>Prediction</u>	CONNECTED Indica	ator CONNECTED Candida	te CONNECTED Home	CONNECTED Tax
POL_UNCERTAIN ^{EPU}	(-)	-0.0007*	-0.0007*	-0.0008**	-0.0007*
		(-1.90)	(-1.90)	(-2.10)	(-1.90)
CONNECTED	?	-0.0003	-0.0001	-0.0003	-0.0001
		(-0.75)	(-0.10)	(-1.63)	(-0.89)
POL_UNCERTAIN x CONNECTED	(+)	0.0006	0.0002	0.0004**	0.0003*
		(1.42)	(1.63)	(2.36)	(1.74)
Intercept		-0.0377***	-0.0377***	-0.0378***	-0.0378***
		(-17.86)	(-17.87)	(-17.93)	(-17.88)
Firm Characteristics		Included	Included	Included	Included
Macroeconomic Characteristics		Included	Included	Included	Included
Firm Fixed Effects		Included	Included	Included	Included
Quarter Fixed Effects		Included	Included	Included	Included
Year Fixed Effects		Included	Included	Included	Included
Cluster by Firm and by Year		Included	Included	Included	Included
Adj. R-squared		49.56%	49.56%	49.56%	49.56%
N		104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 7, (Continued)

Political Uncertainty, Political Connections, and Investment: Alternative Measures of Political Uncertainty

 $INVESTMENT_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 CONNECTED_{it} + \beta_3 POL_UNCERTAIN_x CONNECTED + \beta_4 Q_{it-1} + \beta_5 CF_{it} + \beta_6 \Delta GDP_{t-1} + \beta_7 \Delta DEF_{t-1} + \beta_8 \Delta TERM_{t-1} + \beta_9 \Delta TBill_{t-1} + \beta_{10} SIZE_{it} + \beta_{11} MARKET_{it}$

+ β_{12} (MARKET SHARE) $^{2}_{it}$ + β_{13} HERFINDAHL $_{it}$ + β_{14} N. PAC ACTIVE $_{it+}$ β_{15} CONNECTED $^{Industry}_{it}$ + ε

	Panel	C: Tax-Specific Poli	icy Uncertainty Index		
		(1)	(2)	(3)	(4)
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indica	ator <u>CONNECTED</u> ^{Candida}	ate <u>CONNECTED</u> Home	CONNECTED Tax
POL_UNCERTAIN	(-)	-0.0017***	-0.0017***	-0.0018***	-0.0017***
		(-2.81)	(-2.88)	(-3.07)	(-2.96)
CONNECTED	?	-0.0003	-0.0001	-0.0003	-0.0002
		(-0.75)	(-0.11)	(-1.64)	(-0.90)
POL_UNCERTAIN x CONNECTED	(+)	0.0006	0.0002	0.0006**	0.0004*
		(0.86)	(1.16)	(1.96)	(1.68)
Intercept		-0.0376***	-0.0376***	-0.0377***	-0.0377***
		(-17.80)	(-17.79)	(-17.86)	(-17.81)
Firm Characteristics		Included	Included	Included	Included
Macroeconomic Characteristics		Included	Included	Included	Included
Firm Fixed Effects		Included	Included	Included	Included
Quarter Fixed Effects		Included	Included	Included	Included
Year Fixed Effects		Included	Included	Included	Included
Cluster by Firm and by Year		Included	Included	Included	Included
Adj. R-squared		49.56%	49.56%	49.56%	49.56%
N		104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 8 Changes in Connected Over Time

 $INVESTMENT_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 CONNECTED_{it} + \beta_3 POL_UNCERTAIN_x CONNECTED + \beta_4 Q_{it-1} \\ + \beta_5 CFit + \beta_6 \Delta GDP_{t-1} + \beta_7 \Delta DEF_{t-1} + \beta_8 \Delta TERM_{t-1} + \beta_9 \Delta TBill_{t-1} + \beta_{10} SIZE_{it} \\ + \beta_1 IMARKET_SHAREit + \beta_{12} (MARKET_SHARE)^2_{it} + \beta_{13} HERFINDAHL_{it} + \beta_{14} N. \ PAC_ACTIVE_{it} + \beta_{15} N. \ PAC_ACTIVE_{it} + \beta_{15$

<u>Variable</u> ^{a,b}	<u>Prediction</u>	<u>Initiate</u>	Discontinue
POL_UNCERTAIN Electoral	(-)	-0.0025**	-0.0062**
		(-2.17)	(-2.37)
CONNECTED Indicator	?	-0.0018***	-0.0006
		(-3.22)	(-0.41)
POL_UNCERTAIN x CONNECTED Indicator	(+)	0.0020**	0.0014
		(2.53)	(0.81)
Intercept		-0.0418***	-0.0298***
		(-24.22)	(-4.25)
Firm Characteristics		Included	Included
Macroeconomic Characteristics		Included	Included
Firm Fixed Effects		Included	Included
Quarter Fixed Effects		Included	Included
Year Fixed Effects		Included	Included
Cluster by Firm and by Year		Included	Included
Adj. R-squared		58.50%	44.49%
N		16,127	2,420

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 9 Difference-in-Difference Design

 $INVESTMENT_{it} = \alpha + \beta_1 POL_UNCERTAIN_t + \beta_2 CONNECTED_{it} + \beta_3 POL_UNCERTAIN_x CONNECTED \\ + \beta 4 FirmCharacteristics + \beta 5 (POL_UNCERTAIN_x FirmCharacteristics) \\ + \beta 6 MacroCharacteristics + \beta 7 (POL_UNCERTAIN_x MacroCharacteristics) + \varepsilon$

+ βοΜαcroCharacteristics + β/(PC) Variable a,b	Prediction	
POL_UNCERTAIN Electoral	(-)	0.00208
		(0.94)
CONNECTED Indicator	?	-0.000511
		(-1.37)
POL_UNCERTAIN x CONNECTED Indicator	(+)	0.000866**
		(2.26)
Q		0.000437***
		(4.70)
CF		0.0215***
		(4.43)
ΔGDP		0.000223***
		(4.89)
ΔDEF		-0.0771***
		(-10.13)
$\Delta TERM$		0.0136***
		(3.96)
ΔT -BILL		0.6140
		(1.59)
POLI UNCERTAIN x Q		-0.0001
		(-0.92)
POLI UNCERTAIN x CF		0.0069
		(1.36)
$POLI\ UNCERTAIN\ x\ \Delta GDP$		-0.0009***
		(-9.03)
POLI UNCERTAIN $x \Delta DEF$		0.3140***
DOLLLINGERTADI. ATTENIA		(11.06)
POLI UNCERTAIN x $\Delta TERM$		0.0604***
DOLLINGERTANI AT DILI		(5.21)
POLI UNCERTAIN $x \Delta T$ -BILL		-1.2620**
CIZE		(-2.56)
SIZE		-0.0004*
MADVET CHADE		(-1.72) 0.0011
MARKET SHARE		(0.34)
(MADKET GHADE) ²		
$(MARKET\ SHARE)^2$		-0.0033
		(-0.86)

HERFINDAHL	0.0069***
	(5.53)
N. PAC ACTIVE	0.0001
	(0.51)
POLI UNCERTAIN x SIZE	-0.0001
	(-0.00)
POLI UNCERTAIN x MARKET SHARE	0.0037
	(1.01)
POLI UNCERTAIN x (MARKET SHARE) ²	-0.0075
	(-1.40)
POLI UNCERTAIN x HERFINDAHL	0.0005
	(0.33)
POLI UNCERTAIN x N. PAC ACTIVE	-0.0001
	(-1.17)
Intercept	-0.0404***
	(-17.90)
Firm Fixed Effects	Included
Quarter Fixed Effects	Included
Year Fixed Effects	Included
Cluster by Firm and by Year	Included
Adj. R-squared	49.70%
N	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 10 Political Uncertainty and the Earnigns-Return Relation

 $\textit{UR}_{(-1,+1)i} = \alpha + \beta_1 \textit{UE}_{it} + \beta_2 \textit{POL_UNCERTAIN}_t + \beta_3 (\textit{UE} \textit{x} \textit{POL_UNCERTAIN}) + \beta_4 (\textit{UE} \textit{x} \textit{Macro Characteristics})$

 $+\beta_5(UE\ x\ Firm\ Characteristics)_{it}+\beta_6 Macro\ Characteristics_{t}+\beta_7 Firm\ Characteristics_{it}+\varepsilon$

		POL	L_UNCERTAIN Ele	ectoral	POL_UNCERTAIN ^{EPU}	POL_UNCERTAIN ^{Tax}
<u>Variable</u> ^{a,b}	Prediction	(1)	(2)	(3)	(4)	(5)
UE	(+)	0.0375***	0.0770***	0.0788***	0.0737***	0.0760***
		(23.71)	(11.60)	(11.20)	(10.49)	(10.81)
POL_UNCERTAIN	(?)	0.0002	0.0007	0.0009*	0.0014**	0.0015
		(0.40)	(1.35)	(1.66)	(2.21)	(1.33)
UE x POL_UNCERTAIN	V (-)	-0.0068**	-0.0065**	-0.0063*	-0.0183***	-0.0225***
		(-2.12)	(-2.01)	(-1.89)	(-5.64)	(-4.25)
$UE \ x \ \Delta GDP$			0.0012***	0.0012***	-0.0005	-0.0001
			(3.51)	(3.27)	(-1.38)	(-0.01)
$UE \ x \ \Delta DEF$			-0.0399	-0.0357	0.0530	0.0200
			(-0.56)	(-0.49)	(0.73)	(0.28)
$UE \ x \ \Delta TERM$			0.0726	0.0606	0.0254	0.0643
			(1.60)	(1.30)	(0.54)	(1.38)
$UE \ x \ \Delta T$ - $BILL$			-9.2280***	-9.3070***	-8.2020***	-8.8780***
			(-5.65)	(-5.66)	(-4.96)	(-5.34)
UE x PERSISTENCE				-0.0063*	-0.0047	-0.0053
				(-1.66)	(-1.25)	(-1.41)
UE x PREDICTABILITY	•			-0.0018	-0.0040	-0.0039
				(-0.20)	(-0.44)	(-0.44)
$UE \ x \ BETA$				0.0003	0.0010	0.0008
				(0.13)	(0.55)	(0.43)

Intercept	0.0035***	0.0072***	0.0092***	0.0103***	0.0098***
	(3.51)	(2.70)	(3.25)	(3.61)	(3.46)
Main Effects - Macro Charactertistic	Not Included	Included	Included	Included	Included
Main Effects - Firm Characteristics	Not Included	Not Included	Included	Included	Included
Firm Fixed Effects	Included	Included	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included	Included	Included
Adj. R-squared	8.60%	8.80%	9.00%	9.10%	9.00%
N	104,220	104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by broker and firm (Petersen 2009).

Table 11
The Moderating Effect of Political Connections on Political Uncertatiny and the Earnings-Return Relation

$$\begin{split} UR_{(\cdot I, +1)i} &= \alpha + \beta_1 UE_{it} + \beta_2 POL_UNCERTAIN_t + \beta_3 (UE\ x\ POL_UNCERTAIN)_{it} + \beta_4 CONNECTED_{it} + \beta_5 (UE\ x\ CONNECTED)_{it} \\ &+ \beta6 (POL_UNCERTAIN\ x\ CONNECTED)_{it} + \beta_7 (UE\ x\ POL_UNCERTAIN\ x\ CONNECTED)_{it} + \beta_8 (UE\ x\ Macro\ Characteristics)_{it} \\ &+ \beta9 (UE\ x\ Firm\ Characteristics)_{it} + \beta10 Macro\ Characteristicst + \beta11 Firm\ Characteristicsit + \varepsilon \end{split}$$

		Panel A: Electoral	Uncertainty		
		(1)	(2)	(3)	(4)
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indicat	or <u>CONNECTED</u> ^{Candidate}	CONNECTED Home	CONNECTED Tax
UE		0.1070***	0.1140***	0.1070***	0.1110***
		(11.44)	(12.07)	(11.41)	(11.79)
POL_UNCERTAIN		-0.0003	-0.0003	-0.0003	-0.0003
		(-0.23)	(-0.23)	(-0.24)	(-0.22)
UE x POL_UNCERTAIN	(-)	0.0042	0.0034	0.0051	0.0043
		(1.18)	(1.02)	(1.43)	(1.25)
CONNECTED		-0.0014	-0.0003	-0.0001	-0.0008**
		(-1.64)	(-1.41)	(-0.12)	(-1.96)
UE X CONNECTED		0.0088*	-0.0061***	-0.0056***	-0.0059***
		(1.91)	(-5.71)	(-5.22)	(-5.40)
POL_UNCERTAIN x CONNECTED		0.0007	0.0003	0.0003	0.0003
		(0.94)	(1.57)	(1.25)	(1.28)
UE x POL_UNCERTAIN x CONNECTEL	(+)	-0.0010	0.0010	-0.0022	-0.0006
		(-0.15)	(0.67)	(-0.90)	(-0.25)

Inercept	0.0181***	0.0183***	0.0184***	0.0180***
	(4.67)	(4.72)	(4.74)	(4.64)
Firm Characteristics	Included	Included	Included	Included
Macroeconomic Charactertistics	Included	Included	Included	Included
Firm Fixed Effects	Included	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included	Included
Adj. R-squared	9.10%	9.20%	9.10%	9.10%
N	104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009)

Table 11, (Continued)

The Moderating Effect of Political Connections on Political Uncertatiny and the Earnings-Return Relation

 $UR_{(-1,+1)i} = \alpha + \beta_1 UE_{it} + \beta_2 POL_UNCERTAIN_t + \beta_3 (UE \times POL_UNCERTAIN)_{it} + \beta_4 CONNECTED_{it} + \beta_5 (UE \times CONNECTED)_{it}$

 $+\beta 6 (POL_UNCERTAIN\ x\ CONNECTED) it + \beta_7 (UE\ x\ POL_UNCERTAIN\ x\ CONNECTED)_{it} + \beta_8 (UE\ x\ Macro\ Characteristics)_{it}$

 $+\beta 9(UE\ x\ Firm\ Characteristics)it + \beta 10Macro\ Characteristicst + \beta 11Firm\ Characteristicsit + \varepsilon$

	Panel I	B: Economic Policy	Uncertainty Index		
		(1)	(2)	(3)	(4)
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indica	ator <u>CONNECTED</u> Candidate	^e <u>CONNECTED</u> ^{Home}	CONNECTED Tax
UE		0.1020***	0.1080***	0.1030***	0.1060***
		(11.00)	(11.52)	(11.04)	(11.30)
POL_UNCERTAIN		0.0014**	0.0013*	0.0015**	0.0013**
		(2.07)	(1.94)	(2.29)	(2.04)
UE x POL_UNCERTAIN	(-)	-0.0178***	-0.0172***	-0.0194***	-0.0180***
		(-5.19)	(-5.12)	(-5.68)	(-5.35)
CONNECTED		-0.0012	-0.0002	0.0001	-0.0007*
		(-1.47)	(-1.12)	(0.22)	(-1.76)
UE X CONNECTED		0.0073**	-0.0060***	-0.0055***	-0.0057***
		(2.10)	(-5.59)	(-5.08)	(-5.25)
POL_UNCERTAIN x CONNECTED		0.0001	0.0002	-0.0003	0.0001
		(0.10)	(0.92)	(-0.78)	(0.33)
UE x POL_UNCERTAIN x CONNECTED	(+)	0.0025	-0.0003	0.0055**	0.0020
		(0.34)	(-0.17)	(1.97)	(0.90)

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Inercept	0.0182***	0.0183***	0.0186***	0.0181***
	(4.94)	(4.95)	(5.02)	(4.90)
Firm Characteristics	Included	Included	Included	Included
Macroeconomic Charactertistics	Included	Included	Included	Included
Firm Fixed Effects	Included	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included	Included
Adj. R-squared	9.20%	9.20%	9.20%	9.20%
N	104,220	104,220	104,220	104,220

^{*, **, ***} indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by firm and year (Petersen 2009).

Table 11, (Continued)

The Moderating Effect of Political Connections on Political Uncertatiny and the Earnings-Return Relation

 $UR_{(-1,+1)i} = \alpha + \beta_1 UE_{it} + \beta_2 POL_UNCERTAIN_t + \beta_3 (UE \times POL_UNCERTAIN)_{it} + \beta_4 CONNECTED_{it} + \beta_5 (UE \times CONNECTED)_{it}$

 $+\beta6(POL_UNCERTAIN\ x\ CONNECTED)it + \beta_7(UE\ x\ POL_UNCERTAIN\ x\ CONNECTED)_{it} + \beta_8(UE\ x\ Macro\ Characteristics)_{it}$

 $+\beta 9(UE\ x\ Firm\ Characteristics)it + \beta 10Macro\ Characteristicst + \beta 11Firm\ Characteristicsit + \varepsilon$

Panel C: Tax-specific Economic Policy Uncertainty Index						
		(1)	(2)	(3)	(4)	
<u>Variable</u> ^{a,b}	Prediction	CONNECTED Indicator	CONNECTED Candidate	CONNECTED Home	CONNECTED Tax	
UE		0.1050***	0.1110***	0.1060***	0.1090***	
		(11.27)	(11.79)	(11.27)	(11.56)	
POL_UNCERTAIN		0.0013	0.0010	0.0015	0.0012	
7		(1.09)	(0.91)	(1.28)	(1.01)	
UE x POL_UNCERTAIN	(-)	-0.0219***	-0.0202***	-0.0247***	-0.0222***	
		(-3.82)	(-3.64)	(-4.33)	(-3.97)	
CONNECTED		-0.0012	-0.0002	0.0001	-0.0007*	
		(-1.49)	(-1.20)	(0.16)	(-1.84)	
UE X CONNECTED		0.0079**	-0.0060***	-0.0056***	-0.0058***	
		(2.27)	(-5.65)	(-5.15)	(-5.33)	
POL_UNCERTAIN x CONNECTED		0.0011	0.0007*	0.0001	0.0007	
		(0.80)	(1.95)	(0.00)	(1.28)	
UE x POL_UNCERTAIN x CONNECTED	(+)	0.0025	-0.0014	0.0079	0.0022	
		(0.20)	(-0.48)	(1.64)	(0.55)	

Inercept	0.0179***	0.0179***	0.0182***	0.0178***
	(4.86)	(4.86)	(4.93)	(4.80)
Firm Characteristics	Included	Included	Included	Included
Macroeconomic Charactertistics	Included	Included	Included	Included
Firm Fixed Effects	Included	Included	Included	Included
Quarter Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Cluster by Firm and by Year	Included	Included	Included	Included
Adj. R-squared	9.10%	9.20%	9.20%	9.20%
N	104,220	104,220	104,220	104,220

^{*}, **, *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels, respectively.

^a All variables are defined in Appendix A.

^b All p-values are based on two-tailed tests (in parentheses) and are calculated based on standard errors that are clustered by broker and firm (Petersen 2009).