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The Effect of Political Divide on Profitability and Valuation: Evidence from the Oil and Gas sector

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ABSTRACT
This paper focuses on profitability and valuation of firms when the future path of government policy is uncertain. Specifically, the paper examines whether the economic risk caused by gridlock during periods of divided government influences profitability and valuation of firms that operate in the oil and gas sector. Using U.S. publicly traded oil and gas firms from the Compustat database covering the period 1989 to 2016, the results show that firms are profitable when there is a divided government; however, there is no association between divided government and firm valuation. Large firms tend to be profitable during Republican control and small firms are more profitable when there is a divided government. In sum, political institutional factors affect the profitability of firms that operate in the oil and gas sector; however, this relation differs across firm size and industry.

Key Words: Political Divide, Profitability, Valuation, Oil and Gas Sector
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1 Introduction

This study assesses the impact of government control type (i.e., divided government, and unified government under both Democratic and Republican controls) on profitability and valuation of oil and gas companies headquartered in the United States of America (U.S.A.). Divided government has become a subject of much scholarly interest in recent years as partisan conflict and gridlock between the presidency and congress have characterized American politics. While much research has explored the effects of divided government on policymaking and governance, relatively few studies have extended the discussion to financial market contexts.

The literature has shown that under a unified government, unlike under a divided government, the government can respond much more quickly to income shock by acting briskly to manage the situation so that market performance is restored (Roubini & Sachs, 1989). Lohmann & O'Halloran (1994) state that exemplary market performance is tied to good governance and unified government. Furthermore, Fabozzi, Ma, and Oliphant (2008) explain that when there is a divided government, policies made by the president is met with resistance, making it difficult to adopt such policies and so failure to take such policies in totality or timely hinders market performance (Roubini and Sachs, 1989). Using a balancing model, Fiorina (1992) shows that unlike a divided government, a unified government is able to agree on polices faster and with much ease.

Recent studies explain the various roles played by institutions in forming the U.S. trade policies and the bond between party affiliation of the president and market performance. These studies have compared market performance with the party in power (Democrats or Republicans). President's leadership has significant impact on market performance, and it has been shown that the market performs better under Democratic presidency than under Republican presidency (Hensel and Ziemba, 1995). According to Hobbs and Riley (1984), the Republican presidency is associated with big businesses and investment plans and if executed well will have a huge boost to market performance, whiles Democratic presidency is associated with policies geared towards improving the life of ordinary citizens. This makes the Republican policies favorable for large companies and investors. However, these findings have been questioned by scholars who argue that the Republican party's policies are only ideal for the short term, whiles those of the Democratic party are better for the short-term and best for long-term (Hensel and Ziemba, 1995).

Using the NYSE composite index data covering the period 1969 to 2000, Swensen and Patel (2004) show a positive return during Democratic presidency, although it is not statistically significant. However, in another study by Sy and Zaman (2011), they find a higher return during Democratic presidency. Other studies have examined the nature of market performance during the first and final years of Democratic and Republican presidencies**.** For instance, Johnson, Chittenden and Jensen (1999) document that there is an excellent market performance during the last two final years as compared to the first two years in office.

The literature indicates that the market performs better under Democratic control. Sabherwal et al (2017) argue that this might be so because these studies focus on the overall market performance. They posit that Democratic control effect on market performance will differ across industries. This is because each industry sector performance will depend on the party occupying the White House and/or controlling congress (Fama and French 1993). Industries contribute money to political campaign of a party whose policies favor them. Thus, when their party is in power, we expect that policies that will be enacted will favor these industries which will result in better performance for firms that operate in them. Using the tenure of Republican and Democratic presidencies covering the periods 1981 to 1991, Hensel and Zembe (1995) find that" sin" stocks performed relatively better under a Republican regime than under a Democratic regime. In addition, Sabherwal et al (2017) show that returns in excess of market are higher during Republican presidency than during Democratic presidency for sample consisting of sin stocks as well as for each of the three subsamples of tobacco, alcohol, and gaming stocks.

This study focuses on oil and gas sector and examine whether government control type (i.e. Democratic, Republican, and Unified controls) can explain some of the cross-sectional variation in profitability and valuation of firms that operate in the sector. Unlike the policies of the Democratic party, most policies of the Republican party favor companies in the oil and gas sector (Davenport, 2015). This makes Republican party the favorite of oil and gas companies and thus, receives overwhelming campaign contribution support from them. It is therefore expected that during the years of Republican (Democratic) control firms in the oil and gas sector will be more (less) profitable, and have higher (lower) valuation.[1] However, the divided government impacts on oil and gas sector is not clear. The study explores this by examining whether during the periods of gridlock in Washington firms in the sector are less profitable and have lower valuation.

The study first examines the effects of divided government on firms that operate in the oil and gas sector. After controlling for firm characteristics, firm fixed effects, and year fixed effects, we find that the periods of dividend government are associated with higher profitability. We argue that due to the uniqueness of the four industries within

the sector and the differences in regulations covering their operations, divided government may have different impact across the four industries; namely, crude petroleum and natural gas, drilling oil and gas wells, oil and gas field exploration services, and oil and gas field services, not elsewhere classified). We test this by analyzing subsamples that consist of firms in each of the four mentioned industries. We observe that divided government effect on return on assets (i.e. profitability) is driven by firms that operate in these two industries: crude petroleum and natural gas, and oil and gas field exploration services. These results are consistent with our argument that the effect of gridlock should differ across industries.

The paper further examines the effect of unified government (i.e., Democratic and Republican controls) on profitability and valuation and find that both Democratic and Republican controls are associated with lower profitability, though the effect is much stronger during the periods of Democratic control. These results contradict our hypotheses that during the periods of Democratic (Republican) control, oil and gas companies will be less (more) profitable. As before, we examine unified government effect across industries and find that the impact of Republican control on profitability is driven by firms that operate in the drilling and gas wells industry. And that of Democratic control is driven by firms in the oil and gas field exploration services' industry.

Finally, we restrict our analysis to firms that are headquartered in the state of Texas. The full sample consists of 641 unique firms that are headquartered across 37 states. More than 50% of these firms (i.e. 333 out of 641) are located in Texas. The energy sector is one of the sectors that drive Texas's economy. And it has been a dominant force politically and economically within the state. Texas is known to be one of the global leaders in this sector. Thus, the state may have regulations covering this sector that may differ from those of other states. Nevertheless, since most of the firms in my sample are in Texas, it is interesting to explore how government control type impact profitability and valuation of these firms.

We show that during the periods of Democratic control, firms that operate in the crude petroleum and natural gas industry are less profitable. We also find that Republican control is associated with valuation, but only for firms in the oil and gas field exploration services' industry. However, further analysis shows that Democratic control effect on profit is primarily driven by small oil and gas firms. The Republican control effect on profit is only seen in large

[1] Republican (Democratic) control is a dummy that takes a value of one if the Republican (Democratic) party occupies the White House and control both the house and the senate.

oil firms. Lastly, the study shows that divided government is positively associated with higher profit; however, this effect is seen only in small firms, whereas the negative effect of divided government on profit is driven by large firms.

The rest of the paper proceeds as follows. section 2 briefly reviews the related literature. Section 3 describes the data and presents the summary statistics. Section 4 presents the main results of the effects of divided and unified government (i.e. Democratic and Republican controls) on profitability and valuation. Section 5 provides evidence from the oil and gas industry type. Section 6 provides evidence from a subsample of firms located in the state of Texas. Section 7 concludes.

2 Literature review

In many democracies globally, there exists a conflict between branches of government. For instance, conflict between the executive and the legislative branches (Grossmann and Hopkins, 2015). In the United States (U.S.), the government is formed by one of the two main rival parties (Republican and Democrats), which can create an executive and legislative arm of government interchangeably. Prior studies find that divided government leads to conflicts of interest between the executive and the legislative branches when it comes to budgetary allocations, policies and other trade-related policies and regulations. This division always results in economic consequences such as an imbalance growth of all sectors of the economy as each party tries to cater for its support base or voting bloc. This catering has an unintended consequence on the financial market.

Divided government has become a subject of much scholarly interest in recent years as partisan conflict and gridlock between the presidency and Congress have characterized American politics. A divided government is where the different political parties control the different branches of federal government. For instance, a split government exists where the Republican party controls the presidency, and the Democratic party controls the congress. This always results in a situation where each party is stalling the effort of its rival. For example, the Democrat controlled congress passes a bill, but the Republican president can reject it, and president's proposals always cannot get adopted since laws have to originate from the congressional leaders (Barber and McCarty, 2015).

While much research has explored the impacts of divided government on policymaking and governance, relatively few studies have extended the discussion to financial market contexts. Divided government affects financial market outcomes when agents perceive division and potential gridlock as a signal of policy uncertainty and factor such risk perceptions into their decision-making. This study examines the impacts of divided government on profitability and valuation of firms that operate in the oil and gas sector. The paper further explores the financial market implications (profitability and valuation) of single party control of the presidency and Congress and posits that the impact of single party control on profitability and valuation will depend on whether the Democratic or the Republican party controls both the presidency and congress.

Market performance is the process of methodical management of the company's resources with the aim of engaging in trade and business activities which will improve the economy and maintain quality in customer care and experience**.** In most cases, exemplary market performance (profitability and valuation) is tied to good governance and unified government (Lohmann & O'Halloran, 1994). Earlier research directly connects market performance of the US to its politics as presented by the Democratic and the Republican party politics. At each election cycle, each party takes control of one or more branches of government: the executive or the legislature or both. This results in various conflicts of political interests which always affect the profitability and valuation of firms in different sectors of the US economy.

Unlike when the government is divided, when the government is united (i.e. one-party controls both the legislative and executive branches), it responds more quickly to income shock by acting briskly to manage the situation so that market performance is restored (Roubini & Sachs, 1989). For instance, free trade policies will only be supported and implemented well and faster only if the president's party controls congress. Unlike under unified government, under divided government the president will face resistance when negotiating trade agreements. In most cases, the president's party is the minority in congress, thus making it difficult to adopt such policies (Fabozzi, Ma, and Oliphant, 2008). Failure to take such policies in totality or timely hinders market performance (Roubini and Sachs, 1989).

Market performance highly depends on set policies which should be reviewed more often due to the ever-changing market environment posed by technological advancement and global competition. Therefore, it is prudent for the US

government to review its policies frequently for today and future good market performance and relevancy internationally (Alesina and Rosenthal, 1995). Using the Balancing Model, Fiorina (1992) shows that under unified government such policies are agreed on faster with much ease than under divided government. Recent research has explained the various roles played by institutions in forming US trade policies and the bond between party affiliation of the president and market performance. President's leadership is weighed on the overall performance of the various sectors of the economy which translate to market performance (Hensel and Ziemba, 1995).

Good market performance has been recorded under Democratic presidency than under Republican president. The Republican president is associated with big businesses and investments which upon full engagement and accomplishment has a huge boost to market performance, whereas the Democratic president focuses on equity across board to improve the life of the ordinary citizens. This makes the Republican policies favorable for large companies and investors rather than for ordinary citizens (Hobbs and Riley, 1984). However, many economists and scholars argue that the Republican party policies are for short-term benefits, whereas those of the Democratic party are partly good for the short-term and best for the long-term achievement of good market performance (Hensel and Ziemba, 1995). Many average citizens appreciate the democratic party policies because they address their current plights and seek to stabilize and improve market performance for the long-term basis.

Some studies have analyzed the nature of growth or decline of market performance under both the Democratic and the Republican presidencies based on the first and final years in office**.** A number of studies have been done on Presidential election and short-term stock market performance and find that markets prefer a Republican President. Niederhoffer, Gibbs and Bullock (1970) document that, few days and weeks after a Republican presidential victory, stock markets perform much better than Democrats presidential victory. The same results have been documented by Riley and Lucksetich (1980), Reilly and Drzycimski (1976) and Siegel (1998). For long-term stock market performance, Smith (1992) research documents that between 1921 to 1991, the average annual S&P 500 returns were 2.5% higher during Democratic regime than Republicans but the difference was not statistically significant. Stovall in 1992 also did a similar research from 1901 to 1992 and documented that, the average change in the Dow Jones industrial average during Democratic regime was higher (34.9%) than Republicans (30.5%).

According to Huang (1985) one of the myths of the stock market is that, the market prefers Republicans and sees Republicans as a business party. In his research he shows that, higher average returns have been recorded during democrats' administration than during republican administration. The literature documents good market performance during the last two final years as compared to the first two years in office (Johnson Chittenden and Jensen, 1999). This is attributed to increased large capitalization returns during the third and fourth year and increased utilization of microeconomic policies. Blinder and Watson (2016), in a broader sense argues that, the US economy in general no matter how one defines performance, is better under democrat's presidency than under republican's presidency. Their research further show that, growth rate of every major area of real GDP is higher under democrats than republicans. They show that, for the 64 years of data collected from Truman to Obama's years, annualized stock market returns and corporate profit share of gross domestic income are all doing better under democrats.

However, according to Sabherwal et al (2017), these studies done so far only dwelled on overall market performance of all firms in the Unites States. They believe that conducting a separate study for each sector, we will observe that profitability (returns) largely depends on the party that occupies the White House and/or controls congress (see e.g. Fama and French, 1993). For instance, Sabherwal et al. (2017) show that the "sin" stocks (i.e. publicly listed companies that produce tobacco, alcohol, and gaming) perform better under the Republican presidency than under Democrat presidency. Agricultural and biotechnology industries are lucrative industries responsible for agricultural research and safe production of food and related products. Monsanto is an example of a company which falls in this industry. Monsanto has been criticized by various researchers and organizations for producing products that are unsafe for human consumption. However, Monsanto and its competitors have received maximum protection from the US government, especially from the Republican presidency and congress representatives (Lawson, 2014). It is evident that Monsanto experiences cycles of good and bad performances depending on which political party is in power. This forces many firms in this industry to support the party whose policies favor them (Lawson, 2014).

Performance of the health sector has been put in dilemma by the politics of divided government. Democratic party policies favor their core voters who are low and middle-income earners, whereas Republican party models its policies to favor its voting block who tend to be high income earners (Davenport, 2015). Democrats want a

health sector which is accommodative irrespective of one's social or financial status. This has been rejected by the Republicans who advocate for healthcare where one is responsible for his/her health. For instance, the famous Obama Healthcare was passed under Democrat presidency, whereas the Republican presidency that succeeded it has tried to do away with this healthcare policy. Such push and pull brought by the uncertainty surrounding Obama Healthcare have adversely affected the healthcare sector (Davenport, 2015).

Most of the policies of the Republican party, unlike those of the Democratic party, favor many of oil and gas companies (Davenport, 2015). This makes the Republican party an ally of the oil and gas companies and thus, receives overwhelming campaign contribution support from them (see e.g. Sabherwal et al., 2017). In the most recent years, the Democratic party's policies have been unfavorable to oil and gas sector. This makes the party lose grip of the support from the sector's firms and became unpopular. These firms play an important role regarding which party gets to occupy the White House. Ironically, these firms support candidates whose policies are friendly to them irrespective of their party affiliation. For instance, in 2008, Mr. McCain tirelessly advocated for environmental policies and ran for president on climate change credentials which were stronger than those of his opponent Barrack Obama, who played neutralism on that issue. This did not go well with the wealthy oil and gas companies who in turn shifted their support to Mr. Barack Obama. Just like history repeats itself, President Trump of the Republican party called a global warming a hoax on his run for White House and reversed environmental policies that Mr. McCain fronted and defeated his opponent who held stronger opinions on climatic change. In fact, it was announced that he intends to take the US out of Paris climate accord (Barber and McCarty, 2015).

Actions by President Trump during his campaign saw the Republican party got huge support from the oil and gas companies. It is argued that fossil fuel multimillionaires injected more than $100 million into the Republican party presidential campaign. President Trump himself has millions of dollars invested in fossil fuel industry, which is under threat by the global warming (Barber and McCarty, 2015). It is therefore evident that more of Republican party's politics and politicians are indirectly or directly linked to this sector than are the Democratic party's politics and politicians. In many of Republican party presidential campaigns, their ideology always does not conflict the interests of the oil and gas companies. This makes the republican party policies favor oil and gas sector and thereby enacting

laws that favor companies that operate in the sector. It is therefore believed that these companies will do better (profitable and be valuable) during the periods that Republican party controls Washington.

3 Data and summary statistics

This section discusses data sources, key variables, and presents summary statistics. The main variables of interest in this paper are divided government and unified government, either under Republican or Democratic party. We winsorize all continuous variables at the 1st and 99th percentiles to remove any potential effects of extreme values on the results.

3. 1 Data sources and main variables

We collect all firm-year observations for publicly listed oil companies with Standard Industry Classification (SIC) codes of 1311 (Crude Petroleum and Natural Gas), 1381 (Drilling Oil and Gas Wells), 1382 (Oil and Gas Field Exploration Services), and 1389 (Oil and Gas Field Services, not elsewhere classified). The sample period is from 1989 to 2016, which covers the period where President George H. W. Bush (a Republican) started his first term, and President Barack Obama (a Democrat) ended his second term. Data on company financials come from Compustat database. For the analysis, we combine data from numerous sources. Also political information (i.e. which party controls the house, the senate, and White House) from Wikipedia (https://www.wikipedia.org) was obtained, and Dave Leip's Atlas of U.S. Presidential Elections (https://uselectionatlas.org).[2]

We merge Compustat data with political information and obtained initial firm-year observations of 7,597.[3] The main predictors are divided government, unified government under Republican party, and unified government

[2] Further, I verify the political information from https://web.education.wisc.edu/nwhillman/index.php/2017/02/01/party-control-in-congress-and-state-legislatures/, and http://wiredpen.com/resources/political-commentary-and-analysis/a-visual-guide-balance-of-power-congress-presidency/

[3] The sample consists of only oil and gas companies headquartered in U.S.

under Democratic party. In line with prior literature (see Hutton, Jiang, and Kumar, 2014), dependent variables are return on assets (ROA), and Tobin's q. The firm-level controls are market-to-book ratio, lagged total debt to assets ratio, firm size, and loss dummy.[4] All observations exclude missing values for any of the firm-level control variables. This restriction results in a final sample that consists of 641 unique firms and 5,544 firm-year observations.

3.2 Variables' construction

Divided government is defined as a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate. Democrat control is a dummy variable that takes a value of one if democratic party controls the White House, the house, and the senate. Republican control is a dummy that takes a value of one if the Republican party controls the White House, the house, and the senate.

Following Hutton, Jiang, and Kumar (2014), the dependent variables are defined as follows: ROA as the ratio of income before extraordinary items (IB) to total assets (AT), and Tobin's q as book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Further, the control variables are defined as follows: Size is the log of total book assets (AT); Loss is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; and market-to-book as the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC).

3.3 Descriptive statistics

Table 1 provides the summary statistics for political information and firm-level variables we use in our analysis. Panel A shows the year-level summary statistics for political information variables. We observe that divided government has an average of 0.500, indicating that we had a divided government for 14 years out of 28 years that our sample period covers. Unified government type (i.e. Democrat control or Republican control) has an average of 0.143, implying that we had each type for 4 years during our sample period.

Panel B of Table 1 reports summary statistics at the firm-year level. Approximately 51 percent of all firm-year observations occurred during the period of divided government, and about 14 (13) percent of them occurred during the period of unified government under Democrat (Republican) control. Average return on assets (ROA) is negative 0.24., and average Tobin's q is about 3.59. Panel C shows the various standard industrial classification and the number of unique firms in each classification. Crude petroleum and natural gas industry has the most number of firms (536 unique firms), whiles oil and gas field exploration industry has the least number of firms (24 unique firms). More than half of the oil and gas companies are headquartered in the state of Texas. Panel D indicates the number of firms located in Texas for each industry classification. Crude petroleum and natural gas industry has the most number of firms, whiles oil and gas field exploration services' industry has the least. 333 unique oil companies are in Texas.

[4] I define the construction of our variables in the next section.

Table 1
Summary statistics and industrial classification
The sample consists of all publicly traded oil and gas companies covering the period 1989 to 2016. *Divided government* is a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate. *Democrat control* is a dummy variable that takes a value of one if democratic party controls the White House and congress. *Republican control* is a dummy that takes a value of one if the Republican party controls the White House and congress. See appendix A for the definitions of the remaining variables.

Panel A: Summary statistics at year level

	Mean	Std. Dev.	Median	25th	75th	Obs.
Divided government	0.500	0.509	0.500	0	1	28
Democrat control	0.143	0.356	0	0	0	28
Republican control	0.143	0.356	0	0	0	28

Panel B: Summary statistics at bank-year level

	Mean	Std. Dev.	Median	25th	75th	Obs.
Divided government	0.507	0.500	1	0	1	5544
Democrat control	0.142	0.349	0	0	0	5544
Republican control	0.133	0.340	0	0	0	5544
ROA	-0.244	1.168	0.005	-0.114	0.053	5544
Tobin's q	3.587	14.086	1.405	1.075	2.008	5544
Market-to-book ratio	2.554	7.728	1.111	0.795	1.672	5544
Size	4.893	2.722	5.011	2.927	7.001	5544
Loss	0.478	0.500	0	0	1	5544
Lag of TDA	0.342	0.492	0.258	0.079	0.433	5544

All firms

SIC Code	Industry Name	Number of Firms
1311	Crude petroleum and natural gas	536
1381	Drilling oil and gas wells	41
1382	Oil and gas field exploration services	24
1389	Oil and gas field services, not elsewhere classified	40
Total number of firms		641

Panel D: Texas firms

SIC Code	Industry Name	Number of Firms
1311	Crude petroleum and natural gas	259
1381	Drilling oil and gas wells	31
1382	Oil and gas field exploration services	18
1389	Oil and gas field services, not elsewhere classified	25
Total number of firms		333

4 Empirical model

4.1 Model specification

Here, we examine the effects of divided government and unified government type on return on assets (Profitability) and Tobin's q (Valuation) and conducted our analysis by estimating the following regression model:

$$\mathrm{Dep}_{i,t} = \alpha + \beta \mathrm{GovType}_{t} + \lambda \mathrm{Controls}_{i,t} + \mathrm{Firm}_{i} + \mathrm{Year}_{t} + \varepsilon_{i,t} \quad (1)$$

where Dep represents the dependent variables: return on assets (ROA), and Tobin's q. GovType denotes the three key predictors, namely, divided government, Democrat control, and Republican control. Controls denotes a vector of firm-specific characteristics that can explain some of the variation in our dependent variables. We control for characteristics such as market-to-book, firm size, loss, and lag of total debt to asset ratio (TDA).

In addition, the model specification includes both firm fixed effects and year fixed effects. Firm fixed effects control for unobserved firm attributes that are constant across time but have the potential to influence the dependent variables. Year fixed effects control for shocks to the economy that have bearing on the dependent variables. The GovType estimates in these firm fixed effects regressions would only capture the time variation in profitability, and valuation that are likely caused by these different GovType.[5] This model specification in (1) above follows that of Hutton et. al. (2014).

4.2 The effect of divided government

The literature suggests that divided government causes gridlock that leads to policy uncertainty. Consequently, market agents and managers of corporations will consider this policy risk when valuing financial assets and taking investment decisions. All things being equal, it is expected that during the periods of divided government oil and gas firms will be less profitable and have lower valuation. These hypotheses are examined here.

Table 2 presents the results for the regression estimations. The result in Column 1 shows that divided government explains some of the variation in profitability (i.e. return on assets, ROA). The estimated coefficient on divided government is positive 0.348 and significant at 1% level, this indicates that oil and gas companies are profitable when the government is divided. Similar inference cannot be made about the valuation of oil and gas companies. The coefficient of divided government is positive 0.043, but it is not significant, as shown in Column 2. This implies that the periods of divided government do not provide valuable information to the market which can affect the valuation of oil and gas companies.

4.3 The effect of unified government

Next, we test whether the periods where one party controls both the White House and congress (i.e., both the house and the senate) can explain some of the variation in profitability, and valuation. If Republican (Democratic) party's policies favor (do not favor) the oil and gas sector, then we expect that during the periods of Republican (Democratic) control firms that operate in this sector will be more (less) profitable and have higher (lower) valuation.

The results are provided for this test in Table 2. In Column 3, the estimated coefficient on Democratic (Republican) control is negative 0.556 (0.348), and significant at 1% level, indicating that oil and gas companies are less profitable when there is a unified government. The reduction in profitability is more severe under Democratic control than under Republican control. In contrast, there is no any evidence that unified government has impact on firm valuation. The coefficient on both Democratic and Republican controls are not statistically different from zero, as indicated in Column 4.

Taken together, we find that the market doesn't price the information provided by unified government, and profit is lower under each type of unified government, though it is much lower under Democratic control.

Table 2
The effect of government type on profitability
The sample consists of all publicly traded oil and gas companies covering the period 1989 to 2016. *Divided government* is a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate. ROA is the ratio of income before extraordinary items (IB) to total assets (AT); *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. *Size* is the log of total book assets (AT). *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise. Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year. *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in

[5] We use OLS regressions with standard errors that allow for heteroskedasticity and clustering at the firm level for our estimations.

current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

	Divided government		Unified government	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Divided government	0.348***	0.0428		
	(3.69)	(0.09)		
Democratic control			-0.556***	-0.307
			(-4.76)	(-0.51)
Republican control			-0.348***	-0.0428
			(-3.69)	(-0.09)
Market-to-book	-0.0831***	1.767***	-0.0831***	1.767***
	(-7.68)	(19.50)	(-7.68)	(19.50)
Size	0.222***	-0.155	0.222***	-0.155
	(5.81)	(-0.86)	(5.81)	(-0.86)
Loss	-0.219***	-0.0931	-0.219***	-0.0931
	(-8.80)	(-0.95)	(-8.80)	(-0.95)
Lag of TDA	-0.0235	-0.885	-0.0235	-0.885
	(-0.26)	(-1.04)	(-0.26)	(-1.04)
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	5544	5544	5544	5544
Adjusted R-square	0.689	0.920	0.687	0.920

5 Oil and gas industry type

In this section we argue that the effect of divided and unified governments on profitability and valuation will depend on the type of industry the oil and gas companies operate in. We re-estimate the model conditional on industry type.

5.1 The effect of divided government by industry type

Columns 2 of Table 3 Panel A shows that divided government has no effect on valuation (Tobin's q) for firms that operate in crude petroleum and natural gas industry. The coefficient on divided government is positive 0.024 for Tobin's q, but it is not significant at 10% level. However, oil and gas companies in this industry tend to be profitable during the periods of divided government. The estimated coefficient on divided government is positive 0.419, and significant at 1% level, as indicated in Column 1. For firms in drilling oil and gas wells' industry, we observe that there is no effect of divided government on profitability, and valuation, as indicated in Column 3, and Column 4, respectively.

For Panel B, divided government only has effect on profitability of firms in oil and gas field exploration services' industry. Column 1 shows that the coefficient on divided government is positive 1.050 and it is significant at 10% level for ROA. For Tobin's q, the coefficient on divided government is not significant, as indicated in Column 2. For firms that operate in the industry categorized as oil and gas field services, not elsewhere classified, the paper finds no evidence that divided government affect profitability and valuation of these firms, according to Columns 3 and 4, respectively. In sum, it can be inferred that firms operating in crude petroleum and natural gas, and oil and gas field exploration services' industries are profitable during the periods of divided government.

Table 3
Divided government conditional on firm type
The sample consists of all publicly traded oil and gas companies covering the period 1989 to 2016. *Divided government* is a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate. ROA is the ratio of income before extraordinary items (IB) to total assets (AT). *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Firm controls include: *Size* is the log of total book assets (AT); *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

Panel A	Crude petroleum and natural gas		Drilling oil and gas wells	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Divided government	0.419***	0.0237	0.448	-4.959
	(4.16)	(0.04)	(1.58)	(-1.40)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	4521	4521	430	430
Adjusted R-square	0.698	0.921	0.048	0.422

Panel B	Oil and gas field exploration services		Oil and gas field services, not elsewhere	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Divided government	1.050*	-2.078	0.309	-0.109
	(2.10)	(-1.43)	(1.11)	(-0.77)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	200	200	393	393
Adjusted R-square	0.827	0.986	0.406	0.985

5.2 The effect of unified government by industry type

Here, we explore whether restricting the sample to industry type would change the main results for unified government. Table 4 provides the results for the estimations conditional on industry type, using Democratic and Republican controls as the key predictors. Panel A provides the results for firms that operate in the crude petroleum and natural gas industry. In Column 1, we find that during the years of Republican party control oil and gas companies are less profitable (the coefficient on Republican control is negative 0.419, and significant at 1% level) – this result contradicts the notion that these firms will be profitable under Republican party control since the party's policies favor them. There is no Democratic control effect on profitability. Further, Column 2 suggests that each unified government type has no impact on firm valuation.

Panel A Column 4 show that firms in drilling oil and gas wells' industry, unified government has no effect on valuation. Column 3 indicates that Democratic control has no effect on profitability; however, there is a reduction in profit during periods of Republican control (the coefficient on Republican control is negative 0.233 and significant at 10% level).

We observe different results for firms in the oil and gas field exploration services industry. Column 2 of Panel B show that unified government has no effect on valuation. Column 1 shows that firms in this industry are less profitable when Democratic party controls Washington, but there is no effect of Republican control on profitability. For firms in oil and gas field service, not elsewhere classified industry, we can infer that unified government has no effect on profitability and valuation, as shown in Columns 3, and 4, respectively. In sum, we can infer that firms that operate in crude petroleum and natural gas, and drilling oil and gas wells' industries are less profitable when Republican party controls both the executive and legislative branches.

Table 4
Unified government conditional on firm type
The sample consists of all publicly traded oil and gas companies covering the period 1989 to 2016. *Democrat control* is a dummy variable that takes a value of one if democratic party controls the White House and congress. *Republican control* is a dummy that takes a value of one if the Republican party controls the White House and congress. ROA is the ratio of income before extraordinary items (IB) to total assets (AT). *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Firm controls include: *Size* is the log of total book assets (AT); *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

Panel A	Crude petroleum and natural gas		Drilling oil and gas wells	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Democratic control	-0.0784	-0.431	-0.305	3.876
	(-1.42)	(-1.26)	(-1.44)	(1.34)
Republican control	-0.419***	-0.0237	-0.233*	2.492
	(-4.16)	(-0.04)	(-1.80)	(1.49)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	4521	4521	430	430
Adjusted R-square	0.698	0.921	0.048	0.422

Panel B	Oil and gas field exploration services		Oil and gas field services, not elsewhere	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Democratic control	-1.050**	2.078	-0.309	0.109
	(-2.10)	(1.43)	(-1.11)	(0.77)
Republican control	-0.538	0.141	-0.232	-0.0225
	(-1.37)	(0.23)	(-1.05)	(-0.22)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	200	200	393	393
Adjusted R-square	0.827	0.986	0.406	0.985

6 Texas firms

Texas is the hub of oil and gas sector. There are more oil and gas companies headquartered in the state of Texas than the rest of the states. As indicated earlier in Panel C of Table 1, more than half of all companies in our full

sample are in Texas.[6] The energy sector is the main driver of the state's economy. Indeed, the state is one of the global leaders in the energy sector and has sets of policies and regulation that govern the activities of firms that operate there. Consequently, Washington policies that affect the energy sector may have different effects on firms that are headquartered in Texas. Thus, one can argue that divided and unified government effects on profitability, and valuation could be driven by firms that are located in Texas. This concern is addressed by re-estimating the model using subsample of firms that are headquartered in Texas.

6.1 Texas firms and type of government control

Column 1, and Column 2 of Panel A Table 5 show that for firms in crude petroleum and natural gas industry, divided government has no impact on profitability, and valuation. We find that divided government has no effect on profitability and valuation, for firms in the drilling oil and gas wells industry, as indicated in Panel A Column 3, and Column 4, respectively. Firms in the oil and gas exploration services' industry are less valuable under divided government (see Column 2 of Panel B). The coefficient on divided government is negative 0.855 and significant at 5% level. However, divided government has no effect on profitability, according to Column 1. There is no divided government effect on both profitability and valuation for firms that operate in the oil and gas field services, not elsewhere classified industry, as observed in Column 3, and Column 4 of Panel B.

Table 5
Divided government conditional on firm type- Texas firms only
The sample consists of all publicly traded oil and gas companies that are headquartered in the state of Texas covering the period 1989 to 2016. *Divided government* is a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate. ROA is the ratio of income before extraordinary items (IB) to total assets (AT). *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Firm controls include: *Size* is the log of total book assets (AT); *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

Panel A	Crude petroleum and natural gas		Drilling oil and gas wells	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Divided government	0.138	0.110	0.493	-6.390
	(1.29)	(0.20)	(1.43)	(-1.47)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	2348	2348	341	341
Adjusted R-square	0.681	0.910	0.035	0.420

Panel B	Oil and gas field exploration services		Oil and gas field services, not elsewhere	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Divided government	0.0671	-0.855**	-0.00921	-0.0279
	(0.51)	(-1.95)	(-0.09)	(-0.13)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES

[6] The full sample consists of 641 unique firms that are headquartered in 37 states.

Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	182	182	264	264
Adjusted R-square	0.343	0.540	0.814	0.960

In Table 6, the results for the effect of unified government profitability, and valuation for the restricted sample of Texas firms are presented. It was observed that Democratic control has negative effect on profitability of firms operating in the crude petroleum and natural gas industry, whiles Republican control has no effect (see Panel A Column 1). According to Column 2, unified government has no effect valuation.

For firms in the drilling oil and gas wells' industry unified government has no effect on profitability, and valuation (see Column 3 and Column 4 of Panel A). Further, Republican control has no effect on profitability, whereas Democratic control has negative effect on profitability for firms in the oil and gas field exploration services' industry (see Column 1 of Panel B). For Column 2, Republican control is positively associated with valuation, whereas, Democratic control has no effect on valuation. Finally, for firms in the oil and gas field services, not elsewhere classified industry (as shown in Panel B), Column 3, and Column 4 show that unified government has no effect on profitability and valuation.

In sum, we can infer that during the periods of divided government, firms in the oil and gas field exploration services' industry tend to have lower valuation. The study also documents that firms that operate in either crude petroleum and natural gas industry or oil and gas field exploration services' industry are less profitable when Democratic party controls all branches of government.

Table 6

Unified government conditional on firm type-Texas Firms only

The sample consists of all publicly traded oil and gas companies that are headquartered in the state of Texas covering the period 1989 to 2016. *Democrat control* is a dummy variable that takes a value of one if democratic party controls the White House and congress. *Republican control* is a dummy that takes a value of one if the Republican party controls the White House and congress. ROA is the ratio of income before extraordinary items (IB) to total assets (AT). *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Firm controls include: *Size* is the log of total book assets (AT); *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

Panel A	Crude petroleum and natural gas		Drilling oil and gas wells	
	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Democratic control	-0.428***	0.740	-0.359	5.179
	(-3.26)	(1.14)	(-1.26)	(1.42)
Republican control	-0.138	-0.110	-0.353	3.792
	(-1.29)	(-0.20)	(-1.54)	(1.57)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	2348	2348	341	341
Adjusted R-square	0.681	0.910	0.035	0.420

Panel B	Oil and gas field exploration services		Oil and gas field services, not elsewhere	

	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)
Democratic control	-0.306***	0.328	0.00921	0.0279
	(-3.07)	(0.51)	(0.09)	(0.13)
Republican control	-0.0671	0.855*	0.0323	0.0351
	(-0.51)	(1.95)	(0.34)	(0.23)
Firm controls	YES	YES	YES	YES
Constant	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
# of observations	182	182	264	264
Adjusted R-square	0.343	0.540	0.814	0.960

6.2 Size of Texas firms and type of government control

In this section, we analyze whether divided and unified governments' effects are dependent on the size of the oil and gas companies. These companies are categorized as small or medium or large according to their total assets.

Table 7 provides the results for divided government effect conditional on company size. Column 1 shows that small companies are more profitable during the periods of gridlock. There seems to be no divided government effect on

valuation for small companies, according to Column 2. For medium companies, there is no divided government effect on both profitability and valuation, according to Column 3 and Column 4. Large companies are less profitable when there is a divided government as shown in Column 5; however, there is no impact of divided government on valuation (see Column 6).

Table 7
Divided government effect conditional on firm size
The sample consists of all publicly traded oil and gas companies that are headquartered in the state of Texas covering the period 1989 to 2016. *Divided government* is a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate. ROA is the ratio of income before extraordinary items (IB) to total assets (AT). *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Firm controls include: *Size* is the log of total book assets (AT); *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

	Small firms		Medium firms		Large firms	
	ROA	Tobin's q	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)	(5)	(6)
Divided government	0.940***	-0.419	0.0622	0.0570	-0.0341**	0.0198
	(2.73)	(-0.23)	(0.94)	(0.65)	(-2.03)	(0.41)

Firm controls	YES	YES	YES	YES	YES	YES
Constant	YES	YES	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES
# of observations	791	791	783	783	774	774
Adjusted R-square	0.693	0.906	0.443	0.940	0.510	0.950

Similarly, Table 8 shows the results for the unified government effect conditional on company size. According to Column 1, small firms are less profitable under unified government. However, we find evidence that unified government has no effect on valuation, as shown in Column 2. For medium firms, there is no unified government effect, as indicated in Column 3 and Column 4. Large firms are more profitable under Republican control, whereas Democratic control has no effect (see Column 5). From Column 6, it can be seen that unified government has no effect on valuation. Overall, we find evidence that during the periods of divided (unified) government, small firms are more (less) profitable.

Table 8

Unified government effect conditional on firm size

The sample consists of all publicly traded oil and gas companies that are headquartered in the state of Texas covering the period 1989 to 2016. *Democrat control* is a dummy variable that takes a value of one if democratic party controls the White House and congress. *Republican control* is a dummy that takes a value of one if the Republican party controls the White House and congress. ROA is the ratio of income before extraordinary items (IB) to total assets (AT). *Tobin's q* is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets. Firm controls include: *Size* is the log of total book assets (AT); *Loss* is a dummy that takes a value of one if ROA is negative and zero otherwise; Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year; *Market-to-book* is the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC). All regressions include firm and year fixed effects. Standard errors are corrected for heteroscedasticity and are clustered at the firm level. T-statistics are presented in the brackets below the estimates, with *, **, and *** indicating significance at the 10%, 5%, and 1%, respectively.

	Small firms		Medium firms		Large firms	
	ROA	Tobin's q	ROA	Tobin's q	ROA	Tobin's q
	(1)	(2)	(3)	(4)	(5)	(6)
Democratic control	-1.104***	3.217	-0.0552	-0.0564	0.00430	0.00347
	(-2.79)	(1.50)	(-1.41)	(-0.71)	(0.31)	(0.07)
Republican control	-0.940***	0.419	-0.0622	-0.0570	0.0341**	-0.0198
	(-2.73)	(0.23)	(-0.94)	(-0.65)	(2.03)	(-0.41)
Firm controls	YES	YES	YES	YES	YES	YES
Constant	YES	YES	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES
# of observations	791	791	783	783	774	774
Adjusted R-square	0.693	0.906	0.443	0.940	0.510	0.950

7 Conclusion

Why should profitability and valuation vary across years for firms that operate in the oil and gas sector? Many firm fundamental factors (i.e. firm characteristics) such as leverage, market-to-book, firm size etc. have been found as determinants of this variation. The literature has omitted a potential factor, political institutions (i.e. divided and unified governments). Corporate managers perceive division and gridlock caused by divided government as a signal of policy uncertainty and consequently factor this risk perception into their corporate level decision-making. This study seeks to examine the financial implications of divided government on oil and

gas sector. In addition, the study considers unified government and argue that the impact of single party control on oil and gas sector will depend on the ideology of the party that controls both the White House and congress.

We find that during the periods of divided government oil and gas companies are more profitable. In contrast, during the periods of either Democratic or Republican control, these firms are less profitable. These effects differ across industries in the sector. We find that Democratic control is associated with less profit for small firms and for those that operate in the crude petroleum and natural gas industry. Large firms are profitable under Republican control. We observe that small firms are more profitable when there is a divided government. In sum, we document that political institution (i.e. government control type) is associated with profitability; however, the effect differs across firm size and the industry it operates in.

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Appendix A: Variable definitions

Divided government is a dummy variable that takes a value of one if the president's party is different from the party that controls both the house and the senate.

Democrat control is a dummy variable that takes a value of one if democratic party controls the White House and congress.

Republican control is a dummy that takes a value of one if the Republican party controls the White House and congress.

ROA is the ratio of income before extraordinary items (IB) to total assets (AT)

Tobin's q is defined as the book value of assets plus market value of equity minus book value of equity, all divided by book value of assets.

Size is the log of total book assets (AT)

Loss is a dummy that takes a value of one if ROA is negative and zero otherwise.

Lag TDA is the ratio of total debt (debt in current liabilities (DLC) plus long-term debt (DLTT)) to total book assets (AT), lagged by one year

Market-to-book as the ratio of market value of assets (MVA) to total book assets (AT), where MVA is the sum of the market value of equity (price close (PRCC) times shares outstanding (CSHPRI) plus debt in current liabilities (DLC), long-term debt (DLTT), the liquidation value of preferred stock (PSTKL) minus deferred taxes and investment tax credit (TXDITC).