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Corporate Campaign Contributions as a Predictor for Abnormal Stock Returns after Presidential Elections*

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Abstract

In the U.S. campaign contributions by companies play a major role in financing election campaigns. We analyze contributions by companies before an election and stock market performance after the election for the presidential elections from 1992 until 2004. We find that (i) the percentage of contributions given to the winner in a presidential election and (ii) the total contribution (divided by market capitalization) have a significant positive impact on a company's stock market performance after an election, with the second factor being more important. Furthermore, we find that hypothetical portfolios of the 30 highest contributors according to (i) would have earned significant abnormal returns of up to 0.54% per month (6.6% p.a.) during the first year after an election. Investing in a portfolio formed according to (ii) would have yielded abnormal returns of up to 1.21% per month (15.5% p.a.) for the same observation period.

JEL classification: D72, G10, P16

Keywords: Presidential Election, Corporate Campaign Contributions, Abnormal Returns

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1 Introduction

Ever since the first states were formed business and politics have been closely connected. Rich businessmen frequently tried to influence politics, and politicians knew that they needed to distribute money to be successful. Entrepreneurs like Demosthenes in Athens and Crassus in Rome became political leaders. Some, like the Medici in Tuscany, even took over the whole state. Today the connection between business and politics is sometimes less visible but probably as strong as ever: a successful businessman like Michael Bloomberg is mayor of New York City, and the richest men in Italy and Thailand, Silvio Berlusconi and Thaksin Shinawatra respectively, were prime ministers in their countries.

By setting the national agenda, proposing an annual budget, and defining policies on defense, trade, environment, etc. the President of the U.S. and his administration affect business life in many ways. At the same time campaign contributions by companies and business associations play a major role in financing election campaigns (Ansolabehere, de Figueiredo, and Snyder (2003)).

Some authors like Baron (1989), Grier and Munger (1991), and Snyder (1990) argue that for companies such contributions, like other payments, can be seen as investments that have to yield a return. Jayachandran (2006) and Roberts (1990a) claim that the economic consequences of campaign contributions can be measured by looking at the stock price development of contributing companies.

Politics and business are undoubtedly intertwined in many ways – with campaign contributions, lobbying, public funding of projects, public procurement, and many other factors potentially influencing each other. It is beyond the scope of this paper to cover all of these factors. Here we focus on campaign contributions before an election and the stock market performance of contributing companies after the election. In our first research question we analyze the impact of campaign contributions from an individual company perspective. Specifically, we explore whether total contributions of a company and the distribution of contributions to the winner and loser of an election had a significant impact on abnormal returns of its stocks. Both questions are answered using data from the four presidential elections since 1992.

We find that (i) the percentage of contributions given to the winner in a presidential election and (ii)

the log of total contribution (divided by market capitalization) were both significantly positive related to a company's stock market performance in the two years after an election. While both effects were visible under Clinton, the amplitude has become much larger under Bush.

As an illustration: a company contributing exclusively to the winner of a presidential election outperformed a company which split its contribution equally to both candidates by 5.5 percentage points in the first year after the election when the CAPM is applied and by 4.0 percentage points using Carhart (1997)'s 4-factor model.

Even more significantly, when we compare two companies with equal market capitalization but different total contributions we find that a company giving four times the average contribution outperformed a company contributing the average by 12.9 (9.0) percentage points with the CAPM (4-factor model) in the twelve months after Election Day.

In our second research question we analyze whether an investor could have earned economically and statistically significant abnormal returns if he had structured his portfolio according to contribution data.

We find that hypothetical portfolios of the 30 highest contributors according to (i) the percentage of contributions given to the winner in a presidential election and (ii) the log of total contribution (divided by market capitalization) would have yielded significant abnormal returns. An investor selecting a portfolio according to (i) would have earned significant abnormal returns of up to 0.54% per month (6.6% p.a.) on aggregate when the CAPM is applied during the first year after an election. Investing in a portfolio formed according to (ii) would have yielded abnormal returns of up to 1.21% (15.5% p.a.) per month for the same observation period.

The debate on campaign financing is often heated and emotional, we therefore want to stress that our results should in no way be seen as a moral judgement. We cannot distinguish whether stock prices of firms supporting the winner of an election increase because firms contribute to politicians whose intrinsic views match the firms' interest or whether donations affect a president's policies. A government need not be corrupt for companies supporting it to perform well; e.g. the known Republican attitude towards tort law, environmental protection, and national defense is quite different from the Democrats' attitude to these issues and thus the outcome of a presidential election may influence many companies' profits without the

government explicitly fulfilling any demands of big contributors. It is more likely that, before the election, companies make contributions to the candidate they expect to implement policies that favor them.

The paper is organized as follows: Section 2 gives an overview over the existing literature, Section 3 provides a description of the data set. The econometric model is presented in Section 4 and the results follow in Section 5. Section 6 concludes.

2 Literature

There are two main strands of literature relevant for our study: studies on political business cycles, mostly done by economists, and studies on campaign contributions, predominantly conducted by political scientists.

Studies on political business cycles, pioneered by Nordhaus (1975) and Rogoff (1990) usually aim to measure (i) whether a strong macroeconomic development favors the incumbent, and (ii) whether the election of a candidate influences the stock market. There is broad consensus on the first question – a healthy economy undoubtedly increases the chances of re-election for a candidate or party. On the second question data past 1927 shows that the stock market performed better under Democratic presidents, than under Republicans (e.g. Santa-Clara and Valkanov (2003)). However, Nofsinger (2007) shows that over a longer horizon (since 1828) there is no statistically significant difference in stock returns between presidencies of the two parties.

Political scientists discuss several different questions: Who gives? Who gets? Do contributions influence decision makers? Are contributions 'good' or 'bad'? On the last question a simple 'bad' (corruption!) comes too easy. John Samples, Director of the Cato Institute's Center for Representative Government argues that politicians seldom take their cues from donors, rather they attract money from people who approve of their policies. Coleman (2003) argues that money is necessary and good to ensure an informative campaign, which increases voters' knowledge about candidates and their ideas.

Who gives? Ansolabehere, de Figueiredo, and Snyder (2003) estimate that 21 million individuals contributed an average of 115 dollar to the elections in 2000, but a significant share also comes from companies and special interest groups. Cooper, Gulen, and Ovtchinnikov (2008) report that the average firm participating in the political donation process contributes to 73 candidates for Congress or Senate over any five-year

period. They find that the number of supported candidates has a significant positive relation with future excess returns. In addition, Ansolabehere, Snyder, and Tripathi (2002) and Sabato (1984) report a close link between corporate campaign contributions and lobbying activities: groups that give large amounts to political campaigns also emphasize lobbying. Ansolabehere, de Figueiredo, and Snyder (2003) claim that lobbying expenditures are at least ten times as high as corporate campaign contributions, so the contribution data we use is probably just the 'tip of the iceberg' of corporate money invested to gain access to politicians' ears. Still it is a good proxy for a company's overall involvement, as contributions and lobbying activities seem to be highly correlated.

Who gets? On the congressional level the answer is: committee chairs and incumbents (Ansolabehere and Snyder (1999); Grier and Munger (1991); Romer and Snyder (1994)). At the presidential level, which is the focus of our study, the answer depends more on the contributor: unions and lawyers give mostly to the Democrats, companies predominantly to the Republicans (e.g. in our data sample 63% of corporate contribution went to the Republicans). Looking at totals, Republicans usually receive 15 to 45 percent more in overall contributions than Democrats.[1]

Do contributions influence decision makers? On this question we found only one study also covering presidential elections, while all other studies focus on members of Congress. Goldman, Rocholl, and So (2008b) found that if a company's board members are connected to the winner (loser) of an election they are more likely to see an increase (decrease) of the government contracts awarded to them. The clear finding of the studies looking at the Congress is that members of Congress are hardly ever influenced in their voting behavior by contributions (Ansolabehere, de Figueiredo, and Snyder (2003)). Other factors, most prominently the party, play a much more important role than contributions. However, Stratmann (1991, 2002) suggest that contributions by business associations have influenced members of Congress.

Talking about corporate campaign contributions Ansolabehere, de Figueiredo, and Snyder (2003) say that corporate and industry political action committees (PACs) may indeed behave as if they expect favors in return and that they may get a reasonable rate of return. In addition, some authors argue that economic interest groups usually appear to act as rational investors when making contributions (e.g, Ansolabehere and

[1] Source: www.opensecrets.org.

Snyder (2000); Grier and Munger (1991); Kroszner and Stratmann (1998); Snyder (1990, 1992)). Several studies even interpret contributions as investments (Baron (1989); Denzau and Munger (1986); Grier and Munger (1991); Snyder (1990)). However, as Jayachandran (2006) notes, previous research's focus on votes on the floor of Congress is probably not the best approach, as such votes are highly visible – politicians do not want to be seen as favoring their donors!

We therefore look at contributions by listed corporations only, as here the impact of policies should be visible in the stock prices of contributing companies. Schwert (1981) was the first to recommend the use of stock prices as a means of quantifying the impact of policy changes. Gilligan and Krehbiel (1988) analyze how the valuation of securities changes with new legislation. A recent paper linking campaign contributions and performance of stocks is Jayachandran (2006). She examines stock prices after Senator Jeffords left the Republican party in May 2001, thereby tipping control of the U.S. Senate to the Democrats. Looking at soft money contributions in the previous election cycle she finds that for each 250.000 dollar given to the Republicans a company lost 0.8% of its market capitalization. She concludes that "*shifts in political power have a large effect on the market value of firms*" (Jayachandran (2006), p. 398).

We take up this point and look at the events in U.S. politics that offer the clearest and most important '*shifts in political power*' – the presidential elections. While Cooper, Gulen, and Ovtchinnikov (2008) report that the switch of congressional control had no significant influence on stock returns of companies classified as leaning towards one of the two parties, this question has not been answered for presidential elections. Goldman, Rocholl, and So (2008a) and Knight (2006) find that listed companies aligned with the Republicans performed better than Democratic-leaning companies after the presidential election in 2000. We therefore classify 'government' and 'opposition' as the party holding the presidency and the other party respectively, i.e. the Democrats under Clinton were the government from 1992-2000 and the Republicans under Bush were the government 2000-2008.

Like us Alesina and Roubini (1992), Erikson (1989), Fair (1988), and Hibbs (1987) focus on presidential rather than congressional election outcomes. While these studies look at the economy in general, Herron, Lavin, Cram, and Silver (1999) move towards the micro level by analyzing 74 different industry sectors. They find that 15 of these sectors were seriously affected by the outcome to the 1992 presidential election.

Similarly, Roberts (1990b) finds that the performance of a portfolio of defense companies correlated positively with the likelihood of Ronald Reagan to become president in 1980. We continue this trend towards the micro level by looking at individual companies. Specifically we take those 100 companies which contributed most to campaigns during a given presidential election cycle and analyze how their stocks perform after the election.

3 Data

We look at the four presidential elections from 1992-2004.[2] We collect contribution data for the two years before an election and explore possible effects on the stock returns in the two years after the election.[3] Therefore we use campaign contribution data from 1990-1992, 1994-1996, 1998-2000, and 2002-2004. Stock market data are collected for 1992-1994, 1996-1998, 2000-2002 and 2004-2006.[4]

3.1 Campaign contribution data

Campaign financing in the U.S. is covered by several laws. The first relevant piece of legislation was the Tillman Act of 1907, which banned all corporate contributions to federal political campaigns – at least on paper. However, the law offered many loopholes and was only weakly enforced (Schultz (2000)). It took more than six decades until a new law – the Federal Elections Campaign Act (FECA) of 1971 – was enacted (Alexander (1976); Corrado (2006)). This law allows contributions by individuals, corporations, and non-profit organizations (most prominently Political Action Committees, PACs), but it sets strict limits to the maximum amounts donated. An amendment in 1974 created the Federal Election Commission (FEC) to clarify and enforce the law, administer the public funding program, and facilitate disclosure.[5]

[2] We have to limit our study to this period, as until 1991 parties did not have to report who gave 'soft money', so it was literally untraceable (Nelson (2000)). As we need to assign contributions specifically to companies for our analyses elections before 1991 cannot be covered.

[3] We chose a two-year time horizon for stock prices, as after the mid-term elections the observation window for the next contribution period starts and non-overlapping windows are highly desirable for the statistical analyses.

[4] All data are collected from the day after an election until the day before the next mid-term election.

[5] Source: FEC, www.fec.gov.

In 2002 this law was amended again with the Bipartisan Campaign Reform Act (BCRA). This act expands FECA's definition of independent expenditures to include political parties, and it outlaws contributions known as 'soft money'. Contrary to 'hard money' (contributions that are officially registered and filed with the FEC), this 'soft money' comes from donations that avoid federal regulations, e.g. by donating to a party organization rather than to a particular candidate or campaign (Nelson (2000)). In the 1990ies soft money grew enormously and by 2002, the last cycle before it was banned, 40% of all contributions were 'soft money' (Jayachandran (2006)). However, after the ban contributors obviously only switched to 'hard money', as overall contributions increased by 18.2% in the election cycle 2003-2004 (the first cycle where soft money was no longer allowed) compared to the previous election cycle 1999-2000. Hard money contributions jumped by 97.1% in the same period.[6] In addition, new loopholes were easily found and total contributions have grown from election cycle to election cycle with the election 2008 virtually certain to set a new record.[7] Ansolabehere, Snyder, and Ueda (2004) explore whether the introduction of BCRA had an effect on the stock prices of companies which gave soft money before the ban, but they find no significant impact.

Figure 1 presents the development of total campaign contributions for the presidential elections since 1992. We see that total contributions increased by 18 to 43 percent from one election to the next and that the Republicans always raised more money than the Democrats. Ansolabehere, de Figueiredo, and Snyder (2003) find that overall contributions as a share of GDP have remained fairly stable since 1912. Our data confirm this for the period 1990-2004, as overall contributions grew by a nominal annual rate of 5.4%, compared to 5.0% for the U.S. economy. However, corporate contributions grew much faster than overall contributions: combined donations by the Top-100 listed corporate contributors of each election cycle increased from 53.5 million dollar in the 1990-1992 election period to more than 128 million dollar in the years 2002-2004 – an annualized growth of 7.5 percent. The largest corporate contribution per election cycle in our sample increased even more – from 1.89 million dollar to 6.74 million dollar – an annualized growth

[6]Source: Center for Responsive Politics, http://www.opensecrets.org.

[7]The most notable 'loopholes' are advocacy groups called 501(c) groups and 527 groups, which may raise unlimited contributions which they can spend without limitations on issues they consider important (Cusick (2007)). These groups are essentially the new 'soft money', spending more than 600 million dollar in the 2003-2004 cycle (Source: Center for Responsive Politics).

of 11.2%. This growth rate even dwarfs the S&P500 increase of 8.8% per year in the same period.[8]

Insert Figure 1 about here

In the elections we cover, on average 63 percent of corporate contributions were given to the Republicans. The Democrats rely strongly on other sources for funding, namely unions and lawyers. While labor unions usually give 85 to 95% of their contributions to the Democrats the donors with the highest total amounts are lawyers.[9] Their strong support for the Democrats stems from worries about tort-law regulations, which threaten one of lawyers' most important sources of income. A recent federal law – the 'Class Action Fairness Act 2005' signed by President Bush on February 18th 2005 – confirmed lawyers' worries and the hopes of many companies: with this act class actions are only possible before a federal court, lowering the chances of success significantly.

Zaleski (1992) explores which industries give relatively much to political campaigns. His results show that government purchases from an industry are the main determinant, i.e. companies give much when the government is an important customer (as e.g. in defense). A second relevant factor is industry concentration, which should be neither too high (a monopolist does not need much lobbying) nor too low. The latter confirms an earlier finding by Pittman (1988).

The campaign data we use is hard and soft money combined. More specifically it includes PAC, individual and soft money contributions to federal candidates, party committees and leadership PACs. The data for the two years preceding each election from 1992 until 2004 were provided by the Center for Responsive Politics.[10]

For each presidential election we take those 100 companies which made the highest total contribution for Democrats and Republicans combined. Other studies take each company that contributed, no matter how much (up to 1,200 companies), rather than focusing on the largest contributors. However, we think this might distort results, as only really high contributions should have an influence. By taking all contributions,

[8] All growth rates are nominal. Sources: Bureau of Economic Analysis, Thomson Datastream, and Federal Election Commission for GDP, S&P500, and campaign contribution data respectively.

[9] For the 2004 election they contributed a total of 147 million dollar – 73 percent of this money went to Democrats. Source: www.opensecrets.org.

[10] http://www.opensecrets.org.

some papers assign the same weight to each contribution, no matter whether it was 1,000 or 5 million dollar (e.g. Aggarwal, Meschke, and Wang (2007)).

3.2 Stock market data

To measure the impact of political events on the value of a company we do not need to develop new measures or proxies, as the stock price on an efficient market already is a precise measure for the company value. If the stock market is at least semi-strong form efficient it aggregates traders' opinions about the value of a company and therefore reflects all publicly available information about a company (see Fama (1970, 1991); von Hayek (1945)).

Daily stock prices (adjusted for dividends and splits) and market capitalization were collected from Thomson Datastream for the period November 6th 1992 to November 7th 2006. Time series on the CRSP-performance-index and on the Fama/French-factors (Fama and French (1993)), including the Carhart (1997) momentum factor, were provided by Kenneth French.[11]

4 Research questions and method

4.1 Research question 1: Company perspective – Did the proportion given to the winner and the total contribution have predictive power?

With the first research question we take a look at the inhomogeneity in contributions to test for abnormal returns. To estimate the relationship between company i's campaign contributions during the election campaign period and its stock price after the election, we lag our contribution-related variables by one election cycle. E.g., we relate company i's campaign contribution from the day after the election in November 1996 until the day before the election in November 1998 to company i's performance from the day after the election in November 1998 until the day before the election in November 2000. In the subsequent analyses we examine companies along two factors:

- the preference for one candidate over the other measured by PERCDIFF and

[11] http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

- the logarithm of the total contribution for both candidates divided by the company's market capitalization on Election Day, called CTOT.

With PERCDIFF we measure company i's relative preference of one candidate over the other, irrespective of the total amount contributed. $\text{PERCDIFF}_{i,j}$ is the difference of the percentage given to the winner ($\frac{\text{CGOV}}{\text{TOTAL}}$) and the percentage given to the losing candidate ($\frac{\text{COPP}}{\text{TOTAL}}$) of company i in election cycle j,

$$\text{PERCDIFF}_{i,j} = \frac{\text{CGOV}_{i,j}}{\text{TOTAL}_{i,j}} - \frac{\text{COPP}_{i,j}}{\text{TOTAL}_{i,j}}. \tag{1}$$

$\text{CGOV}_{i,j}$ and $\text{COPP}_{i,j}$ define company i's contribution to the winning and losing candidate in election j and $\text{TOTAL}_{i,j}$ stands for the total contribution given.

While PERCDIFF measures the commitment to one of the two candidates, our second variable CTOT picks up the overall political involvement of a company. This variable is important to account for companies like Citigroup and AT&T, which were among the largest contributors in each election, but split their contribution almost equally among the two candidates. Thus their coefficient for PERCDIFF is close to zero. We interpret this as a 'hedging-strategy' to ensure that they have access to the government irrespective of the election outcome. This explanation is supported by Ansolabehere, de Figueiredo, and Snyder (2003), p. 126 who state that "*campaign contributions are one way to improve the chances of getting to see the legislator about matters of concern to the group*".

$\text{CONT}_{i,j}$ (used in robustness check II) is calculated as the log of the total contribution of a company divided by its market capitalization on Election Day. We divide by market capitalization because a contribution of \$5 million signals very high political involvement when given by a small company with market capitalization below \$1 billion, while it is 'peanuts' for Microsoft with a market capitalization of more than \$300 billion. As campaign contributions of companies are increasing over time, we apply the following transformation to arrive at $\text{CTOT}_{i,j}$ which is used in the main analysis:

$$\text{CTOT}_{i,j} = log \frac{\frac{\text{TOTAL}_{i,j}}{\overline{\text{TOTAL}_j}}}{\frac{\text{MCAP}_{i,j}}{\overline{\text{MCAP}_j}}}. \tag{2}$$

We divide each contribution by the average contribution in the corresponding election cycle. The same is done for market capitalization, as this variable also increased several-fold during our sample period.

As we have several observations over time for most companies, we use a panel regression model with PERCDIFF and CTOT as independent variables. To generate the appropriate data set we first set up an OLS-estimation for stock i using (i) the CAPM (Capital Asset Pricing Model) developed by Sharpe (1964) and Lintner (1965), and (ii) Carhart (1997)'s 4-factor model according to equations 3 and 4, respectively. Fama and French (1993) show that not only the market return, but two more factors (company size (SMB) and book-to-market ratio (HML)) have explanatory power. Carhart (1997) extended this to a 4-factor model by adding a momentum factor:

$$\text{RTRF}_t = \alpha + \beta_1 \text{RMRF}_t + \beta_{AR_1} \text{RTRF}_{t-1} + \epsilon_t, \tag{3}$$

$$\begin{aligned} \text{RTRF}_t &= \alpha + \beta_1 \text{RMRF}_t + \beta_2 \text{SMB}_t + \beta_3 \text{HML}_t + \beta_4 \text{MOM}_t + \\ &+ \beta_{AR_1} \text{RTRF}_{t-1} + \epsilon_t. \end{aligned} \tag{4}$$

$\text{RTRF}_{i,t}$ indicates the difference between company i's daily log-returns ($\text{RT}_{i,t}$) and the daily risk-free interest rate (RF_t), which is approximated by the monthly T-bill return. $\text{RMRF}_{i,t}$ defines the daily excess log-return of a value-weighted performance index composed of all AMEX, NYSE and NASDAQ stocks (CRSP-Index) relative to RF_t. $\text{SMB}_{i,t}$ is the difference in return of a portfolio of small stocks and a portfolio of large stocks. $\text{HML}_{i,t}$ measures the difference in returns of a portfolio consisting of stocks with high book-to-market ratios and a portfolio of stocks with low book-to-market ratios. With $\text{MOM}_{i,t}$ we include the momentum anomaly first reported by Jegadeesh and Titman (1993). $\text{MOM}_{i,t}$ measures the difference of a portfolio consisting of past high-return stocks and a portfolio of past low-return stocks.[12] Finally, we account for first-order

[12]For a detailed description of all factors see Fama and French (1993) and the website of Kenneth French: http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html. Note, that all factors include all AMEX, NYSE

autocorrelation by adding a AR(1)-term as it is often significant when using daily data (Edmans, Garcia, and Norli (2007)).

Let $\hat{\epsilon}_{i,t}$ denote a time series of daily residuals from equation 4 for stock i. We then calculate the 2-year return during election cycle j by summing up all residuals ($\hat{\epsilon}_{i,t}$) up to T_j:

$$\mathrm{y}_{i,j} = \sum_{t=1}^{T_j} \hat{\epsilon}_{i,t}. \tag{5}$$

T_j defines the number of trading days within election cycle j. To look at the development of abnormal stock returns over time after Election Day we also calculate returns for both the first six and twelve months after the election. Therefore, we additionally set T_j to 126 and 252 trading days, respectively. Earlier studies on this subject often focused on a very short time horizon, i.e. one day to one week. E.g. Goldman, Rocholl, and So (2008a) find that companies with boards that are connected to the Republicans significantly outperformed the market over the period of one to seven days after Election Day 2000, where Bush was elected president. While such studies are useful, we chose to look at the longer horizons of 6, 12, and 24 months, as implementing new laws and assigning government contracts takes time. This view is shared by Aggarwal, Meschke, and Wang (2007) who are in favor of long-term studies and argue that if donating to winners does represent an investment, positive effects should be persistent. Again, we apply the same lag structure regarding contributions and returns as in all other analyses in this paper.

Finally, we set up the following panel regression:

$$\begin{aligned} \mathrm{y}_{i,j} &= \alpha + \mathrm{PERCDIFF}_{i,j-1} + \\ &+ \mathrm{CTOT}_{i,j-1} + \epsilon_{i,j}. \end{aligned} \tag{6}$$

Note that we do not correct for cross-section fixed effects, since this would eliminate the very idiosyncratic growth rates of individual stocks we want to measure. We do not correct for period fixed effects either, as they are not significant. Instead, we use the 'White cross-section' method to control for cross-section correlation

and NASDAQ stocks.

and heteroscedasticity.

4.1.1 Robustness Checks

To test the reliability of our model, we run two robustness checks each for the CAPM and the 4-factor model with variations of our dependent and independent variables. First, to account for unsystematic risk we calculate normalized returns ($\text{NRT}_{i,j}$) as dependent variable by dividing the 6-month, 1-year, and 2-year returns from equation 5 by their corresponding standard deviations ($\hat{\sigma}_{i,j}$),

$$\text{NRT}_{i,j} = \frac{\text{y}_{i,j}}{\hat{\sigma}_{i,j}}. \tag{7}$$

To arrive at $\hat{\sigma}_{i,j}$ we multiply the average daily standard deviation of stock i's residuals with the square root of the number of trading days of interest T_j (126, 252, and approximately 500 respectively) in cycle j.

In the second robustness check we examine the reliability of the independent variable CTOT by regressing against the unbenchmarked total contribution $log(\text{CONT})$.

4.2 Research question 2: Investor perspective – Could abnormal returns be generated by picking stocks according to contribution data?

While in research question 1 we focused on the company perspective, in research question 2 we explore whether an investor could have earned abnormal return by selecting portfolios according to the two variables CTOT and PERCDIFF.

The empirical literature offers numerous examples where statistically significant abnormal returns are reported to justify an 'anomaly', but once transaction costs are taken into account the significance often disappears.[13] If an investor wanted to trade based on our results only two transactions were necessary every two years for stock i – thus transaction costs play only a marginal role.

[13]Some examples where effects are reported include Ariel (1990); Kim and Park (1994); Kohli and Kohers (1992); Lakonishok and Smidt (1988). Malkiel (2003) and Marquering, Nisser, and Valla (2006) claim that after transaction costs almost all of these 'anomalies' fail to deliver positive abnormal returns.

In the literature there is still a debate about measuring abnormal returns. Barber and Lyon (1997) argue that calculating buy-and-hold abnormal returns (BHAR) of event firms is the right approach, as it precisely measures investor experience. In two seminal papers Fama (1998) and Mitchell and Stafford (2000) provide arguments and evidence against the BHAR methodology as it completely ignores the cross correlation of event firms abnormal returns during the observation period – resulting in overstated test statistics. Instead, they advocate a monthly calendar-time portfolio approach for measuring long-term abnormal returns. Therefore, a portfolio has to be formed each period including all companies that have participated in the event. With this approach, the cross correlation among the event firms is automatically accounted for in the portfolio variance of each month. When calculating portfolios this way one has to decide whether to include the firms equally- or value-weighted. Fama (1998) reports that long-term post-event returns shrink a lot when the stocks are value-weighted rather than equal-weighted. Another aspect for value-weighting the portfolios is that it may account for the wealth effects of individual investors more accurately (see Fama (1998)). We consciously chose the most rigorous and demanding methodology – the calendar-time portfolio approach with value-weights among the stocks, so any results we find are highly reliable.

We form six value-weighted portfolios according to our two measures PERCDIFF and CTOT for each election cycle:[14]

- PERCDIFF30: Top 30 ranked stocks according to the variable PERCDIFF.
- PERCDIFF31_70: stocks ranked from 31 to 70 according to PERCDIFF.
- PERCDIFF71_100: stocks ranked from 71 to 100 according to PERCDIFF.
- With the portfolios CTOT30, CTOT31_70, CTOT71_100, the same is done for the variable CTOT.

Our last portfolio is composed of the Top-100 contributors of each election cycle (PF_Top100) to see whether all companies under investigation can earn abnormal returns as a group. If they are an unbiased

[14]The same lag structure regarding contributions and returns is used as in the previous calculations. Note that a stock may be included in up to two of the six portfolios for a given election. E.g. a company making a high total contribution and giving most to the Democrats before a Clinton victory could be included in the CTOT30 and PERCDIFF30 portfolios for that election.

sample of the market, they should yield no abnormal returns.

For research question 2 we again use the CAPM and the 4-factor model for performance measurement:

$$\text{RTRF}_{j,t}^{\text{PF}} = \alpha + \beta_1 \text{RMRF}_{j,t} + \epsilon_{j,t}, \tag{8}$$

$$\text{RTRF}_{j,t}^{\text{PF}} = \alpha + \beta_1 \text{RMRF}_{j,t} + \beta_2 \text{SMB}_{j,t} + \beta_3 \text{HML}_{j,t} + \beta_4 \text{MOM}_{j,t} + \epsilon_{j,t}. \tag{9}$$

Due to the midterm elections, we only measure the return up to two years following Election Day. Therefore, we cannot run a simple OLS-regression, as our time series is not continuous. Instead, we apply a panel regression for each portfolio with the four elections as cross-sections (j) and with 24 observations (months) over time (t). We correct with the 'White period' coefficient covariance method to account for arbitrary serial correlation and time-varying variances in the residuals.

5 Results

5.1 Main result 1: The proportion given to the winner and the total contribution had predictive power

In Section 4.1 we hypothesize that the two independent variables measuring (i) the commitment of a company to a candidate (PERCDIFF) and (ii) the log of the total contribution relative to company size (CTOT) should have a significant positive influence on its stock market performance.

As can be seen in Table 1, PERCDIFF is positive for all observation periods for the aggregate data set. With the CAPM it is significant for the 6- and 12-month horizon, while with the 4-factor model it is significant on the 24-month horizon. As an illustration: A company which contributed only to the winning candidate on average outperformed a company which contributed equally to both candidates by 5.5 (4.0) percentage points in the first year after an election using the CAPM (4-factor model).

Insert Table 1 about here

Looking at the Clinton and Bush presidencies separately we find highly significant coefficients for Bush with the CAPM on all horizons, and otherwise positive but insignificant coefficients. Under Clinton a

company contributing only to him outperformed a company which split its contribution equally to both candidates by 6.8 (8.2) percentage points in the first year after an election with the CAPM (4-factor model). Under Bush the difference even reaches 12.3 (4.4) percentage points in the twelve months after an election.

For CTOT we find even clearer results with highly significant positive coefficients in the aggregate data for all observation periods. To illustrate our results we compare two hypothetical companies with average market capitalization but with different total contributions. Whereas company A gives four times the average contribution, company B only spends the average contribution of the Top-100 listed corporate contributors.[15] Company A would have outperformed company B by on average 12.9 (9.0) percentage points in the first year after the election when the CAPM (4-factor model) is applied. The results for Clinton and Bush are quite consistent with positive significant coefficients on all observations with 10 of the 12 coefficients being significant on the 1%- or 5%-level. Especially the results for Bush are economically highly significant, as company A outperforms company B by 17.1 (11.4) percentage points in the first twelve months following Election Day when the CAPM (4-factor model) is used. Looking at the two-year horizon the difference in returns even reaches 30.3 (23.4) percentage points.[16]

We conclude that CTOT was the more decisive factor to generate abnormal returns from 1992-2006. Furthermore, as can be seen from PERCDIFF, companies which strongly supported the winner of the election outperformed companies supporting the losing candidate. Both factors were economically and statistically more significant during the Bush presidency.

5.1.1 Robustness Checks

As can be seen from Tables A1 (CAPM) and A2 (4-factor model) in the Appendix, our results are robust to changes in the dependent as well as the independent variables. In our first robustness check we replace abnormal returns by the normalized returns ($NRT_{i,j}$) as shown in equation 7. The significant results we find are very similar to what we found in our original analysis for the aggregate data set and for both the Clinton

[15] E.g. in the election 2004 the average of the Top-100 corporate contributors was 1.28 million dollar, up from 535,000 in 1992.

[16] We also ran an OLS-regression for each election cycle separately and found similar results.

and Bush subsamples.

Insert Table A2 about here

In the second robustness check we change the independent variable CTOT with all other things unchanged. Specifically, log(CONT) is not transformed, i.e. this number is not benchmarked on the respective average per election cycle. On aggregate and in both subsamples our main results hold in all respects and – as in robustness check I – some results even improve.

5.2 Main result 2: Picking stocks according to contribution data generated abnormal returns for investors

As outlined in Section 4.2 we now focus on the investor perspective and examine the performance of portfolios formed according to contribution data.

5.2.1 Performance of a portfolio of all 100 companies

Before we look at sub-portfolios we examine our whole data sample and calculate whether the return of the largest 100 contributors as a group differed from the market return. In Table 2 we apply the CAPM and the 4-factor-model of equations 8 and 9 to examine whether the monthly abnormal returns (alphas) deviate significantly from zero.

Insert Table 2 about here

Applying the CAPM (column 1) we find no significant results for the aggregate sample. The same holds true when we look at the Clinton and Bush presidencies separately (columns 3 and 5 respectively). Thus, the return of the 100 largest contributors as a group was not different from the market return.

When we apply the 4-factor-model we also find no significant results (columns 2, 4, and 6). The additional coefficients for SMB and HML indicate that our sample includes mainly large cap stocks with high book-to-market ratios. This confirms the observation of Cooper, Gulen, and Ovtchinnikov (2008), that mostly large companies contribute to political campaigns.

We thus conclude that the returns of major contributors as a group were not distinguishable from the market – no matter whether we use the CAPM or whether size, book-to-market ratio, and momentum are accounted for with the 4-factor model.

5.2.2 Performance of sub-portfolios

In what we consider one of the key analyses of the paper we measure the performance of portfolios selected according to the two variables PERCDIFF and CTOT formed in Section 4.2. Figure 2 illustrates the results. In the top panels we sort our companies according to the variable PERCDIFF in each election cycle and calculate a value-weighted portfolio of the corresponding Top 30 stocks (solid line; PERCDIFF30; the 30 clearest supporters of a candidate) and a value-weighted portfolio of the corresponding stocks with ranks 71 to 100 (dotted line; PERCDIFF71_100; the 30 companies leaning most towards his opponent). The figures present the cumulative abnormal returns of these portfolios compared to the CRSP-Index. In the bottom panels we sort according to the variable CTOT in each election cycle. Again, the figures present the cumulative abnormal returns compared to the CRSP-Index of the CTOT30- and CTOT71_100-portfolios.

Insert Figure 2 about here

The two left panels, presenting the results for Clinton, look fairly similar. In both figures the PERCDIFF30- and CTOT30-portfolios accumulate positive abnormal returns, while the PERCDIFF71_100- and CTOT71_100-portfolios accumulate negative abnormal returns in the 20 months after the election, for a net difference of up to 20 percentage points. Therefore, large contributors, especially the strongest supporters of Clinton, performed very well after his election victories.

The results for Bush are presented in the right panels. We immediately see, that the return differences between the portfolios are larger than they were for Clinton. Comparing the two panels we find that the development is quite similar in the first year after the election, where the highest contributors according to both measures outperform the lowest contributors by up to 25 percent. In the second year the two figures differ somewhat: while the difference between the PERCDIFF30- and PERCDIFF71_100-portfolios remains quite stable at roughly 20 to 25 percentage points, the difference between the CTOT30- and CTOT71_100-portfolios grows over the whole observation period to more than 45 percentage points. This corroborates

the comparatively higher predictive power of CTOT during the Bush years that was already evident in the panel regressions reported above.

Turning from the graphical to the econometric analysis, Table 3 presents results for the first 24 (top three panels), 12 (panels 4 to 6) and 6 (last three panels) months after each election. The first two columns show the alphas of the PERCDIFF30 and PERCDIFF71_100-portfolios, i.e. the companies with the highest 30 values for PERCDIFF and with the lowest 30 values, respectively.[17] The first line of each panel shows the monthly CAPM-alpha, the second line the respective p-value, the third line the monthly alpha according to the 4-factor model, and the fourth line the respective p-value. The right two columns present the same data for portfolios formed according to CTOT.

Insert Table 3 about here

Looking first at the CAPM-alphas, which can be considered the more relevant for investors, we see that in the first column of Table 3 all nine monthly CAPM-alphas of the PERCDIFF30 portfolios are positive (five of them significant) with values up to 0.76% per month. This means that abnormal returns of up to 9.4% p.a. could have been earned when investing in the 30 companies with the highest share of contributions to the winning candidate. Also in line with our prediction, eight out of the nine PERCDIFF71_100 portfolios show negative CAPM-alphas between –0.58% and –0.15% per month. Three are significant on the 1-percent level, stressing the economic and statistical relevance of the results.

When we turn to the alphas of the PERCDIFF-portfolios according to the 4-factor model most significances disappear, as this model already accounts for size, book-to-market ratio, and momentum.

In the right two columns the results of CTOT, which delivered much more significant results on our first research question, are reported. We find very consistent and strong results for the CAPM: all CTOT30-alphas for the aggregate and the separated data samples are positive and significant on the 1-percent level with alphas between 0.26% and 1.46% per month. This translates into abnormal returns of up to 19.0% per year. Also in line with our predictions the alphas of all CTOT71_100-portfolios are negative with five of the nine values being significant on the 1%- and 5%-level.

[17] We do not show the PERCDIFF31_70- and CTOT31_70-portfolios in this table, as they are of minor interest and are hardly ever significant, which is in line with our expectations.

The results are somewhat weaker when the 4-factor model is applied. We still find seven of nine alphas of the CTOT30-portfolios to be positive, five of them significant, most of them on the 1%-level. However, here we also have one significant negative alpha for the 12-month horizon under Clinton.

Taking a look at both presidencies separately we find that under Clinton six out of twelve and under Bush eight out of twelve CTOT30- and CTOT71_100-portfolios are significant on the 1%-level with the predicted sign (CAPM and 4-factor model alphas).

We conclude that forming portfolios according to PERCDIFF and especially according to CTOT allowed investors to earn significant abnormal returns, while those who invested into a portfolio of the companies with the lowest values of PERCDIFF and CTOT suffered negative abnormal returns.

6 Conclusion

By setting the national agenda, proposing an annual budget, and defining policies on defense, trade, environment, etc. the president and his secretaries affect business life in many ways. Our results show that companies which had supported the elected president in his election campaign or had high total contributions were able to generate significant abnormal returns.

Specifically we find that both (i) the percentage of contributions given to the winner in a presidential election and (ii) the log of the total contribution (divided by market capitalization) significantly increased a company's abnormal stock market return in the two years after an election in the period 1992-2006. Among the two factors the second turned out to have a larger impact.

A company contributing only to the winner would have outperformed a company splitting its contribution equally to both candidates by 5.5 percentage points in the first year after the election when the CAPM is applied and by 4.0 percentage points using Carhart (1997)'s 4-factor model. On the other hand, when we compare two companies with equal market capitalization but different total contributions we find the larger total contributor (giving four times the average) to outperform the smaller total contributor (giving the average) by 12.9 (9.0) percentage points when using the CAPM (4-factor model) in the twelve months after Election Day. Both variables had a stronger effect under Bush.

In our last analysis we formed hypothetical portfolios of the 30 highest contributors according to (i)

the percentage of contributions given to the winner in a presidential election and (ii) the log of the total contribution (divided by market capitalization). An investor selecting a portfolio according to (i) would have earned significant abnormal returns of up to 0.54% per month (6.6% p.a.) when the CAPM is applied during the first year after an election. Investing in a portfolio formed according to (ii) would have yielded abnormal returns of up to 1.21% per month (15.5% p.a.) for the same observation period.

Campaign contributions thus proved to be a good predictor variable for abnormal stock returns after an election. We consider this even more remarkable, as we covered two very different presidencies with strongly differing developments on the stock markets, e.g. the forming and bursting of the tech-bubble, and with unexpected exogenous shocks like 9/11 and the war on terror. Still, there are several other relevant variables that may play a role in the mutually influencing network of politics and business, e.g. lobbying activities and personal closeness between high government representatives and business leaders. As lobbying and campaign contributions are highly correlated, we expect similar results, but we leave this to future research. We are not aware of a comprehensive data base on personal closeness and refrained from presenting only anecdotic evidence.

To conclude, we want to stress that our results do not necessarily mean that politicians deliver policies that companies 'bought' with their contributions. Rather, the general policies implemented by an administration may suit a firm – e.g. President Bush's decisions to stay out of the Kyoto-protocol, allow drilling in Alaska natural reservoirs, and his decision to go to war in Iraq have all helped oil companies. However, they were not necessarily designed to help them, but rather reflected Bush's convictions and attitude.

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Figures and Tables

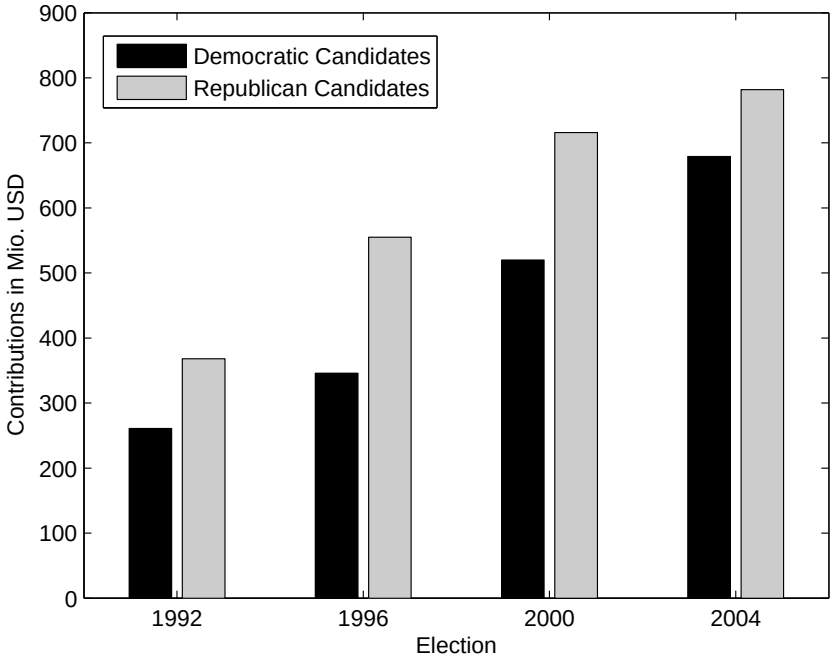

Figure 1: Development of total campaign contributions for the two years before a presidential election in the period 1992-2004. Source: Center for Responsive Government.

CAPM

	Aggregate			Clinton			Bush		
Factor	6mon	12mon	24mon	6mon	12mon	24mon	6mon	12mon	24mon
α	0.019	-0.003	-0.041^{**}	0.029^{***}	0.025^{**}	-0.006	-0.009	-0.049	-0.108^{***}
	(0.197)	(0.847)	(0.047)	(0.000)	(0.017)	(0.337)	(0.765)	(0.227)	(0.000)
PERCDIFF	0.064^{**}	0.055^{*}	0.006	0.055	0.068	0.009	0.116^{***}	0.123^{**}	0.101^{***}
	(0.033)	(0.081)	(0.799)	(0.231)	(0.320)	(0.851)	(0.000)	(0.020)	(0.000)
CTOT	0.029^{***}	0.043^{***}	0.057^{**}	0.019^{***}	0.026^{**}	0.005	0.037^{**}	0.057^{***}	0.101^{***}
	(0.002)	(0.000)	(0.044)	(0.000)	(0.033)	(0.860)	(0.014)	(0.000)	(0.000)
R^2	0.068	0.058	0.034	0.042	0.033	0.000	0.094	0.099	0.103

4-factor model

	Aggregate			Clinton			Bush		
Factor	6mon	12mon	24mon	6mon	12mon	24mon	6mon	12mon	24mon
α	-0.016	-0.025^{*}	-0.072^{***}	-0.008^{***}	0.003	-0.049	-0.013	-0.044	-0.101^{***}
	(0.142)	(0.076)	(0.000)	(0.000)	(0.621)	(0.152)	(0.675)	(0.283)	(0.000)
PERCDIFF	0.044	0.040	0.009^{*}	0.065	0.082	0.015	0.026	0.044	0.031
	(0.176)	(0.294)	(0.091)	(0.243)	(0.301)	(0.771)	(0.631)	(0.560)	(0.475)
CTOT	0.021^{***}	0.030^{***}	0.050^{***}	0.022^{***}	0.020	0.017	0.019^{***}	0.038^{***}	0.078^{***}
	(0.000)	(0.000)	(0.004)	(0.000)	(0.137)	(0.114)	(0.000)	(0.000)	(0.000)
R^2	0.038	0.030	0.027	0.060	0.031	0.004	0.021	0.039	0.061
n	400	400	400	200	200	200	200	200	200

*, ** and *** represent the 10%, 5% and the 1% significance levels.

Table 1: Panel regression measuring the impact of PERCDIFF and CTOT on abnormal returns (top panel: CAPM residuals, bottom panel: 4-factor model residuals) for 6, 12, and 24 months for the aggregate data (first three columns), the Clinton-years (columns 4-6), and the Bush-years (columns 7-9). p-values for a double-sided test are given in parenthesis.

	Aggregate		Clinton		Bush	
Factor	CAPM	4-Factor Model	CAPM	4-Factor Model	CAPM	4-Factor Model
α	0.012	0.058	0.023	−0.180	−0.099	0.133
	(0.920)	(0.716)	(0.890)	(0.172)	(0.324)	(0.494)
RMRF	89.56***	92.36***	96.51***	99.61***	83.48***	82.28***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
SMB		−30.80***		−27.43***		−31.31***
		(0.000)		(0.000)		(0.000)
HML		2.20		3.13**		2.41
		(0.335)		(0.034)		(0.120)
MOM		−5.48		6.50*		−12.48***
		(0.241)		(0.096)		(0.000)
$R2$	89.4	94.1	91.2	95.0	87.9	94.9
n	96	96	96	96	96	96

*, ** and *** represent the 10%, 5% and the 1% significance levels.

Table 2: Panel regression measuring monthly abnormal returns (alphas, in percent) of the CAPM and the 4-factor model for a portfolio of the 100 largest corporate contributors in each election cycle since 1992. p-values for a double-sided test are given in parenthesis.

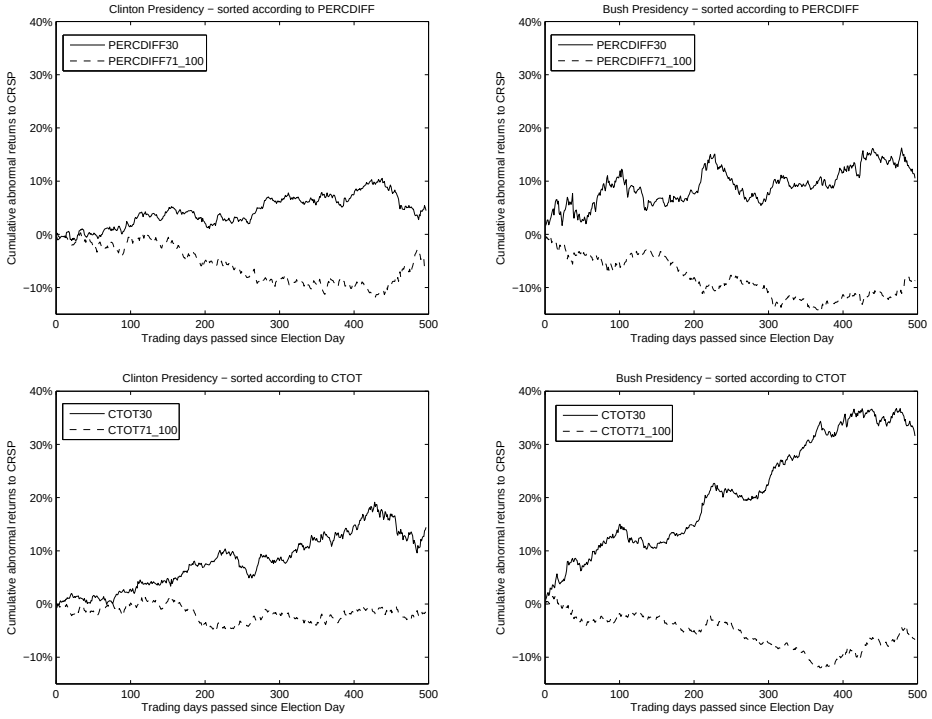

Figure 2: Cumulative abnormal returns of equally weighted portfolios composed of 30 stocks each compared to the CRSP-performance index. Top panels: Portfolio formation according to PERCDIFF with PERCDIFF30 (PERCDIFF71_100) containing the stocks ranked from 1 to 30 (71 to 100) in an election cycle. Bottom panels: Portfolio formation according to CTOT. The left panels show the development of cumulative abnormal returns over time during the Clinton presidency, while the right panels present the same data for the Bush presidency.

Observation period: 24 months from Election Day - Aggregate data

	PERCDIFF30	PERCDIFF71_100	CTOT30	CTOT71_100
CAPM alpha	0.298***	−0.310***	0.973***	−0.159
	(0.006)	(0.000)	(0.000)	(0.329)
4-factor alpha	−0.131	0.095	0.517**	0.041
	(0.510)	(0.413)	(0.025)	(0.808)
		Clinton		
CAPM alpha	0.096***	−0.148	0.256***	−0.043
	(0.002)	(0.345)	(0.000)	(0.868)
4-factor alpha	−0.210	−0.212***	0.070	−0.204***
	(0.277)	(0.002)	(0.628)	(0.000)
		Bush		
CAPM alpha	0.070	−0.280	1.225***	−0.364***
	(0.645)	(0.317)	(0.000)	(0.000)
4-factor alpha	−0.173	0.249	0.746***	0.086
	(0.465)	(0.126)	(0.000)	(0.679)

Observation period: 12 months from Election Day - Aggregate data

	PERCDIFF30	PERCDIFF71_100	CTOT30	CTOT71_100
CAPM alpha	0.535***	−0.623**	1.209***	−0.313**
	(0.005)	(0.000)	(0.000)	(0.048)
4-factor alpha	0.239	0.004	0.740**	0.276
	(0.637)	(0.974)	(0.021)	(0.296)
		Clinton		
CAPM alpha	0.000	−0.399*	0.310***	−0.444***
	(1.000)	(0.087)	(0.000)	(0.004)
4-factor alpha	0.110	−0.179	−0.364***	0.154
	(0.838)	(0.277)	(0.000)	(0.495)
		Bush		
CAPM alpha	0.136	−0.581	1.396***	−0.559***
	(0.537)	(0.217)	(0.000)	(0.001)
4-factor alpha	0.087	−0.177	1.124***	−0.051
	(0.895)	(0.124)	(0.000)	(0.831)

Observation period: 6 months from Election Day - Aggregate data

	PERCDIFF30	PERCDIFF71_100	CTOT30	CTOT71_100
CAPM alpha	0.755*	−0.250	1.238***	−0.154
	(0.000)	(0.454)	(0.000)	(0.569)
4-factor alpha	−0.544	1.036	0.180	0.389
	(0.432)	(0.124)	(0.627)	(0.434)
		Clinton		
CAPM alpha	0.322	0.353	0.780***	−0.135
	(0.444)	(0.515)	(0.000)	(0.793)
4-factor alpha	−0.098	1.236*	0.709***	0.254
	(0.945)	(0.062)	(0.010)	(0.493)
		Bush		
CAPM alpha	0.396***	−0.445	1.464***	−0.505***
	(0.006)	(0.459)	(0.001)	(0.000)
4-factor alpha	−1.448**	0.321	−0.292	−0.463
	(0.024)	(0.439)	(0.361)	(0.258)

*, ** and *** represent the 10%, 5% and the 1% significance levels.

Table 3: Monthly abnormal returns (alphas, in %) of value-weighted portfolios formed according to PERCDIFF (left two columns) and CTOT (right two columns). p-values for a double-sided test are given in parenthesis. R^2 shows values between 75% and 95%.

Appendix

Robustness Check I (CAPM): Normalized returns ($NRT_{i,j}$) as dependent variable

	Aggregate			Clinton			Bush		
Factor	6mon	12mon	24mon	6mon	12mon	24mon	6mon	12mon	24mon
α	0.118	−0.017	−0.069	0.186***	0.112***	−0.025***	−0.034	−0.223	−0.218
	(0.157)	(0.880)	(0.395)	(0.000)	(0.007)	(0.000)	(0.867)	(0.414)	(0.219)
PERCDIFF	0.340***	0.212**	0.083	0.325*	0.281	−0.028	0.610***	0.530**	0.339***
	(0.003)	(0.041)	(0.308)	(0.080)	(0.146)	(0.760)	(0.001)	(0.030)	(0.002)
CTOT	0.115***	0.149***	0.137**	0.066	0.089*	0.019	0.156***	0.197***	0.236***
	(0.002)	(0.000)	(0.033)	(0.172)	(0.058)	(0.798)	(0.000)	(0.000)	(0.000)
R^2	0.065	0.067	0.045	0.039	0.042	0.001	0.098	0.123	0.133

Robustness Check II (CAPM): Untransformed independent variable CONT

	Aggregate			Clinton			Bush		
Factor	6mon	12mon	24mon	6mon	12mon	24mon	6mon	12mon	24mon
α	−0.058***	−0.133***	−0.217**	−0.039***	−0.073**	−0.026	−0.088***	−0.184***	−0.383***
	(0.003)	(0.001)	(0.028)	(0.010)	(0.038)	(0.776)	(0.000)	(0.000)	(0.000)
PERCDIFF	0.079**	0.078**	0.037	0.054	0.066	−0.010	0.118***	0.123**	0.098***
	(0.027)	(0.037)	(0.332)	(0.238)	(0.330)	(0.838)	(0.000)	(0.021)	(0.000)
log(CONT)	0.024***	0.040***	0.053**	0.018***	0.026**	0.005	0.029*	0.049***	0.097***
	(0.000)	(0.000)	(0.041)	(0.000)	(0.027)	(0.838)	(0.055)	(0.000)	(0.000)
R^2	0.059	0.055	0.033	0.041	0.033	0.000	0.073	0.081	0.097
n	400	400	400	200	200	200	200	200	200

*, ** and *** represent the 10%, 5% and the 1% significance levels.

Table A1: Robustness checks for research question 1 based on the CAPM residuals. p-values for a double-sided test are given in parenthesis.

Robustness Check I (4-factor model): Normalized returns ($NRT_{i,j}$) as dependent variable

	Aggregate			Clinton			Bush		
Factor	6mon	12mon	24mon	6mon	12mon	24mon	6mon	12mon	24mon
α	-0.099	-0.111	-0.173^{*}	-0.049^{**}	0.019	-0.146^{*}	-0.123	-0.241	-0.248
	(0.235)	(0.304)	(0.077)	(0.030)	(0.428)	(0.084)	(0.585)	(0.386)	(0.278)
PERCDIFF	0.280^{**}	0.191	0.108	0.366	0.333	0.052	0.267	0.317	0.216
	(0.045)	(0.117)	(0.178)	(0.120)	(0.160)	(0.575)	(0.322)	(0.253)	(0.118)
CTOT	0.094^{***}	0.109^{**}	0.127^{***}	0.084^{**}	0.056	0.050	0.101^{***}	0.150^{***}	0.193^{***}
	(0.000)	(0.005)	(0.002)	(0.029)	(0.235)	(0.114)	(0.000)	(0.000)	(0.000)
R^2	0.047	0.040	0.042	0.054	0.037	0.007	0.035	0.067	0.089

Robustness Check II (4-factor model): Untransformed independent variable CONT

	Aggregate			Clinton			Bush		
Factor	6mon	12mon	24mon	6mon	12mon	24mon	6mon	12mon	24mon
α	-0.073^{***}	-0.118^{***}	-0.224^{***}	-0.089^{***}	-0.069	-0.123^{***}	-0.054^{**}	-0.136^{***}	-0.309^{***}
	(0.001)	(0.003)	(0.000)	(0.000)	(0.105)	(0.000)	(0.020)	(0.001)	(0.000)
PERCDIFF	0.054^{*}	0.057	0.036^{***}	0.064	0.081	0.013	0.027	0.044	0.029
	(0.098)	(0.166)	(0.007)	(0.251)	(0.304)	(0.802)	(0.625)	(0.561)	(0.506)
log(CONT)	0.017^{***}	0.028^{***}	0.046^{***}	0.021	0.019	0.019^{*}	0.015^{***}	0.033^{***}	0.074^{***}
	(0.000)	(0.000)	(0.003)	(0.000)	(0.132)	(0.061)	(0.000)	(0.000)	(0.000)
R^2	0.033	0.029	0.025	0.057	0.030	0.005	0.014	0.031	0.055
n	400	400	400	200	200	200	200	200	200

*, ** and *** represent the 10%, 5% and the 1% significance levels.

Table A2: Robustness checks for research question 1 based on the 4-factor model residuals. p-values for a double-sided test are given in parenthesis.

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Jürgen Huber and Michael Kirchler

Corporate Campaign Contributions as a Predictor for Abnormal Stock Returns after Presidential Elections

Abstract

In the U.S. campaign contributions by companies play a major role in financing election campaigns. We analyze contributions by companies before an election and stock market performance after the election for the presidential elections from 1992 until 2004. We find that (i) the percentage of contributions given to the winner in a presidential election and (ii) the total contribution (divided by market capitalization) have a significant positive impact on a company's stock market performance after an election, with the second factor being more important. Furthermore, we find that hypothetical portfolios of the 30 highest contributors according to (i) would have earned significant abnormal returns of up to 0.54% per month (6.6% p.a.) during the first year after an election. Investing in a portfolio formed according to (ii) would have yielded abnormal returns of up to 1.21% per month (15.5% p.a.) for the same observation period.

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